

Forging Relationships, Preventing Proliferation: A Decade of Cooperative Threat Reduction in Central Asia

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On December 21, 1991, as leaders of eleven Soviet republics gathered in the Central Asian city of Almaty, Kazakhstan, to formally dissolve the Soviet Union,¹ the newly independent Central Asian states found themselves the unwilling hosts to some of the world's most dangerous weapons. More than 1000 nuclear warheads were in place on over 100 intercontinental ballistic missiles stored at two remote locations on the Kazakhstani steppes.² Covering a significant corner of northeastern Kazakhstan was the primary nuclear test site for the Soviet Union, where 456 nuclear tests were conducted.³ Several hundred miles to the west, Soviet specialists were working at one of the largest factories ever created for the manufacture and production of anthrax. To the south, the world's only known open-air test site for biological weapons lay under a blanket of snow on an island shared by Kazakhstan and Uzbekistan in the Aral Sea.⁴ West of the sea, a Soviet chemical weapons test site stretched over the Ustyurt plateau in Uzbekistan. A partially constructed chemical weapons production plant lay dormant in Northern Kazakhstan.⁵ Nearly 600 kilograms of highly-enriched uranium fuel from an abandoned Soviet submarine program lay stored, forgotten, in a Kazakh metallurgy plant.⁶ A fast-breeder nuclear reactor, used for desalination, was operating on the shores of the Caspian Sea, capable of producing over 100 kilograms of plutonium annually.⁷ Yet these particular sites and weapons comprise only

a portion of the legacy of Soviet weapons of mass destruction (WMD) bequeathed to the Central Asian states upon independence.

As of spring 2003, almost all of these threats have been, or are being, eliminated by a relatively small U.S. Government initiative known as the Cooperative Threat Reduction (CTR) program. The achievements of this program have been, in short, phenomenal, and few could have predicted such success back in 1991. For the past decade, the United States has used the CTR program to help the states of the former Soviet Union dismantle and destroy infrastructure related to WMD and put in place safeguards to prevent their proliferation. While Central Asia has not been the focus of the CTR program, developments in that region have had interesting and significant effects on the program's evolution. CTR has been critically important to Central Asia and has played a key role in the development of U.S. relationships with individual countries in this strategically vital part of the world.

History

The CTR program grew out of legislation sponsored in 1991 by Senators Sam Nunn (D-GA, now retired) and Richard Lugar (R-IN), in response to their concerns about control over the nuclear arsenal in a rapidly disintegrating Soviet Union.⁸ The goal of the initial legislation was to make available a relatively modest sum of Department of Defense (DOD) money each year to work cooperatively with Russia to safeguard and dismantle the Soviet nuclear arsenal.⁹ For the first two years, the legislation provided \$400 million per year in transfer authority to DOD, which meant that the Department had to take \$400 million from already existing projects and use it instead on cooperative dismantlement projects with the former Soviet Union.¹⁰ Senators Nunn and Lugar did not envision CTR as a foreign aid program and made efforts to restrict the money to tangible projects.¹¹ Their intent was that CTR would contribute directly to U.S. national security by helping to eliminate nuclear weapons aimed at the United States, while simultaneously helping to prevent those weapons and their components from falling into the hands of rogue states and terrorist organizations.¹²

After some initial reservations, the first Bush administration supported the CTR program. However, the program did not come into its own until the change of administrations in 1993.¹³ Part of the initial inspiration behind Senators Nunn and Lugar's introduction of the CTR legislation had been their exposure to work on the state of Soviet nuclear weapons done by Dr. Ashton Carter and his colleagues at the Harvard

Center for Science and International Affairs.¹⁴ In 1993, Carter joined the Clinton administration as Assistant Secretary of Defense for International Security Policy, which gave him direct responsibility for the CTR program and propelled the program forward.¹⁵ CTR also embodied the ideas of cooperative engagement and preventive defense, philosophies espoused by Carter and Dr. William Perry, who became Clinton's Secretary of Defense in early 1994.¹⁶ With dual CTR supporters at the helm of DOD, the Clinton administration embraced CTR and made it a key foreign policy initiative.¹⁷ The new team included a request for an additional \$400 million for CTR in its proposed budget to Congress for fiscal year 1994, and Congress promptly approved it.¹⁸ From that year on, CTR became a regular part of the DOD budget, and it was no longer necessary to reprogram funds from other DOD projects.

Initially, and to this day, the CTR program has been directed primarily at Russia rather than Central Asia. The vast bulk of the literature analyzing and evaluating the CTR program reflects this fact by concentrating on the program's implementation in Russia alone. Such a state of affairs is hardly surprising, as Russia is the sole legal successor to the Soviet Union's nuclear weapons arsenal and host to the overwhelming majority of nuclear, biological and chemical weapons infrastructure, materials and technologies. In addition, the program initially focused on reducing the nuclear threat, which also was understandable given that nuclear warheads were the defining weapons of the Cold War. As a result, literature on CTR's presence in Central Asia is scarce. Nonetheless, several success stories have materialized over the past decade, and these stories are worthy of our attention. This chapter will document some of the ways in which the CTR program has contributed to the security of Central Asia while deepening U.S. diplomatic relations with the region and encouraging the development of strong, independent Central Asian states.

Early expansion of CTR beyond Russia was limited to Belarus, Ukraine and Kazakhstan—the only three non-Russian Soviet successor states with nuclear weapons on their territories. The primary reason these three additional states were included in the CTR program was to provide incentives for them to voluntarily give up their inherited nuclear weapons,¹⁹ a decision that has been widely touted as one of the most significant and concrete accomplishments of the CTR program.²⁰ As the program developed, however, it began to be seen as more than a narrow technical initiative designed to accomplish specific goals related to weapons dismantlement. In fact, CTR evolved into a means to engage these new states, develop relationships with their leaders, and emphasize U.S. concerns

about the importance of nonproliferation policies in the region.²¹ In Kazakhstan, for example, implementation of the CTR program became one of the most important aspects of the U.S.-Kazakhstan relationship, and gave the United States key insights into the largely unknown and unfamiliar Central Asian region.

In the first part of the 1990s, U.S. policy makers treated Kazakhstan as a smaller, less complicated Russia, with many of the same proliferation threats and nonproliferation opportunities. As in Russia, CTR projects focused on reducing the nuclear threat. However, in succeeding years, CTR was recognized as an important tool that could be used not only to deal with threats, but also to take advantage of opportunities unique to Central Asia. For example, U.S. and Kazakhstani officials were able to build upon their existing CTR relationships and the trust they had established to expand the program into an area where it had been almost impossible to work in Russia: biological weapons nonproliferation.²² Once that door had been opened, it became logical to draw Uzbekistan into the program as well, and as in Kazakhstan, CTR cooperation became an important means of strengthening and deepening the U.S.-Uzbekistan relationship. DOD now plans to expand the program to include border security, an area all the more critical in the post-September 11 world.²³ Thus, the CTR program is likely to have lasting benefits for U.S. security, and indeed for the security of the world.

CTR in Kazakhstan: The Early Years

After the Soviet Union fell apart, a key U.S. foreign policy goal was to prevent the emergence of three new nuclear-armed nations, by convincing Kazakhstan, Belarus and Ukraine to relinquish their nuclear weapons.²⁴ On May 23, 1992, these three countries signed the Lisbon Protocol, becoming parties to the Strategic Arms Reduction Treaty (START I) between the United States and Russia, which had become the legal successor to the Soviet Union for all international treaties.²⁵ Under the Lisbon Protocol, all three countries pledged to join the Nuclear Non-Proliferation Treaty (NPT) as non-nuclear-weapons states, which meant relinquishing legal ownership of all nuclear weapons on their territories.²⁶

It fell to the Clinton administration to ensure that these countries followed through on their pledge, and that they did so as quickly as possible. To achieve this goal, administration officials turned to the CTR program.²⁷ According to one insider, the promise of CTR assistance “was the most consistent and productive tool available to U.S. diplomats” in negotiations on denuclearization.²⁸ Senator Lugar stated this fact even

more forcefully when he noted, "Without [the] Nunn-Lugar [program], Ukraine, Kazakhstan and Belarus would still have thousands of nuclear weapons."²⁹

Once the Kazakh Parliament ratified the NPT in December 1993, effectively ensuring a nuclear-weapons-free Kazakhstan, the United States was obligated to fulfill its end of the bargain by providing assistance under the CTR program. Together, the two countries had to figure out what types of projects to develop using this assistance. Because Kazakhstan was inclined to see CTR assistance as a blanket reward for denuclearization, it was often difficult to reconcile what the Kazakhs wanted and felt they needed, with the restraints on the program in the CTR legislation.³⁰ The initial legislation was quite specific, restricting the use of CTR funds to activities that were clearly related to the nonproliferation, safeguarding, destruction or dismantlement of WMD.³¹ In the face of these restrictions, the United States took the path of least resistance, simply modeling the CTR projects in Kazakhstan on existing CTR projects in Russia, which clearly fit within the scope of the legislation.

The process of providing CTR assistance involved two important legal steps: first, an umbrella agreement was negotiated between the U.S. government and the recipient country governments, providing the basic legal framework for assistance.³² Then, for each specific CTR project area, a separate implementing agreement was negotiated and signed on the agency-to-agency level. In Kazakhstan, the umbrella agreement and the first set of implementing agreements were signed December 13, 1993, the same day that the Kazakh Parliament ratified the NPT. The implementing agreements enabled projects in the following areas: provision of emergency response equipment for use during the transport of nuclear weapons to Russia; establishment of a government-to-government communications link to facilitate data reporting for the START and INF arms control agreements; strategic offensive arms elimination for the dismantlement of SS-18 Intercontinental Ballistic Missile (ICBM) silos; nuclear warhead storage elimination; strategic bomber elimination; improvement of material control and accounting and physical protection (MPC&A) of nuclear materials; improvement of export controls; and establishment of defense and military contacts.³³

All of these program areas paralleled CTR projects in Russia. Over the course of the previous year-and-a-half, implementing agreements also had been signed in Russia for provision of emergency response equipment, strategic offensive arms elimination, improvement of MPC&A, and establishment of defense and military contacts.³⁴ A defense conversion

implementing agreement was signed with Russia in December 1993, and a Kazakhstani agreement on defense conversion followed just a few months later in March 1994. Additional agreements were signed with Russia for other CTR program areas, such as chemical weapons destruction and the conversion of plutonium-production reactor cores, but these were not relevant to Kazakhstan. In other words, every project area in Russia that could be copied in Kazakhstan was copied.

The projects providing emergency response equipment and a continuous government-to-government satellite communications link were quickly and easily implemented. Projects to withdraw strategic nuclear weapons from Kazakhstan and eliminate ICBM missile silos, strategic bombers, and nuclear weapons storage facilities also were straightforward and considered highly successful. U.S. and Kazakhstani specialists worked together to implement these projects on the ground. One article from early 2000 found the projects for elimination of strategic offensive arms in Kazakhstan the “most successful” of all such projects in the former Soviet Union, as they were the first to achieve the complete elimination of all strategic weapons from a country.³⁵ Withdrawal of all nuclear weapons and strategic bombers was completed by April 1995;³⁶ the few remaining strategic bombers were eliminated in 1998, and all 147 missile silos were dismantled and destroyed by 1999.³⁷ As a result, there are no further projects to be completed under the strategic offensive arms elimination implementing agreement in Kazakhstan.

The next two project areas—of nuclear materials MPC&A and export controls—were inherently more complicated because they are premised not on the simple destruction of hardware, but on the creation of lasting systems and institutions. MPC&A projects involved the provision of equipment and training, and were established at the four primary locations in Kazakhstan where nuclear materials were located.³⁸ For the most part, these projects ran more smoothly than analogous projects in Russia, due to, in the words of one analyst, “fewer nuclear facilities . . . , housing less nuclear material, with fewer bureaucratic obstacles.”³⁹ In addition, because Kazakhstan is a non-nuclear-weapons state and its facilities are subject to International Atomic Energy Agency (IAEA) safeguards, it had fewer concerns about the protection of classified information.⁴⁰ However, these projects were not without their problems. For example, concerns have been raised regarding the long-term sustainability of the MPC&A improvements and the development of a “safeguards culture” at the various nuclear installations.⁴¹ While it is difficult to quantify success in the development of such a “safeguards culture,” there is no question that nu-

clear materials in Kazakhstan are more secure today than they were prior to the completion of U.S.-funded MPC&A projects there.

These projects began life as CTR projects run by DOD, but in fiscal year 1996 responsibility for them was transferred to the Department of Energy (DOE) where they took on a life of their own and became part of a larger program for the safeguarding of nuclear materials.⁴² In the same year, responsibility for export control assistance programs was transferred out of the CTR program at DOD and over to the State Department.⁴³ The Department of Commerce and the DOE also developed export control assistance programs in Kazakhstan and some of the other Central Asian states, funded primarily through the State Department.⁴⁴ Although export control projects involved the provision of some equipment (for example, it provided Kazakhstan with patrol boats for the Kazakhstani Coast Guard on the Caspian Sea), for the most part they focused on education and training. U.S. experts assisted Kazakh officials with the drafting of a comprehensive export control law.⁴⁵ In addition, the program provided the United States with the opportunity to familiarize Kazakh officials with international export control regimes, which have been described as “a fundamental but largely unappreciated part of early Nunn-Lugar contacts.”⁴⁶

Defense conversion stands out as the major exception to the success of the initial set of CTR projects in Kazakhstan. This was to be one of the most important projects for Kazakhstan, as it had the potential to contribute to the long-term development of their economy. According to Kazakh officials, “conversion to civilian and commercial purposes of industrial enterprises devoted to military production under the Soviet system is of paramount importance to Almaty.”⁴⁷ However, CTR defense conversion projects were plagued by a number of problems caused by a variety of political and economic factors, and were dealt a death blow by the U.S. Congress in 1996, when it disallowed any new CTR funding for defense conversion activities in the former Soviet Union.⁴⁸ CTR defense conversion programs were particularly susceptible to criticism, and Congressional opponents argued that such programs essentially subsidized the modernization of other areas of the post-Soviet defense establishments.⁴⁹ Other arguments against defense conversion programs were that the money would be better spent converting the U.S. defense industry, and that the programs were too small to have any meaningful effect on the conversion of the mammoth Soviet defense industry. Thus, CTR defense conversion activities in Kazakhstan slowly dwindled. A few small-scale projects continued to be funded with CTR monies from earlier years, but others failed altogether.⁵⁰

In sum, the story thus far is one in which the United States aggressively pursued its goal of a nuclear-weapons-free Kazakhstan by first promising CTR assistance, and subsequently deciding the shape of that assistance through a series of specific projects. These projects focused primarily on nuclear weapons and nuclear materials, and were modeled after those CTR projects in Russia that were relevant to Kazakhstan. By and large these projects were successful, especially when compared with the more complicated and extensive corresponding projects in Russia.

CTR in Kazakhstan: Thinking Outside the Russian Box

If, during its early years, the CTR program helped to ensure the removal of nuclear weapons from Kazakhstan and provided concrete assistance for the dismantlement and nonproliferation-related projects discussed above, it also served another, perhaps equally important, purpose: providing the foundation for a strong, bilateral relationship between the United States and Kazakhstan. As one official explained, DOD recognized early on that a strong, strategic relationship with Central Asia was important to U.S. security and a useful counterbalance to Russia.⁵¹ The CTR program helped establish this relationship while simultaneously communicating the importance the United States placed on the development of nonproliferation policies in the region. Indeed, an article by former Assistant Secretary of Defense Ashton Carter and Steven Miller, his colleague from the Harvard University Center for Science and International Affairs, noted that the principle purpose of the Nunn-Lugar program was “less to finance specific technical steps than to set an agenda for denuclearization and cooperation and to command attention to this agenda.”⁵² Former administration officials have pointed out that negotiations and discussions over the CTR program were “the first in-depth direct channel of communication” between Almaty and Washington,⁵³ and that the non-Russian CTR recipient states viewed CTR assistance as a “symbol of continuing U.S. commitment to their independence, national well-being, security, and a non-nuclear future.”⁵⁴ An early Kazakhstani analysis of the program substantiated this position, warning that Congressional reductions in CTR funding “would reduce Kazakhstan’s basic trust in the policies of the United States.”⁵⁵ As it turned out, trust did develop between the two countries as the initial CTR projects were negotiated and implemented. This trust led to a second wave of CTR projects in Kazakhstan, projects not modeled on CTR in Russia, but designed to address problems unique to Kazakhstan.

The first such initiative was Project Sapphire, a secret endeavor that involved the removal and transport of a forgotten stash of highly-enriched uranium from the Ulba Metallurgy Plant in Ust-Kamenogorsk to the Oak Ridge National Laboratory in Tennessee.⁵⁶ Established in 1949, the Ulba Metallurgy Plant is a massive industrial enterprise that currently produces low-enriched fuel pellets for civilian nuclear power plants and processes strategic metals such as beryllium and tantalum. However, for a number of years during the Soviet era, the plant also produced weapons-grade, highly-enriched uranium fuel for use in naval propulsion reactors. Although production of such fuel apparently ended in the 1980s, when Kazakhstan became independent in 1991, a cache of 581 kilograms of highly-enriched uranium remained in storage at Ulba. Experts estimate this amount would have been enough to build more than 20 nuclear weapons.

Kazakh officials first informed the United States of the existence of this material in August 1993, and over the course of the next few months conveyed their concerns about the safety of the material, requesting assistance to secure it or remove it from the country altogether. This request would have been practically inconceivable without the existence of the ongoing dialogue between the United States and Kazakhstan on nonproliferation issues, begun in the context of CTR negotiations. By the time the United States confirmed the quantity and enrichment level of the material in February 1994, the CTR umbrella agreement, as well as the initial implementing agreements described above, were already in place, providing a legal framework for cooperation at Ulba. After confirming that Russia was not interested in taking the material itself (Russian officials claimed initially not to have any knowledge of the existence of the material), U.S. and Kazakh officials agreed that the safest option would be to remove the material. Although removal of the highly-enriched uranium clearly contributed to nonproliferation goals by eliminating the potential for the material to be stolen, it was a novel use of the CTR program. It also was not immediately clear that the compensation Kazakhstan sought for the fuel could be provided out of CTR funds. CTR agreements restricted assistance to in-kind support in the form of equipment, materials, technologies, and training; cash grants were not allowed. In the end, however, due to extraordinary efforts on both sides, the material was airlifted in November 1994 from Ust-Kamenogorsk. Eventually, a compensation package was agreed upon that included the provision of computer equipment, vehicles, and medical supplies, all paid for using CTR funds. The delivery of this compensation was completed in August 1997.⁵⁷ With Project Sapphire, U.S.

and Kazakhstani officials proved that CTR could be used for more than the regularly scheduled CTR activities.

Another example of a unique use of CTR tailored to regional concerns was the project to destroy the nuclear test tunnels at the Degelen Mountain and Balapan underground test facilities on the Semipalatinsk nuclear test site. Between 1949 and 1989, 456 nuclear tests were conducted at Semipalatinsk, the Soviet Union's primary nuclear test site.⁵⁸ The Degelen Mountain project involved using conventional explosives to destroy the nearly 200 remaining test tunnels, rendering them useless for future nuclear testing. Kazakhstan was eager to prove its nonproliferation commitment to the United States, and every CTR project implemented in country represented jobs for Kazakhstanis. Although this project was clearly related to WMD, it, too, was not a traditional CTR project because it did not involve dismantlement and the tunnels did not represent an immediate proliferation threat. Kazakhstan President Nursultan Nazarbaev officially closed the test site in August 1991,⁵⁹ and it was highly unlikely that the test site would ever be used again as Kazakhstan had signed the NPT as a non-nuclear-weapon state. Nonetheless, the project came to be seen as falling within the scope of the CTR legislation. One U.S. official commented that the project represented America's recognition of the importance of engaging Kazakhstan for strategic and political reasons beyond proliferation threats, noting "there was a less restrictive approach to projects [in Kazakhstan]" than in Russia.⁶⁰ A CTR implementing agreement for the project was negotiated between DOD and the Kazakhstani Ministry of Science and New Technologies, and was signed October 3, 1995.⁶¹ A Defense Department press release hailed the agreement as "a symbol of both countries' commitment to leadership in promoting global non-proliferation policies."⁶²

Probably the most significant set of second wave CTR projects in Central Asia involved former biological weapons facilities. The Soviet Union had a robust but illegal offensive biological weapons program, with numerous research and production facilities throughout Russia⁶³ as well as a large anthrax production factory in Northern Kazakhstan, and a handful of research institutes in Kazakhstan and Uzbekistan. These outlying facilities conducted at least some research and development work for the Soviet biological weapons program.⁶⁴ U.S. attempts to expand the CTR program into the biological weapons areas in Russia were met with complete stonewalling by Russian officials. Although President Boris Yeltsin admitted in 1992 that the Soviet Union had conducted a secret offensive biological weapons program, in violation of the Biological Weapons Convention, the

program is still shrouded in secrecy. According to one U.S. official, when the United States would raise the possibility of providing CTR assistance in the area of bioweapons, the Russians simply would deny the existence of bioweapons facilities on their soil. "Where can you go from there?" this official asked.⁶⁵ In Kazakhstan, however, the situation was quite different. There, former bioweapons facilities were cut off from their former institutional structures, and there were no institutional actors in the central government in denial about the former Soviet program. The Kazakh leadership was able to show its commitment to nonproliferation by being open about the legacy of Soviet bioweapons in their country, and, at the same time, lobby for assistance from the United States to deal with that legacy.

As a direct result of the personal relationships and trust that developed between U.S. and Kazakh officials during the implementation of other CTR projects, American officials finally secured permission from the Kazakh government to visit the anthrax production facility in Stepnogorsk in June 1995.⁶⁶ Although they had known about the existence of the plant, U.S. officials were horrified by what they saw—the enormous scale of the plant, the level of decay within it, and the vulnerability of bioweapons scientists to recruitment. The plant was clearly a proliferation danger. It needed to be dismantled; and it was determined that CTR would be an appropriate tool for the job. In June 1996, one year after the first U.S. visit to Stepnogorsk, an amendment was signed to the 1995 implementing agreement governing work at Degelen Mountain.⁶⁷ This new amendment provided the legal basis for biological weapons proliferation prevention activities in Kazakhstan under the CTR program.

As of Spring 2003, all the equipment for production of biological weapons at Stepnogorsk has been destroyed, and the Defense Department is in the process of destroying the buildings themselves.⁶⁸ In addition, new projects are underway to provide effective physical protection of biological agents at two research institutes: the State Agricultural Research Institute in Otar and the Anti-Plague Institute in Almaty.⁶⁹ Finally, a new cooperative biodefense project seeks to develop cooperative research projects between Kazakhstani and U.S. scientists, to "prevent proliferation of biological weapons biotechnology, increase transparency, and enhance U.S. force protection."⁷⁰

Thus, in the second phase of CTR, assistance again has veered from its initial path of nuclear-related, Russia-modeled projects. Building on the relationships that CTR helped develop, DOD has used the agreement as a tool to address specific nonproliferation opportunities unique to Central Asia. In recent years, additional proliferation threats have been identified,

such as the partially constructed chemical weapons production plant in the city of Pavlodar in Northern Kazakhstan. The initiation of significant work in the former biological weapons sector in Kazakhstan was a breakthrough for CTR in this highly sensitive area, and now represents the greater part of CTR activity in Kazakhstan. In addition to preventing the proliferation of biological weapons-materials, these projects have the ancillary benefit of giving the U.S. important insights into the Soviet biological weapons program that Russia continues to obscure. Perhaps more important to the development of the CTR program, the biological weapons-related work in Kazakhstan has provided a road map for biological weapons-related CTR work in other countries, such as Uzbekistan, Ukraine and Georgia.

CTR in Uzbekistan and Beyond

The Defense Department's expansion of the CTR program into Uzbekistan was very different from its expansion into Kazakhstan. The Uzbek government approached the United States for assistance with a discreet problem: the demilitarization of a remote facility for the research, development and testing of chemical weapons in the city of Nukus, in western Uzbekistan.⁷¹ Following the model for the second wave of CTR projects in Kazakhstan, the project was identified as one that fit into the CTR framework, and Uzbekistan quickly joined the CTR club without fanfare. In fact, DOD was so anxious to begin work that it started under a temporary agreement in 1997 with the Ministry of Defense while hammering out the CTR umbrella agreement over a period of several years.⁷²

In addition to the Nukus project, which was completed in May 2002,⁷³ DOD has used the CTR program to implement a number of projects in the biological weapons-related sphere. After concluding a new implementing agreement for such work in October 2001, DOD began to demilitarize the former biological weapons test site on Vozrezhdeniye Island in the Aral Sea.⁷⁴ In addition, DOD is in the process of establishing CTR projects along the lines of those in Kazakhstan for physical protection of biological agents and for collaborative bio-defense research at three research institutes: the Institute of Veterinary Science in Samarkand, the Institute of Virology in Tashkent and the Center for Prophylaxis and Quarantine of Most Hazardous Infections in Tashkent.⁷⁵

DOD is currently developing a new set of CTR projects that is likely to expand CTR further within Central Asia. This major new initiative, called Weapons of Mass Destruction Proliferation Prevention (WMDPP), is designed to provide border security assistance to all eligible non-Russian states of the former Soviet Union, and has already received \$40 million

from Congress.⁷⁶ Within Central Asia, initial WMDPP projects will occur in countries where CTR has already been established, such as Kazakhstan and Uzbekistan, but it is also likely that this initiative eventually will be expanded to Kyrgyzstan.⁷⁷ The goal of WMDPP is to provide recipient countries with “self-sustaining, multi-agency capabilities to prevent, detect, and interdict WMD and related materials,”⁷⁸ and the first priority will be to address indigenous operational capabilities at key border crossings. In testimony before the Senate Armed Services Committee in July 2002, Lisa Bronson, Deputy Under Secretary of Defense with responsibilities for the CTR program, noted that this initiative will further enhance U.S. security, not only by helping to prevent the proliferation of WMD to terrorists and “states of concern,” but also by “facilitating future U.S. activities in the region and reinforcing relationships with FSU [former Soviet Union] states” and “developing relationships with foreign counterpart agencies that will be useful in times of crisis.”⁷⁹ This last comment could be a subtle acknowledgement that U.S.-Uzbekistan cooperation under the auspices of the CTR program played an important role in Uzbekistan’s prompt agreement to allow the United States to station troops in southern Uzbekistan during combat operations in the opening phases of the Global War on Terrorism in Afghanistan in late 2001.

Conclusion

A decade of CTR experiences in Central Asia has given the United States significant insights into this strategically important region of the world. While the CTR program has been and remains overwhelmingly focused on Russia, it is useful to note the evolution of CTR in Central Asia and the ways it has strengthened U.S. relationships there. It is clear that when the program was first introduced in Central Asia, there was not a systematic evaluation of the proliferation threats in the region nor a measured application of the program to counter those threats. Instead, a top-down approach was used, in which DOD copied Russian CTR projects to the extent that they were relevant. As the program evolved, this approach gradually gave way to a bottom-up approach where individuals on both sides identified specific proliferation threats and then used CTR as a tool to deal with those threats.

During this evolution, Central Asia has come to be understood as a region distinct from Russia, with a different set of nonproliferation problems and opportunities. Furthermore, in the context of the current war on terrorism, the future of the entire CTR program is increasingly focused on the threats posed by biological weapons proliferation, an aspect of the

program that has been particularly strong in Central Asia, and on border security issues addressed by the new WMDPP initiative.⁸⁰ It is noteworthy that the CTR program has evolved to a stage at which an exclusively non-Russian initiative could be pursued.

Over the course of a decade, the CTR program has provided Kazakhstan and Uzbekistan with the resources to deal with specific problems that would have been difficult to address otherwise. It also has provided America with a concrete means of engaging with Central Asia on serious issues of mutual concern. This engagement deepened the relationships between the United States and Kazakhstan, and later between the United States and Uzbekistan. Each new project reinforces these relationships—and as new threats emerge, the countries will be better positioned to address them. By engaging with Central Asia to prevent the WMD proliferation, the CTR program has advanced U.S. policies and contributed to U.S. homeland, regional and global security. CTR has proven flexible enough to address unanticipated threats, and at the same time maintained its primary focus on the dangers of proliferation. It has done so at minimal expense while yielding important side benefits. In an era obsessed with the control and elimination of WMD, CTR may prove to be an effective alternative to the more costly, more problematic resort to U.S. military force.

Notes

¹ David Remnick, "In New Commonwealth of 'Equals,' Russia Remains the Dominant Force," *The Washington Post*, December 22, 1991, A39.

² In September 1990, there were 104 SS-18 ICBMs, each armed with 10 nuclear warheads, located at bases in Derzhavinsk and Zhangiz-Tobe in Kazakhstan. Table 1-C, *Nuclear Successor States of the Soviet Union: Status Report on Nuclear Weapons, Fissile Material, and Export Controls*, no. 5, Monterey Institute of International Studies and Carnegie Endowment for International Peace, March 1998, 10.

³ This test site, called the Semipalatinsk Test Site, is approximately 18,000 km². See "Research Library: Country Information, Kazakhstan," on the website of the Nuclear Threat Initiative, material produced by the Center for Nonproliferation Studies at the Monterey Institute of International Studies, <<http://www.nti.org/db/nisprofs/kazakst/weafacil/semipala.html>>.

⁴ The island is known as Vozrozhdeniye Island (translated as "Renaissance" or "Rebirth" Island), and the test site was officially referred to as "Aralsk-7" during the Soviet period. Gulbarshyn Bozheyeva, Yerlan Kunakbayev, and Dastan Yeleukenov, "Former Soviet Biological Weapons Facilities in Kazakhstan: Past, Present and Future," Occasional Paper no. 1, Center for Nonproliferation Studies, Monterey Institute of International Studies, June 1999.

⁵ This was the Pavlodar Chemical Plant in the city of Pavlodar, Kazakhstan. Gulbarshyn Bozheyeva, "The Pavlodar Chemical Weapons Plant in Kazakhstan: History and Legacy," *The Nonproliferation Review*, Summer 2000, 136.

⁶ The fuel was located at the Ulba Metallurgy Plant, located approximately 20 miles outside Ust-Kamenogorsk, Kazakhstan. William C. Potter, "Project Sapphire: U.S.-Kazakhstani Cooperation for Nonproliferation," *Dismantling the Cold War: U.S. and NIS Perspectives on the Nunn-Lugar Co-*

operative Threat Reduction Program, John M. Shields and William C. Potter, eds. (Cambridge 1997), 345-346.

⁷ Jon Brook Wolfsthal, Cristina Astrid Chuen, and Emily Ewell Daughtry, eds., Table 4.6, "Mangyshlak Atomic Energy Combine," *Nuclear Status Report: Nuclear Weapons, Fissile Material and Export Controls in the Former Soviet Union*, no. 6, Monterey Institute of International Studies and Carnegie Endowment for International Peace, June 2001, 165.

⁸ See Sam Nunn, "Changing Threats in the Post-Cold War World," *Dismantling the Cold War*, xvi, supra note 6; Richard Lugar, "Forward," *Defense by Other Means: The Politics of US-NIS Threat Reduction and Nuclear Security Cooperation*, Jason D. Ellis (Westport 2001), xii.

⁹ Soviet Nuclear Threat Reduction Act of 1991, P.L. 102-228. The program is also popularly referred to as the "Nunn-Lugar program."

¹⁰ Jason D. Ellis, 80-81; Richard Combs, "U.S. Domestic Politics and the Nunn-Lugar Program," *Dismantling the Cold War*, John M. Shields and William C. Potter, eds. (Cambridge, 1997), 44.

¹¹ For example, Senator Nunn has noted with frustration, "For some reason, [CTR] has come under attack as if it were a foreign aid program." Sam Nunn, "Changing Threats in the Post-Cold War World," *Dismantling the Cold War*, John M. Shields and William C. Potter, eds., xvii. Senator Lugar has written, "Nunn-Lugar is not foreign aid. It is not charity." Richard Lugar, "Forward," *Defense by Other Means*, Jason D. Ellis, xii.

¹² Congressional findings included in the first Soviet Nuclear Threat Reduction Act of 1991 stated, "It is in the national security interests of the United States (A) to facilitate on a priority basis the transportation, storage, safeguarding, and destruction of nuclear and other weapons in the Soviet Union, its republics and any successor entities, (B) to assist in the prevention of weapons proliferation." Soviet Nuclear Threat Reduction Act of 1991, P.L. 102-228, available at <<http://www.thomas.loc.gov>>.

¹³ See, for example, Ellis, supra note 10, 112; Combs, supra note 10, 47; Rose Gottemoeller, "Presidential Priorities in Nuclear Policy," John M. Shields and William C. Potter, eds., *Dismantling the Cold War*, 65.

¹⁴ See Nunn, supra note 11, xvi, referring to Kurt M. Campbell, Ashton B. Carter, Steven B. Miller, and Charles A. Zraket, *Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union*, CSIA Studies in International Security (Cambridge, MA: Center for Science and International Affairs, Harvard University, November 1991); Gottemoeller, supra note 13, 67.

¹⁵ Ellis, supra note 10, 119.

¹⁶ See Gloria Duffy, "Cooperative Threat Reduction in Perspective," *Dismantling the Cold War*, John M. Shields and William C. Potter, eds., 25. Also, see Ashton B. Carter and William J. Perry, *Preventive Defense: A New Security Strategy for America* (Washington, DC: Brookings Institution Press, 1999).

¹⁷ Duffy, supra note 16, 25; Gottemoeller, supra note 13, 65, 67.

¹⁸ Ellis, supra note 10, 82.

¹⁹ Combs, supra note 10, 47-48; Gottemoeller, supra note 13, 65.

²⁰ See, for example, John M. Shields and William C. Potter, *Dismantling the Cold War*, 386; Ellis, supra note 10, 2, (Westport 2001); John W. R. Lepingwell and Nikolai Sokov, "Strategic Offensive Arms Elimination and Weapons Protection, Control, and Accounting," *The Nonproliferation Review*, Spring 2000, 59.

²¹ See John M. Shields and William C. Potter, *Dismantling the Cold War*, 13-15; Combs, supra note 10, 48; Duffy, supra note 16, 26-27. See also, Ellis, supra note 10, 40-41. Ellis argues that there were "two major divergent approaches" to the CTR program. The first approach was broader and open to many ideas for reducing the nuclear threat from the NIS, including "intensive long-term attention to sustaining democracy in Russia and integrating it into the international community." The second approach was more limited and short-term, focusing on specific destruction and dismantlement activities.

²² Author's phone conversation with U.S. DOD official, October 2002.

²³ *Ibid.*

²⁴ Gottemoeller, *supra* note 13, 65; Ellis, *supra* note 10, 32 (“DOD officials ranked the denuclearization of the Non-Russian NIS Republics as the Chief Aim and ‘Ultimate Yardstick’ of the Program’s Success.”)

²⁵ Text of Protocol to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms (“Lisbon Protocol”) signed in Lisbon, Portugal on May 23, 1992, available on the Nuclear Threat Initiative website at <<http://www.nti.org/db/nisprofs/fulltext/treaties/start1/s1lis.html>> and on the U.S. Department of Defense website at <http://www.defenselink.mil/acq/acic/treaties/start1/protocols/start_1p.htm#VI>.

²⁶ *Ibid.*, Article V.

²⁷ Combs, *supra* note 10, 47-48.

²⁸ Gottemoeller, *supra* note 13, 65. Another former official has noted that CTR, “played an important role in the decisions of Ukraine, Belarus, and Kazakhstan to forgo nuclear weapons capabilities.” Duffy, *supra* note 16, 25. See also, Ellis, *supra* note 10, 31. Ellis notes that CTR funds “provided a key incentive for Belarus, Kazakhstan, and Ukraine to forgo the nuclear option . . . None of these three states had the financial resources or capabilities to successfully undertake strategic denuclearization.”

²⁹ Lugar, *supra* note 8, xiii.

³⁰ See Combs, *supra* note 10, 48; Gottemoeller, *supra* note 13, 66.

³¹ The initial legislation for the Nunn-Lugar program limited assistance to “cooperation among the United States, the Soviet Union, its republics, and any successor entities to 1) destroy nuclear weapons, chemical weapons, and other weapons, 2) transport, store, disable, and safeguard weapons in connection with their destruction, and 3) establish verifiable safeguards against the proliferation of such weapons.” Soviet Nuclear Threat Reduction Act of 1991, P.L. 102-228, available at <<http://www.loc.gov/thomas>>. Although the subsequent versions of the authorizing legislation expanded the program to include prevention of “braindrain” of scientists with weapons expertise, defense conversion, and military-to-military contacts (P.L. 102-484), and later even programs for environmental restoration of military sites and the construction of housing for former military officers (P.L. 103-160), these expanded programs were quickly eliminated by subsequent Congresses. See Ellis, *supra* note 10, Chapter Four, 77-106.

³² CTR umbrella agreements typically include provisions that ensure that the assistance will not be taxed, that the U.S. will have the right to audit and examine assistance provided to ensure that it is being used for the purposes for which it was provided, that ensure that U.S. personnel have diplomatic protections in accordance with the Vienna Convention on Diplomatic Relations, and others. See Jack M. Beard, “Recent Development: A New Legal Regime for Bilateral Assistance Programs: International Agreements Governing the ‘Nunn-Lugar’ Demilitarization Program in the Former Soviet Union,” *Virginia Journal of International Law*, 894 (Summer 1995), 35.

³³ See 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, signed December 13, 1993 (United States – Kazakhstan Umbrella 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 Weapons from the Republic of Kazakhstan for Destruction and the Removal of Intercontinental Ballistic Missiles and the Destruction of their Silo Launchers, signed December 13, 1993 (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 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, signed December 13, 1993 (Strategic

Offensive Arms Elimination Implementing Agreement); Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning Control, Accounting and Physical Protection of Nuclear Material to Promote the Prevention of Nuclear Weapons Proliferation, signed December 13, 1993 (MPC&A 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, signed December 13, 1993 (Export Control Implementing Agreement); and 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, signed February 14, 1994 (Defense and Military Contacts MOU).

³⁴ See 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, signed June 17, 1992 (Emergency Response Implementing Agreement); Agreement Between the Department of Defense of the United States of America and the Ministry of Economics of the Russian Federation Concerning Cooperation in the Elimination of Strategic Offensive Arms, signed August 26, 1993 (Strategic Offensive Arms Elimination 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 Control, Accounting and Physical Protection of Nuclear Material, signed September 2, 1993 (MPC&A Implementing Agreement); and 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, signed September 8, 1993 (Defense and Military Contacts MOU). Unlike in Kazakhstan, there has never been an export control agreement in Russia, although it was not for lack of trying. The U.S. had hoped to provide CTR assistance for the improvement of Russian export controls, but negotiations on an agreement stalled and an agreement never materialized. Additionally, there was no need for a CTR agreement with the Russian Federation on a government-to-government communications link as Russia had inherited the Soviet Union's link.

³⁵ Lepingwell and Sokov, *supra* note 20, 60.

³⁶ Oumirserik T. Kasenov, Dastan Eleukenov, and Murat Laumulin, "Implementing the CTR Program in Kazakstan," in John M. Shields and William C. Potter, eds., *Dismantling the Cold War*, 194.

³⁷ "Cooperative Threat Reduction: Kazakhstan Programs," Defense Threat Reduction Agency website at <http://www.dtra.mil/ctr/ctr_kazakhstan.html>.

³⁸ The four locations are: the Institute of Nuclear Physics in Alatau, a small village outside Almaty, and the Institute of Atomic Energy in Kurchatov City on the former nuclear test site near Semipalatinsk, both of which housed a few kilograms of highly-enriched uranium fuel for use in nuclear research reactors; the Mangyshlyk Atomic Energy Combine in Aktau on the coast of the Caspian Sea, the site of a BN-350 fast-breeder reactor and approximately 300 metric tons of spent fuel containing plutonium; and the Ulba Metallurgy Combine in the eastern Kazakhstani city of Ust-Kamenogorsk. The Ulba Combine manufactures low-enriched uranium fuel pellets and various other materials that have dual uses, i.e. that can be used both in the manufacture and development of nuclear weapons and that have other non-weapons-related uses. Wolfsthal et al., *supra* note 7, 160-165.

³⁹ Jessica Eve Stern, "Cooperative Activities to Improve Fissile Material Protection, Control and Accounting," in John M. Shields and William C. Potter, eds., *Dismantling the Cold War*, 327-328.

⁴⁰ *Ibid.*

⁴¹ See Emily Ewell Daughtry and Fred Wehling, "Cooperative Efforts to Secure Fissile Material in the NIS," *The Nonproliferation Review*, Spring 2000, 97.

⁴² MPC&A programs were transferred to DOE in accordance with Presidential Decision Directive-41, "U.S. Policy on Improving Nuclear Material Security in Russia and Other Newly Independent

States.” For a discussion of some of the reasons behind this move, see Ellis, *supra* note 10, 123 and Gottemoeller, *supra* note 13, 69-71.

⁴³ *Ibid.*

⁴⁴ These funds, which the Department of Commerce and Energy must apply for, come out of the State Department’s Nonproliferation and Disarmament Fund. See Scott Parrish and Tamara Robinson, “Efforts to Strengthen Export Controls and Combat Illicit Trafficking and Braindrain,” *The Nonproliferation Review*, Spring 2000, 114-115.

⁴⁵ Kasenov et al., *supra* note 35, 197-201.

⁴⁶ Michael H. Newlin, “Export Controls and the CTR Program,” in John M. Shields and William C. Potter, eds., *Dismantling the Cold War*, 305.

⁴⁷ Kasenov et al. *supra* note 35, 203.

⁴⁸ National Defense Authorization Act for FY 1997, P.L. 104-201.

⁴⁹ See Amy F. Woolf, “Nunn-Lugar Cooperative Threat Reduction Programs: Issues for Congress,” CRS Report for Congress, Order No. 97-1027-F, updated March 6, 2002, available at <http://www.fcnl.org/pdfs/nuc_nunn_lugar.pdf>.

⁵⁰ For a discussion of CTR defense conversion activities in Kazakhstan and an in-depth analysis of the attempt to convert the former biological weapons production facility at Stepnogorsk, Kazakhstan, see Sonia Ben Ouagrham and Kathleen Vogel, “Conversion at Stepnogorsk: What the Future Holds for Former Bioweapons Facilities,” Cornell University Peace Studies Program, Occasional Paper #28, February 2003, available at <<http://www.ciaonet.org/wps/ous01>>.

⁵¹ Author’s phone conversation with U.S. DOD official, October 2002.

⁵² Ashton B. Carter and Steven E. Miller, “Cooperative Security and the Former Soviet Union: Near-Term Challenges,” *Global Engagement: Cooperation and Security in the 21st Century*, Janne E. Nolan, ed. (Washington, DC: The Brookings Institution, 1994), 548.

⁵³ Duffy, *supra* note 16, 26.

⁵⁴ Gottemoeller, *supra* note 13, 65.

⁵⁵ Kasenov et al., *supra* note 35, 194.

⁵⁶ For a detailed account of this story, see William C. Potter, “Project Sapphire: U.S.-Kazakhstani Cooperation for Nonproliferation,” John M. Shields and William C. Potter, eds., *Dismantling the Cold War*, 345-362. Factual information in this paragraph is drawn from that article.

⁵⁷ “Cooperative Threat Reduction: Project Sapphire,” Defense Threat Reduction Agency website, <http://www.dtra.mil/ctr/project/projkaz/ctr_sapphire.html>.

⁵⁸ See “Research Library: Country Information, Kazakhstan,” on the website of the Nuclear Threat Initiative, material produced by the Center for Nonproliferation Studies at the Monterey Institute of International Studies, <http://www.nti.org/db/nisprofs/kazakst/weafacil/semipala.htm>.

⁵⁹ *Ibid.*

⁶⁰ Author’s phone conversation with U.S. DOD official, October 2002.

⁶¹ See Agreement Between the Department of Defense of the United States of America and the Ministry of Energy Industry and Trade of the Republic of Kazakhstan Concerning the Elimination of Infrastructure for Weapons of Mass Destruction, signed October 3, 1995 (Weapons of Mass Destruction Implementing Agreement).

⁶² “U.S.-Kazakhstan Agreement to Seal Up World’s Largest Nuclear Test Tunnel Complex,” DOD News Release, October 3, 1995, <available at <<http://www.fas.org/news/kazakh/951004-409811a.html>>.

⁶³ See Ken Alibek and Stephen Handelman, *Biohazard: The Chilling True Story of the Largest Cover tBiological Weapons Program In the World--Told from Inside by the Man Who Ran It* (New York: Random House, May 1999).

⁶⁴ For detailed descriptions of the Kazakhstani facilities and their former activities, see Gulbarshyn Bozheyeva, Yerlan Kunakbayev, and Dastan Eleukenov, “Former Soviet Biological Weapons Facilities in Kazakhstan: Past, Present and Future,” Occasional Paper No. 1, Center for Nonproliferation Studies, Monterey Institute of International Studies, June 1999.

⁶⁵ Author's phone conversations with U.S. DOD official, October 2002. DOD is currently using CTR funds to pursue a limited number of biological weapons-related nonproliferation activities in Russia, but because DOD has yet to sign an implementing agreement for work in this area in Russia, it is forced to do so through the International Science and Technology Center in Moscow. From a legal perspective, this is less desirable than an implementing agreement as it does not provide the same level of protections to the United States. However, the work has been deemed important enough to U.S. policy goals that this awkward assistance mechanism continues to be used.

⁶⁶ A detailed account of this first visit is provided in Judith Miller, Stephen Engelberg, and William Broad, *Germs: Biological Weapons and America's Secret War* (New York, 2001), 165-182.

⁶⁷ Ben Ouagrham and Vogel, *supra* note 47, 36. The agreement is cited in *supra* note 59 and was initially amended to allow for work in the biological weapons nonproliferation sphere on June 10, 1996.

⁶⁸ "Cooperative Threat Reduction: BW Production Facility Dismantlement," Defense Threat Reduction Agency website, <http://www.dtra.mil/ctr/project/projkaz/bw_secure_trans.html>.

⁶⁹ "Cooperative Threat Reduction: BW Materials Security and Transparency," Defense Threat Reduction Agency website, <http://www.dtra.mil/ctr/project/projkaz/bw_prod_facil_disman.html>.

⁷⁰ "Cooperative Threat Reduction: BW Cooperative Bio Defense Projects," Defense Threat Reduction Agency website, <http://www.dtra.mil/ctr/project/projkaz/bw_coop_bio_proj.html>.

⁷¹ Author's phone conversation with U.S. Department of Defense official, October 2002.

⁷² The temporary agreement was the 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, which was signed on June 27, 1997. The Umbrella Agreement is the Agreement Between the United States of America and 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. It was not signed until June 5, 2001.

⁷³ "Cooperative Threat Reduction: Nukus Chemical Research Institute Demilitarization [Complete]," Defense Threat Reduction Agency website, <http://www.dtra.mil/ctr/project/projuzb/ctr_nukus.html>.

⁷⁴ Alan Sipress, "U.S. to Help Uzbekistan Clean Up Anthrax Site," October 23, 2001, A2.

⁷⁵ "Cooperative Threat Reduction: Uzbekistan Programs," Defense Threat Reduction Agency website, <http://www.dtra.mil/ctr/ctr_uzbekistan.html>.

⁷⁶ Although both the State Department and the Department of Energy currently have programs that also focus on border security, neither of these programs is as well funded as the new DOD initiative. DOD plans to coordinate its new program closely with these other agencies. Author's phone conversation with U.S. DOD official, October 2002. (Turkmenistan and Belarus are not eligible because they have not been certified by the State Department as required by the CTR legislation, due to poor human rights records.)

⁷⁷ It is unlikely, however, that it will be expanded to Tajikistan or Turkmenistan any time soon. Tajikistan is still considered too unstable for the initiation of any major CTR projects. Furthermore, the heavy presence of border guards from the Russian Federation on the Afghan-Tajik border complicates any potential U.S. border-related assistance to Tajikistan. As indicated in *supra* note 75, Turkmenistan is not currently eligible for CTR assistance.

⁷⁸ "Combating WMD Smuggling," Testimony of Deputy Under Secretary of Defense Lisa Bronson before the Senate Armed Services Committee, Subcommittee on Emerging Threats, July 30, 2002.

⁷⁹ *Ibid.*

⁸⁰ Author's phone conversation with U.S. DOD official, October 2002.