

The Cooperative Threat Reduction Assistance to Kazakhstan

Cooperative Threat Reduction Program, Department of Defense January 16, 1997

Assistance to the Republic of Kazakhstan is provided through ten unique Cooperative Threat Reduction (CTR) projects. Notifications to Congress total \$172.6 million and to date \$108.1 million has been obligated. The following provides a summary of each of the CTR projects being implemented in Kazakhstan.

Strategic Offensive Arms Elimination (SOAE)

The \$70 million implementing agreement for Strategic Offensive Arms Elimination, which originally focused solely on SS- 1 8 ICBM silo launcher dismantlement, was amended in July 1995. The amendment allows the U.S. to provide other types of dismantlement assistance to Kazakhstan, such as the elimination of heavy bombers, the elimination of unified fill facilities, and the disposition of excess liquid rocket fuel. The agreement was amended in June 1996 to add \$8 million in FY 1996 funds.

The original and primary project under this agreement assists Kazakhstan in the safe elimination and clean-up of all SS- 1 8 silo launchers, launch control sites, training silos, and silo test launchers, which enables Kazakhstan to fulfill START I obligations. Technical meetings began in January 1994, but implementation was delayed due to Russian objections to U.S. contractor presence at the intact silos.

In May 1994, U.S. and Kazakhstan officials agreed on a two phase approach where Russia would be responsible for destroying the silo headworks in the first phase with no U.S. personnel on-site. The U.S. Department of Defense (DoD) agreed to provide assistance to Kazakhstan for its tasks during Phase One. DoD awarded two contracts, valued at approximately \$1.2 million, to Kazakstani firms to remove equipment deemed valuable to the government of Kazakhstan prior to the destruction of the silo headworks by the Russians. The U.S. is assisting Kazakhstan in the second phase, clean-up of the destroyed silos, through the provision of a general contractor. DoD awarded a contract to the Brown and Root/ABB SUSA joint venture for \$31,531,912 on 29 November 1995. A protest, filed by one of the unsuccessful offerors upon award, resulted in a three month delay to the dismantlement work in the 1996 work season. Work at the sites began in July 1996 and all site work should be complete by August 1999. The Defense Special Weapons Agency (DSWA), in its role as contract monitor, was notified that a potential radiological problem exists at the silos at the Balapan test range. DSWA plans to initiate a contract with the Kazakstani National Nuclear Center to assess the extent of the radiological problem. Existence of contamination could be a significant "change in condition" and affect the funding requirements of the project. DSWA was also notified that not all of the silos at the Leninsk test range identified in the contract are SS- 1 8 silos. The contract states that Brown and Root/ABB SUSA should eliminate fourteen silos at the Leninsk test range. However, only ten of the fourteen silos identified are SS- 1 8 silos. In addition, there are a total of 18 silos at Leninsk that require elimination. A letter on this subject has been forwarded to the CTR Program Office for guidance.

The Kazakhstan Ministry of Defense (MoD) requested and the U.S. agreed to provide equipment to dismantle strategic bombers in Kazakhstan. In October 1995, a DoD tech-

nical team met with MoD representatives and defined the technical requirements for heavy bomber elimination. DoD subsequently provided MoD with a proposed list of equipment and Kazakstani technical experts accepted this list. Additional items were requested by the Kazakstani technical experts in February 1996 and this list has been reviewed by the U.S. Additional information pertaining to this new petition was requested by the U.S. In April 1996, a DoD technical team received additional information on the items requested by the Kazakstanis as well as supplemental equipment requests. The supplemental equipment requests included: radio communication equipment, work bench, ladders, mobile home/office trailer, ambulance, and motor vehicle scales. DoD agreed to provide the supplemental equipment in September 1996. The procurement process for the original equipment began in May 1996 and was completed in September 1996. Procurement of the additional equipment began in October 1996 and should be complete by March 1997.

A DoD technical team defined the initial requirements for unified fill facility elimination in April 1996. The Kazakstanis requested Nunn-Lugar assistance to eliminate these facilities and agreed upon the technical requirements for the elimination of the facilities. To fulfill the requirements of the agreement, the Department of Defense (DoD) agreed to assist Kazakstan in the neutralization and dismantlement of missile unified fill facilities (UFFs) located at Derzhavinsk, Zhangis-Tobe, and Leninsk and in the decontamination and deactivation of the nuclear weapons storage areas (NWSAs) located at Derzhavinsk, Zhangis-Tobe, and Dolon. The support facilities to be eliminated contain SS-18 ICBM system and heavy strategic bomber infrastructure. Each UFF complex consists generally of above ground liquid ICBM fuel (heptyl) and oxidizer (amyl) storage tanks, mechanical equipment located inside buildings, earth-covered semi-buried bunkers and structures, buried distribution piping and utilities, lagoons, and communication systems. Each NWSA consists of earth covered storage magazines, radiologically contaminated material disposal wells, above ground storage buildings (supplies and vehicles), maintenance buildings, and administration buildings. DSWA is currently developing requirements to issue a Request for Proposals (RFP). A trip is planned in February 1997 to finalize the technical requirements for this project.

The Kazakstanis also requested assistance with the elimination of liquid fuel. The Kazakstanis requested a contractor to provide the required fuel disposition with the use of a GFE incinerator. DSWA is currently developing requirements for this project in conjunction with the program office.

Weapons of Mass Destruction Infrastructure Elimination (WMDIE)

On 3 October 1995, an agreement was signed by the U.S. Department of Defense and the Ministry of Science - Academy of Sciences (formerly the Ministry of Science and New Technology) of the Republic of Kazakstan, which provided an initial \$6 million in assistance for the elimination of the nuclear test tunnels at the former Semipalatinsk Site's Degelen Mountain Complex. On 7 June 1996, the U.S. Department of Defense and Kazakstan's Ministry of Science - Academy of Science amended the WMDIE agreement to include additional funding for a total of \$22.5 million. The amended agreement also permits the use of WMDIE funds for the dismantlement of infrastructure designed for the production of biological weapons at the Stepnogorsk BW facility and the closure of nuclear test holes at the Balapan Test Field at Semipalatinsk. Currently, the overall WMDIE umbrella for Kazakstan includes three projects: (1) Nuclear Testing Infrastructure Elimination (NTIE) Project, which includes the test tunnels at Degelen

Mountain and the nuclear test holes at Balapan Test Field; (2) Project Sapphire; and, (3) Stepnogorsk BW Production Facility.

The elimination of approximately 181 nuclear test tunnels at Degelen Mountain and 13 unused nuclear test holes at the Balapan Test Field has been merged into one project (NTIE Project) with a \$18.5M budget. The elimination process will be accomplished using a two-phased approach. Phase I involves site assessments and the development of associated schedules and budgets. Phase I for the Degelen Mountain Complex began in October 1995 and was completed in October 1996. Phase I for Balapan was initiated in November 1996 with a contract award. Phase II involves the actual tunnel and nuclear test hole closure operation. On 2 April 1996, DSWA and the National Nuclear Center (NNC) signed the initial Phase II contract for Degelen, a \$4.2 million contract to eliminate the first 58 tunnels. To date, the contractor has contractually completed (closed and backfilled) 50 tunnels and has closed 8 others, but lack back filling for completion. The second Phase II contract, the elimination of approximately 64 tunnels by 31 January 1998, was negotiated and awarded to NNC on 9 January 1997. A final contract to close the remaining tunnels by end of FY 1999 is projected to be negotiated and awarded during the 3rd Quarter FY 1998. An initial Phase II contract award for closure of three nuclear test holes at Balapan is anticipated to be awarded in May 1997. A second contract will be awarded to close the remaining nuclear test holes by September 1998, using results and experience gained from the initial closures.

Funds notified under the October 1995 agreement were used for Project Sapphire. One million dollars of CTR WMDIE funds were used in the fall of 1994 to partially pay for Project Sapphire, which involved the purchase of 600 kg of highly-enriched uranium (HEU) from a Kazakstan production facility.

The Biological Weapons (BW) Production Facility Dismantlement Project will be accomplished using a two-phased approach. The Stepnogorsk facility, a former Soviet BW mobilization production plant, is owned by the privatized BioMedPreparat enterprise. The first phase entails a contract with BioMedPreparat to develop a Management Action Plan for the work to be accomplished, to identify and itemize the equipment and critical systems that must be removed to eliminate the BW production capability, to sample areas of the facility key to BW production, to establish a U.S. equipped safety laboratory, and to develop a dismantlement plan. Phase I was initiated with a contract award to BioMedPreparat on 5 December 1996, and will be completed in August 1997. The second phase will address the actual dismantlement of the specialized equipment and critical systems to ensure the demilitarization of the facility. A portion of this facility is currently being used by Allen & Associates International as a project under the Industrial Partnership area (page 6).

Government-to-Government Communications Link (GGCL)

This \$2.3 million assistance project provides Kazakstan with the necessary communications equipment and training to facilitate achievement of reporting obligations under the START and Intermediate-Range Nuclear Forces (INF) Treaties. Implementation of a GGCL capability is being accomplished in a manner consistent with Defense Information Systems Agency modernization of the Direct Communications Link (DCL) between the United States and Russia. As appropriate, it is modified to meet the unique requirements of individual new independent states, such as Kazakstan.

Interim computer equipment was installed and became operational in October 1994. Installation and operation of permanent equipment was established on 20 September 1995. Terminal technical assistance and preventive maintenance, installation of new terminal software and new software training were conducted 4 March 1996.

Pursuant to the country agreement, actions are being taken to provide an additional ground station to be used as a second or back-up system. Recent policy decisions reopened the possibility of providing a single-channel satellite ground station and allowing the Republic of Kazakhstan to modify the station for multi-channel use. An initial planning meeting is projected for 2nd Quarter FY 1997. Actual procurement of the satellite ground station cannot occur until acceptance of conditions placed on use of revenues generated from a multi-channel earth station and extension of the agreement. Projected delivery, installation, alignment, training, and turnover completion is 4th Quarter FY 1997. All actions are currently delayed pending cables being sent to the three (Kazakhstan, Ukraine, and Belarus) countries, offering this option and requesting their acceptance in writing of the stated conditions.

Emergency Response Equipment and Training

The purpose of this up to \$5.0 million project assists Kazakhstan in expanding its emergency response capabilities in connection with the return of nuclear warheads to Russia for destruction, and the removal of ICBMs and destruction of their silo launchers.

The initial technical exchange was conducted on 7-11 August 1994 at Los Alamos National Laboratory. The specifications and types/models of equipment required, related training, and delivery schedules were generated during these discussions. The U.S. completed equipment procurements through existing contracts. Delivery of all equipment, except upgrades for command and control radios and computer equipment, was completed in February 1996 and related training was conducted in March 1996. Types of equipment provided include: VHF portable radios; portable command and control computers; radiation, chemical, and fire fighting protective clothing; personal dosimetry equipment; Violinist III radiation detection equipment; radiological assistance program (RAP) kits; an alpha spectrometer; and air sampling monitors. Projected delivery of the command and control equipment is 2nd Quarter FY 1997 with installation and training completed in 3rd Quarter FY 1997.

Export Control

Initiated with the signing of the up to \$2.26 million implementing agreement on 14 December 1993, the export control assistance program in Kazakhstan began. An amendment to the agreement was signed on 30 June 1995 for an additional up to \$5.0 million.

The up to \$7.26 million in export control assistance includes efforts to introduce Kazakhstan to international export control regimes and to involve them in the development and integration process. Other initiatives include assistance in drafting legislation and building the political infrastructure to support and develop export controls. Computers, customs lab equipment and patrol boat procurements augment that infrastructure. Delivery and training on the customs laboratory equipment occurred in October 1995. The Licensing Automation local area-network, consisting of four PCS and two laptop computers, was also delivered in October 1995. The procurement process for the automation of the Ministry of Industry & Trade (MIT) was initiated in October 1995. However, due to delays on approval from the Government of Kazakhstan (GOK), the procurement

process had to be re-initiated. Approval for the project was granted by the GOK in March 1996. A site survey of the MIT facilities was completed in July 1996. Contract was awarded 26 September 1996. A total of six patrol boats were procured to assist the Government of Kazakhstan with its enforcement capabilities on the Caspian Sea. Two 27' Boston Whalers were delivered in January 1995. Three more Boston Whalers were delivered in April 1996. Training on the Boston Whalers occurred in May 1996. The sixth boat, a 42' patrol boat, was delivered in August 1996. The project is scheduled for completion by the end of FY 1997.

Material Control and Accounting and Physical Protection (MC&A and PP)

The objective of U.S. assistance in this project is to strengthen Kazakhstan's national systems of MC&A and PP and those employed at nuclear facilities in a timely manner. MC&A systems provide the capability for detecting possible theft, diversion, or other unauthorized use of nuclear material and for deterring such acts by imposing a risk of detection. PP provides capabilities for detecting, delaying, and responding to adversarial acts, including theft, diversion, and sabotage. Building upon existing Kazakhstan national MC&A and PP policies and practices, the U.S. is assisting Kazakhstan in developing:

- programs and national resources to ensure the effective regulatory oversight of MC&A and PP;
- enhanced capability for effectively tracking and reporting on nuclear material inventories and transfers;
- enhanced capability for both national authorities and facilities to determine and account for nuclear material inventories;
- effective physical protection measures for nuclear materials and facilities; and,
- effective technical support for MC&A and PP including resources for training, identifying and implementing technologies and equipment, as well as for providing technical assistance to facilities.

The MC&A and PP project plan was agreed to in March 1994 and implements the up to \$5 million agreement which was signed in December 1993. An amendment to the agreement was signed on 30 June 1995 for an additional up to \$3.0 million. Project funding through the first amendment totals \$8.0 million, and the estimated completion date for activities covered by these funds is in FY 1997. The Nuclear Regulatory Commission (NRC) and Department of Energy (DOE) have responsibilities at the national and facility levels. At the national level, NRC assists in developing a regulatory program and an information and reporting system. DOE at the facility level establishes an MC&A and PP program at Ulba that serves as a model for other Kazakhstan facilities. The first technical working group meeting took place in Almaty in July 1994. The first site survey took place in September 1994 at the Ulba facility in Ust-Kamenogorsk. A local area network was delivered to the Atomic Energy Agency of the Republic of Kazakhstan in August 1995, which allows for development of the national information system for nuclear materials control and accounting. Other procurements were initiated based on regulatory and site assessments. In March 1996, an advanced statistics course for MC&A was held in Almaty. Cooperative efforts, including MC&A and PP equipment deliveries continue. On 10 June 1996, a second amendment provided an additional \$15M for MPC&A improvements at Aktau's nuclear facilities. Improvements at Ulba,

using DoD funding, are scheduled for completion in 1997. After completion of the Ulba work, Aktau improvements will constitute the only remaining DoD-funded portion of MPC&A activities in Kazakstan. This portion of the project should be finished in 1998.

Expanded Defense and Military Contacts

The objective of this \$1.9 million project is to promote better understanding and cooperation between the military establishments of the U.S. and Kazakstan. To date \$0.7 million has been provided to fund 36 scheduled events. Types of events include:

- Coast Guard aviation team visit;
- Kazakstan participation in disaster relief conference;
- U.S. Army General Officer visit;
- U.S.-Kazakstan Defense Conversion meeting in Washington; and,
- Kazakstan Navy visit to the U.S. Coast Guard.

Industrial Partnerships

On 19 March 1994, Secretary of Defense Perry signed the Defense Conversion Implementing Agreement. The final list of defense enterprises to be considered for industrial partnerships, or defense conversion, was agreed to on 30 June 1994. On that list were 11 companies that both governments agreed would be eligible for assistance when additional funds, above the \$15 million currently in this project, would become available. The Commerce Business Daily (CBD) notice of procurement action was announced 11 July 1994, with a Request for Proposal (RFP) released on 26 July 1994. The Defense Special Weapons Agency (DSWA) handled the procurement of U.S./Western companies for the partnerships. A pre-proposal conference was held on 9 August 1994 to introduce eight Kazakstan enterprises to U.S./Western firms.

The following projects have been funded:

- a) On 20 January 1995, DSWA awarded a \$16 million cost-sharing contract with the U.S. contributing \$5 million and AT&T contributing \$11 million. In addition, AT&T will privately finance \$6.5 million in operational expenses during the 21 month period. AT&T through their affiliate, Lucent Technologies, and their Kazakstani partner, KazInformtelecom (KIT), will establish an international and domestic wireless telecommunications service in Kazakstan, converting some of the facilities at Sary-Shagan 3-D facility into an international telecommunications down link. KIT is a private, joint stock company. This project is nearly complete. All 11 PBX's and ARK equipment have been installed in locations throughout Kazakstan (two of which are in Almaty.) The 5ESS switch has been installed in Almaty. (A second 5ESS was deleted from the requirements of the Contract because of market conditions.) The system has been tested, coordinated with INTELSAT, and is fully operational. Nursat has received licenses for data and video transmission, but has not received voice transmission licenses, the key to the joint venture's success. The Kazakstani government is considering granting exclusive rights to a German joint venture which would heavily impact this project. Ambassador Jones has sent a letter to the Prime Minister requesting assistance with this problem.

b) On 23 March 1995, DSWA awarded a \$5.82 million cost-sharing contract with the U.S. contributing \$2,685,992 and Allen & Associates International (AAI) contributing \$3,139,620. AAI and their Kazakstani partner, BioMedPreparat, will convert a facility to manufacture, package, and distribute vitamins, pharmaceuticals, and antibiotics. The joint venture between AAI and BioMedPreparat, KAMED Resources, was registered on 15 March 96. The joint venture utilizes between 3,300 and 6,500 square feet of facility formerly used for production of biological weapons. AAI has also attracted ICN Pharmaceuticals as a partner. ICN will ship six products to KAMED for packaging and distribution. AAI estimates this will increase the private investment by \$2 million.

c) On 23 March 1995, DSWA awarded a \$7.6 million cost-sharing contract with the U.S. contributing \$3,998,304 and KRAS contributing \$3,698,308. KRAS and the Kazakstan National Nuclear Center (NNC) have converted a former nuclear weapons testing and research facility into a printed circuit board production plant. The joint venture, KK Interconnect (KKI), was registered on 9 April 96. This JV manufactures and markets single and double layer printed circuit boards (PCBS) for the regional and international market. These PCBs are commonly found on simple control systems such as light switches, burglar alarms, phone systems, radios, TVs and other consumer electronics. KK Interconnect has refurbished and installed equipment in a facility with over 26,000 square feet. The Defense Enterprise Fund (DEF) made a \$2.5M equity investment in KKI in Dec 96, allowing the JV to move towards production of multi-layered circuit boards. The ownership will be distributed as follows: 35% KRAS, 34% NNC, and 31% DEF. This contract was successfully completed and JV opening ceremonies were held in Oct 96. KKI began production on its first order of 500,000 PCB's this fall. This contract is complete.

d) On 23 March 1995, DSWA awarded a \$6.27 million cost-sharing contract with the U.S. contributing \$2,985,446 and Byelocorp Scientific Inc. (BSI) contributing \$3,283,048. BSI and their Kazakstani partner, Gidromash, converted facilities to manufacture, service, ship, and distribute pressure vessels and fittings for cryogenic liquids. The JV utilizes 600,000 square feet of the production space at Gidromash, where missile and aircraft systems were formerly produced. Gidromash has been completely converted to civilian production. The registration of the joint venture BYELKAMIT was approved on 14 December 1995, with the ownership distributed as follows: 67% BSI/SUPCO, 4% local partners, and 29% State Property Committee. Full production is currently underway. \$2.5 million in orders are expected this year. ISPESL, the Italian Certification Agency, has issued their certification, and Byelkamt is now selling their products in Europe. The factory received certification from the American Society of Mechanical Engineers (ASME) this fall, making them the only ASME certified manufacturer in Kazakstan. This contract was successfully completed and JV opening ceremonies were held in July 96. This contract is complete.

Defense Enterprise Fund (DEF)

On 21 June 1994, the U.S. Secretary of Defense designated the Defense Enterprise Fund to assist in the conversion and privatization of excess military/industrial capacity through financial assistance for partnerships. President Clinton appointed to DEF, Mr. Randolph Reynolds as Chairman, Board of Directors. The DEF receives its funds by Nunn-Lugar grants directly. Other than for Nunn-Lugar grants, the Defense Enterprise Fund is an independent not-for-profit U.S. corporation. Enterprises that qualify for DEF

investment include: privatized enterprises or spin-offs; defense enterprises or laboratories, with priority placed on those previously engaged in activities related to weapons of mass destruction (WMD); and partnerships in conjunction with U.S. or western companies. The types of financial assistance which are available include equity, loans, guarantees, and grants.

The DEF has \$51.17 million in Nunn-Lugar funding. Of this, \$7 million has been specifically allocated for equity investments, grants, and loans in joint ventures with Kazakstani WMD enterprises.

The DEF Board approved on 25 September 1996 a \$3 million investment in NURSAT, a telecommunications Joint Venture in Kazakstan which is a venture between AT&T/Lucent Technologies, Communications Development Corporation and Kazinformtelecom. This expands on conversion begun under an earlier Industrial Partnerships project.

In December 1996, the DEF made a \$2.5 million dollar investment in KKInterconnect which will allow the venture to expand their production into multi-layered circuit boards. This expands upon the conversion of the National Nuclear Center begun under an earlier Industrial Partnerships project. The DEF continues to search for other candidate projects.

International Science and Technology Center (ISTC)

On 27 November 1992, the U.S., the Russian Federation, Japan, and the European Community signed an agreement to establish an International Science and Technology Center (ISTC) to serve as a clearinghouse for projects to engage weapons scientists and engineers in the former Soviet Union (FSU) in peaceful civilian work.

The Center plays a facilitating role by developing, evaluating, and funding project proposals. The Board of Governors, which includes representatives of the participating governments, determines the overall policy of the Center and approves projects for funding. The Board has been meeting in Moscow quarterly since March 1994, with the most recent Board meeting in December 1996.

Kazakstan became a member of the ISTC at the sixth Board meeting held on 29-30 June 1995. Nine million dollars were notified to Congress for funding of Kazakstan projects through the ISTC in Moscow, \$6 million on 14 February 1995, and \$3 million on 30 May 1995. To date, four projects have been awarded in Kazakstan for \$3 million.