

Издание Центра исследований проблем нераспространения, Монтерейский институт международных исследований

Inside this Issue

- Belarus Issues National Report on Export Control
- Russian Federal Customs Service Issues New Reference Document
- Central Asian States Finalize Nuclear-Weapon-Free Zone Treaty
- Tajik Government Approves Statute on Radiation Safety

International Assistance Programs.....5

 United States Provides Patrol Boats, Vehicles, and Equipment to Uzbekistan and Kyrgyzstan

Embargoes and Sanctions Regimes.....6

- United States Sanctions Nine Chinese Entities
- United States Removes Sanctions on One Spanish and Four Russian Entities

- Illicit Trafficking in the NIS......8
 - ElBaradei, U.S. Intelligence Concerned about Trafficking in Russian Nuclear Material
 - South Korean Businessman Faces Trial in Russia for Importing Radioactive Material without Proper License
 - Two Incidents Involving Radioactive Substances Reported in Russia
 - Ukraine Investigates Alleged Illicit Weapons Sales to Iran and China

- United States Intensifies Efforts to Prevent Illicit Shipments of Nuclear and Related Materials
- Grand Jury Indicts Individuals, Companies for Unlawful Shipments to Iran
- Progress in CIA and IAEA Probes into A.Q. Khan Network

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Recent Developments in the NIS

Belarus Issues National Report on Export Control

On January 11, 2005, the Ministry of Foreign Affairs of Belarus released the National Report of the Republic of Belarus *On the Export Control Policy,[and] Exports of Weapons and Military Equipment in 2003-2004.*[1] The comprehensive report describes in detail the national system of export control, including a review of Belarusian export control legislation, state policy, and decisionmaking processes related to military-technical cooperation, export control, and nonproliferation. It also specifies the responsibilities of the Interagency Commission on Military-Technical Cooperation and Export Controls and the State Defense Industry Committee, lists specific goods and services subject to export control, describes licensing procedures, and contains licensing forms for military and dual-use items. Separate chapters describe the procedures for exports and imports of chemicals controlled under the Chemical Weapons Convention and for transit of controlled items, as well as export control enforcement with reference to particular articles of the Criminal Code.[2] [*Editor's Note: The report (in Russian) can be found online at the website of the Ministry of Foreign Affairs of Belarus:* http://www.mfa.gov.by/rus/economic/econtrol/exp_report_03-04/expcontrol_03-04.pdf>.]

The chapter on international cooperation in export control describes the implementation by Belarus of the 1997 Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Anti-Personnel Mines and on Their Destruction (Ottawa Convention); activities in export controls and disposition of light weapons and small arms; and measures implemented in the framework of the UN Register of Conventional Weapons. According to the report, Belarus included several dozen man-portable air defense systems and grenade launchers in its list of weapons to be destroyed. The document also declares the need for foreign assistance in implementing Minsk's commitment to destroy four million antipersonnel mines in four years. To illustrate Belarusian adherence to international agreements, the report states that the country destroyed 584 intermediate-range and shorter-range missiles under the 1988 U.S.-Soviet treaty on the elimination of such missiles as well as 1,773 battle tanks; 1,341 armored combat vehicles; and 130 combat aircraft under the 1990 Treaty on Conventional Armed Forces (CFE Treaty) in Europe. The report claims that under the CFE Treaty, Belarus destroyed three times as many weapons as did France, the United Kingdom, and the United States combined.[2]

This report is the third on Belarusian export control policy and arms exports. Belarus prepared similar annual reports for 2001-2002 and 2002-2003. Of CIS countries, Belarus is the first and only one to make the publication of such reports a regular event. It should be noted that, unlike the 2002-2003 report, the current report does not specify exported weapon types, quantities, and recipients. However, the Belarusian media provided such data from a separate report submitted by the Ministry of Foreign Affairs of Belarus to the UN Register of Conventional Weapons regarding Belarusian arms exports in 2003. Media reports noted that the 2004 data are not yet available. According to the report, Belarusian arms exports in 2003 went to five countries: Algeria, Iran, the Ivory Coast, Sudan, and Sweden. The main export items were tanks, armored personnel carriers, reconnaissance vehicles, multiple launch rocket systems, and other artillery systems.[3]

At a press conference in Minsk, Vyacheslau Sheyda, head of the marketing and advertising department of the leading Belarusian arms exporter Beltekheksport, announced that Belarus ranked among the top 20 arms exporting countries in 2004.[3] According to Belarusian independent military analyst Alyaksandr Alesin, five years ago Belarus was among the top 10 arms exporters, and now, after the arms stocks remaining from Soviet times have been exhausted, the country has had to change its military export structure: The decline in exports of conventional weaponry was compensated by increasing exports of military electronics, such as laser and optical targeting systems and microchips for air defense systems. Alesin claimed that Belarus could be included in the top 10 exporters if the cost of this sophisticated equipment were taken into account. Besides, according to Alesin, exports of dual-use items, which have military applications and are not usually included in such reports, should be taken into consideration.[4]

Sources: [1] Vyacheslav Budkevich, "MID obnarodoval otchet o politike eksportnogo kontrolya, eksporta vooruzheniy i voyennoy tekhniki" [MFA made public a report on the policy of export control, exports of weapons and military equipment], Belapan news agency; in *Belorusskaya delovaya gazeta* online edition, January 12, 2005, http://bdg.by/news/news.htm?66688>. [2] National Report of the Republic of Belarus *On Export Control Policy, Exports of Weapons and Military Equipment in 2003-2004* (in Russian), Ministry of Foreign Affairs of Belarus website, http://www.mfa.gov.by/rus/economic/econtrol/exp_report_03-04/expcontrol_03-04.pdf>. [3] "V 2003 godu Belarus eksportirovala vooruzheniye i voyennuyu tekhniku v Sudan, Kot-D'Ivuar i Shvetsiyu" [In 2003, Belarus exported weapons and military equipment to Sudan, Ivory Coast, and Sweden], Belarus and Telegraph Agency BELTA, January 12, 2004, in Integrum Techno, http://www.integrum.com>. [4] Valer Kalinouski, "Belarus Remains In Top Twenty Of Arms Exporters," Radio Svaboda [Radio Liberty], in Charter97 website, http://www.charter97.org/eng/news/2005/01/13/arms>.

Russian Federal Customs Service Issues New Reference Document

On November 15, 2004, the Russian Federal Customs Service issued a new document entitled Letter No. 07-56/6954 *On Certification Documents of the Federal Technical and Export Control Service*. The letter was signed by the head of the Customs Service Main Directorate of Commodity Nomenclature and Trade Restrictions, General-Lieutenant Andrey Kudryashev, and was distributed to Russian Federal Customs Service personnel to serve as a reference document.[1,2]

The letter reminds customs officials that, in accordance with Presidential Edict No. 1085 *On Questions of Federal Technical and Export Control Service* of August 16 2004, the Federal Technical and Export Control Service (FTECS) under the Ministry of Defense issues import and export licenses and other documents required for transactions involving commodities subject to export control. The letter contains visual examples of signatures of FTECS officials responsible for signing licenses and other official documents on behalf of the FTECS starting from November 1, 2004. These include the following individuals: Sergey Grigorov, FTECS director; Sergey Yakimov, FTECS deputy director; and Yuriy Zabaluyev, head of the Directorate of Export Control. The document also contains a visual example of the FTECS seal, which should also appear on import/export license-related documents.[1,2] The letter will allow Russian customs officials to verify the authenticity of documents provided by exporters or importers.

The letter also stipulates that all licenses and other export control–related documents issued by the Ministry of Economic Development and Trade prior to November 1, 2004, remain valid until their expiration and cannot be renewed. The document also informs customs officials that, since the new version of FTECS license application forms has yet to be officially approved, the FTECS will continue to use the old forms, which were sent to customs officials in Letter No. 07-20/6637 *On Examples of License Application Forms* of February 21, 2001, issued by the now defunct State Customs Committee of the Russian Federation (now the Federal Customs Service).[1,2,3]

Sources: [1] "FTS Rossii. Pismo ot 15 noyabrya 2004 g. N 07-56/6954 O razreshitelnykh dokumentakh Federalnoy sluzhby po tekhnicheskomu i eksportnomu kontrolyu" (Federal Customs Service. Letter of November 15, 2004 No. 07-56/6954 On Certification Documents of Federal Technical and Export Control Service], Russian analytical customs web portal Tamognia.ru, <http://tamognia.ru/fts/fts_447.html>. [2] "Novoye v federalnom zakonodatelstve: Vneshneekonomicheskaya deyatelnost" [New in the federal legislation: Foreign economic activities], "Pismo FTS RF ot 15.11.2004 N 07-56/6954 'O razreshitelnykh dokumentakh Federalnoy sluzhby po tekhnicheskomu i eksportnomu kontrolyu" [Letter of the Federal Customs Service of Russian Federation No. 07-56/6954 'On Certification Documents of Federal Technical and Export Control Service of November 15, 2004], ConsultantPlus information network website, http://www.consultant.ru/review/25237. [3] "Gosudarstvennyy tamozhennyy komitet Rossiyskoy Federation. Federation 21.001 N 07-20/6637 Ob obraztsakh blankov litsenziy" [State Customs Committee of the Russian Federation. February 21, 2001 No.07-20/6637 On Examples of License Forms], Russian customs software company Sigma-Soft website, http://www.sigma-soft.ru/search/D0085/d_8500_1.shtml.

Central Asian States Finalize Nuclear-Weapon-Free Zone Treaty

Taking an important step toward strengthening the global nuclear nonproliferation regime, diplomats from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan met on February 7-9, 2005, and finalized the text of a treaty establishing a Central Asian nuclear-weapon-free zone (CANWFZ).[1] The meeting, held in Tashkent, concluded talks on finalizing the treaty that had been under way since September 2002, when the five states initially agreed on a draft text.[2] Since September 2002, the Central Asian states have also conducted consultations on the draft treaty with the nuclear weapon states—China, France, Russia, the United Kingdom, and the United States. One of the primary purposes of the Tashkent meeting, according to an Uzbek Foreign Ministry spokesman, was to address the comments on the original draft treaty made by the nuclear weapon states.[3]

The revised draft treaty that emerged from the Tashkent meeting contains only a few changes from the September 2002 text. The first change is that the revised draft will allow the import of low- and medium-level radioactive waste into the CANWFZ, as long as the imports are managed in accordance with International Atomic Energy Agency (IAEA) standards. The previous draft had prohibited all imports of radioactive waste. This change was made at the request of Kazakhstan, which has been considering changing its domestic legislation to allow the commercial import of low- and medium-level radioactive waste for long-term storage. A second change is that the revised treaty does not specifically provide for neighboring states to join the CANWFZ, as did the original draft. Third, the new draft treaty establishes Kyrgyzstan as the depositary state for the treaty. The previous draft had provided that the United Nations would serve as the depositary. This last change is most likely a political gesture, intended to recognize the role that Kyrgyzstan played in negotiating the treaty. The other provisions of the draft treaty remain largely unchanged.[2]

The pending establishment of the CANWFZ is particularly significant because thousands of Soviet nuclear weapons were once based in Central Asia. The new zone also borders on regions of proliferation concern, such as the Middle East and South Asia. Further enhancing its importance, the CANWFZ will border on two nuclear weapon states, Russia and China, and it will be the first nuclear-weapon-free zone located entirely in the Northern Hemisphere. The terms of the treaty itself buttress the nonproliferation regime as they oblige the Central Asian states to accept enhanced IAEA safeguards on their nuclear material and require them to meet international recommendations regarding security of their nuclear facilities. Considering current concerns that Central Asia could become a source of terrorist activity or a transit corridor for terrorist smuggling of nuclear materials, these terms of the CANWFZ should be viewed as a positive step in the ongoing international struggle against terrorism. In a unique feature, the treaty also recognizes the environmental damage done to Central Asia by the Soviet nuclear weapons program and pledges to support environmental rehabilitation.

Following the meeting, the five Central Asian states issued a joint statement calling on all other states especially the nuclear weapon states-to support the initiative to create a CANWFZ. They also declared their intent to sign the newly revised treaty "as soon as possible." [4] The five states also announced after the session that the signing ceremony for the treaty would be held at the former Soviet nuclear test site in Semipalatinsk, Kazakhstan.[5] Although a date for the signing of the treaty was not announced, it may be as early as this summer. While Russia and China voiced support for the 2002 draft CANWFZ treaty, France, the United Kingdom, and the United States reportedly expressed reservations, and it remains to be seen whether the revisions agreed to at the Tashkent meeting will lead them to now support the agreement. Sources: [1] "V Tashkente soglasovan tekst dorovora o zone svobodnoy ot vadernogo oruzhiya v Tsentralnoy Azii" [Text of the treaty establishing a nuclear-weapon-free zone in Central Asia agreed in Tashkent], ITAR-TASS, February 9, 2005. [2] For details of September 2002 draft treaty, see Scott Parrish, "Central Asian States Achieve Breakthrough on Nuclear-Weapon-Free Zone Treaty," CNS Research Story of the Week, September 30, 2002, CNS website, http://cns.miis.edu/pubs/week/020930.htm. [3] "V Tashkente sostoitsya zasedaniye regionalnoy gruppy ekspertov" [Regional experts group will meet in Tashkent], RIA Novosti, February 7, 2005. [4] "Tashkentskoye zayavleniye predstaviteley Tsentralno-Aziatskikh gosudarstv po sozdaniyu zony, svobodnoy ot yadernogo oruzhiya v Tsentralnoy Azii" [Tashkent declaration by representatives of the Central Asian states on the establishment of a Central Asian nuclear-weapon-free zone], February 9, 2005. [5] "Dogovor o bezyadernoy zone v Tsentralnoy Azii budet podpisan v Semipalatinske" [Central Asian nuclear-weapon-free zone treaty will be signed in Semipalatinsk], ITAR-TASS, February 10, 2005.

Tajik Government Approves Statute on Radiation Safety

On December 3, 2004, Chairman of the Government of Tajikistan Emomali Rakhmonov signed a government decree approving the statute *On State Regulation in the Field of Radiation Safety*. According to the statute, the Agency for Nuclear and Radiation Safety under the Tajik Academy of Sciences is designated a state regulatory authority in the field of radiation safety. As such, the agency will assess radiation safety of industrial facilities; license activities related to the use of radioactive sources; monitor compliance with relevant regulations; certify personnel handling radioactive sources; conduct inventory checks of radiation sources, including control over radioactive waste; and engage in international cooperation in the field of radiation safety, including with the International Atomic Energy Agency. In exercising its powers, the Agency for Nuclear and Radiation Safety will coordinate its activities with a number of Tajik state agencies, including the Ministry of Public Health, Ministry of Security, Ministry of Defense, Ministry of Internal Affairs, Ministry of Emergency and Civil Defense, Ministry of Industry, Committee on State Border Protection, State Sanitary and Epidemiological Service of the Ministry of

Public Health, Ministry of Public Revenues and Taxes, State Committee on Environmental Protection and Forestry, and Committee on State Oversight of Labor Safety in Industry and Mining. The statute provides for the creation of an interagency council on radiation safety that will review issues related to ensuring the country's radiation safety. The government decree requires the Agency for Nuclear and Radiation Safety to submit within three months a draft statute on the interagency council on radiation security and suggestions for its composition.

Source: Text of the Statute On State Regulation in the Field of Radiation Safety adopted by Decree of the Government of the Republic of Tajikistan No. 482 of December 3, 2004, provided to CNS by a Tajik official.

International Export Control and WMD Security Assistance Programs

United States Provides Patrol Boats, Vehicles, and Equipment to Uzbekistan and Kyrgyzstan

In early 2005, Uzbekistan and Kyrgyzstan received export control equipment and technical assistance from the United States under the U.S. State Department EXBS program. The following is a summary of these efforts.

On January 12, 2005, U.S. Ambassador to Uzbekistan Jon Purnell presented two new Gyurza river patrol boats, valued at \$5.6 million, to Major General Ilkhom Ibragimov, commander of the Border Troops of the Committee for State Border Protection of the National Security Service of Uzbekistan. The handover ceremony in the Uzbek border town of Termez was attended by officials from the U.S. Department of Homeland Security and the U.S. Department of State Office of the Coordinator of U.S. Assistance to Europe and Eurasia, as well as city officials from Termez and representatives of the Ukrainian firms that built the boats---"Leninska kuznya" shipyard, and the design and construction firm Progress. The Gyurza class vessels were provided to Uzbekistan under the U.S. Department of State-funded Aviation/Interdiction Project. [Editor's Note: The Aviation/Interdiction Project, as part of the U.S. Department of State-funded Export Control and Related Border Security Assistance (EXBS) program, focuses on air patrol and interdiction capabilities of recipient countries to improve their border security and enhance counterterrorism capability and interoperability.] The 20-meter-long vessels equipped with an integrated sensor package that permits a day/night, all-weather operating capability, will be based in Termez and used to patrol the Amudarya River along Uzbekistan's southern border with Afghanistan. Having a very shallow draft and tunnel hull drive, the boats were specially designed for the unique hydrology of the Amudarya River.[1]

On February 15, 2005, Ambassador Purnell presented a total of \$749,539-worth of equipment to the Uzbek State Customs Committee, Committee for State Border Protection, Ministry of Health, and the Ministry of Emergency Situations. The equipment, donated under the EXBS program, included 252 pager-size radiation detectors, 20 Ludlum Geiger counters, 8 "product acoustic signature" systems, 20 density meters, 18 Metor metal detectors, 60 Metor handheld metal detectors, and 34 pairs of night-vision binoculars. Since its inception in April 2000, the EXBS program has donated more than \$12 million in equipment and training to the government of Uzbekistan. In the comings months, EXBS equipment donations will include cargo X-ray equipment for the Tashkent International Airport, as well as new engines and tires for BTR-80 patrol vehicles, valued at over \$1.7 million. Other major equipment donations scheduled for delivery next year include two helicopter simulators valued at \$6.5 million.[2]

On January 28, 2005, the U.S. Embassy in the Kyrgyz Republic provided EXBS technical assistance worth \$2.6 million to the Kyrgyz Border Guard Service, Department of Customs Service of the Committee on Revenues under the Ministry of Finance, and to the Ministry of Ecology and Emergency Situations. The assistance included 30 KamAZ trucks, 10 Niva vehicles, 54 sets of radio equipment, 84 sets of cold weather gear, and 60 night-vision goggles. The equipment will be used for nonproliferation and border security efforts, as well as interdiction of the transit of illegal goods.[3]

Sources: [1] "United States Presents River Patrol Boats to the Committee for State Border Protection," U.S. Embassy in Uzbekistan press release, January 13, 2005, http://www.usembassy.uz/home/index.aspx?&=&mid=429&lid=1&overview=1084. [2] "United States Presents Radiation Detection and Other Equipment to the Agencies of the Government of Uzbekistan," February 15, 2005, http://www.usembassy.uz/home/index.aspx?&=&mid=429&lid=1&overview=1084>. [2] "United States Presents Radiation Detection and Other Equipment to the Agencies of the Government of Uzbekistan," February 15, 2005, http://www.usembassy.uz/home/index.aspx?&mid=429&overview=1115>. [3] U.S. Embassy in the Kyrgyz Republic press release, January 28, 2005, http://bishkek.usembassy.gov/releases/2005/EXBIS%20handover_Jan%2028_Eng.doc>.

Embargoes and Sanctions Regimes

United States Sanctions Nine Chinese Entities

According to a January 3, 2005, U.S. Department of State notice in the Federal Register, the United States imposed sanctions on nine Chinese entities under Section 3 of the Iran Nonproliferation Act of 2000, which "provides for penalties on entities for the transfer to Iran since January 1, 1999, of equipment and technology controlled under multilateral export control lists [...] or otherwise having the potential to make a material contribution to the development of weapons of mass destruction (WMD) or cruise or ballistic missile systems."[1]

The sanctioned entities include the following eight companies and one individual: Beijing Alite Technologies Company Limited, China Aero-Technology Import Export Corporation, China Great Wall Industry Corporation, China North Industry Corporation (NORINCO), Wha Cheong Tai Company, Zibo Chemet Equipment Corporation Ltd. (China); Ecoma Enterprise Co. Ltd. (Taiwan); Paeksan Associated Corporation (North Korea); and Q. C. Chen (a Chinese national). The sanctions will remain in place for two years from their effective date—December 27, 2004.[1]

Under the terms of the new sanctions, no U.S. government department or agency may procure any goods, technologies, or services from these foreign entities or provide any assistance to them; further, these entities shall not be eligible to participate in any U.S. government assistance program. The sanctions also ban the U.S. government from selling to the entities any items on the U.S. Munitions List and any defense articles, defense services, or design and construction services under the Arms Export Control Act. In addition, all existing export licenses will be suspended and no new export licenses will be issued for the transfer to these entities of items "controlled under the Export Administration Act of 1979 or the Export Administration Regulations."[1]

Two of the sanctioned Chinese entities—Wha Cheong Tai Company and Q. C. Chen—were sanctioned for the second time under the Iran Nonproliferation Act within a one-month span. The first set of sanctions, which went into effect on November 24, 2004, was imposed on, along with the aforementioned two entities, three other companies—Chinese Liaoning Jiayi Metals and Minerals Company, Ltd.; Shanghai Triple International Ltd.; and North Korean Changgwang Sinyong Corporation.[2] It should also be noted that three of the blacklisted companies were sanctioned on several occasions in 2004 under the Iran Nonproliferation Act: NORINCO and Changgwang Sinyong Corporation in April and September, and China Great Wall Industry Corporation in September.[3,4]

The notice in the *Federal Register* does not provide details on the nature of the items the alleged violators exported to Iran. U.S. government officials, quoted in the *New York Times*, described the list of exports to Iran as high-performance metals and components that could aid Iran's efforts to extend the range of its missiles. Officials also told the newspaper that no evidence suggested that China's leadership was aware of the sales. The *New York Times* also cited a senior administration official, who spoke on condition of anonymity, as saying that the Chinese "are moving in the right direction generally" on proliferation and have stopped some exports to North Korea, including a chemical that could be used in reprocessing spent nuclear fuel into weapons-grade fuel. However, according to the official, "while they are helping us on North Korea, they have not been as helpful on Iran."[5]

When asked about the December 2004 sanctions in an interview with the *China Daily*, an official with the Chinese Foreign Ministry spokesperson's office said that the actions were "very irresponsible" and would "not help expand Sino-U.S. cooperation on nonproliferation."[6] Foreign Ministry spokesperson Kong Quan expressed China's disapproval of the U.S. sanctions during a regular press briefing, adding that: "The US government's wanton launch of sanctions against Chinese companies without real evidence is not a wise choice."[7]

Sources: [1] U.S. Department of State Bureau of Nonproliferation Public Notice 4946, "Imposition of Nonproliferation Measures Against Nine Foreign Entities, Including a Ban on U.S. Government Procurement, and Removal of Penalties From One Entity," *Federal Register*, January 3, 2005, Vol. 70, No. 1, p. 133, http://www.gpoaccess.gov. [2] U.S. Department of State Bureau of Nonproliferation Public Notice 4914, "Imposition of Nonproliferation Measures Against Five Foreign Entities, Including a Ban on U.S. Government Procurement," *Federal Register*, December 1, 2004, Vol. 69, No. 230, p. 69989, http://www.gpoaccess.gov. [2] U.S. Department of State Bureau of Nonproliferation Public Notice 4914, "Imposition of Nonproliferation Measures Against Five Foreign Entities, Including a Ban on U.S. Government Procurement," *Federal Register*, December 1, 2004, Vol. 69, No. 230, p. 69989, http://www.gpoaccess.gov. [3]

U.S. Department of State Bureau of Nonproliferation Public Notice 4680, "Imposition of Nonproliferation Measures Against Thirteen Entities, Including Ban on U.S. Government Procurement," *Federal Register*, April 7, 2004, Vol. 69, No. 67, p. 18415, <htps://www.gpoaccess.gov>. [4] U.S. Department of State Bureau of Nonproliferation Public Notice 4845, "Imposition of Nonproliferation Measures Against Fourteen Foreign Entities, Including Ban on U.S. Government Procurement," *Federal Register*, September 29, 2004, Vol. 69, No. 188, pp. 58212-58213, http://www.gpoaccess.gov>. [5] David E. Sanger, "U.S. Punishes 8 Chinese Firms for Aiding Iran," *New York Times* online edition, January 18, 2005, p. 1, http://www.nytimes.com/2005/01/18/politics/18nukes.html>. [6] "PRC FM Spokesman's Office: US Sanctions 'Very Irresponsible,'

<http://www.nytimes.com/2005/01/18/politics/18nukes.html>. [6] "PRC FM Spokesman's Office: US Sanctions 'Very Irresponsible,' 'Strong Dissatisfaction,'" *China Daily*, January 7, 2005. [7] "China Slams US Sanctions against Five Chinese Proliferators," Agence France-Presse, December 2, 2004, in Lexis–Nexis Academic Universe, http://www.lexis-nexis.com>.

United States Removes Sanctions on One Spanish and Four Russian Entities

According to a November 8, 2004, U.S. Department of Commerce Bureau of Industry and Security (BIS) final rule [*official U.S. document introducing changes or amendments in regulations that govern a particular field*] amending the U.S. Export Administration Regulations (EAR), the United States lifted sanctions previously imposed on four Russian entities. Sanctions against Europalace 2000, Grafit (aka State Scientific Research Institute of Graphite or NIIGRAFIT), MOSO Company, and the Scientific Research and Design Institute of Power Technology (aka NIKIET, Research and Development Institute of Power Engineering [RDIPE], or ENTEK) were imposed by the Department of Commerce in 1998 and 1999 under the EAR following determinations by the U.S. Department of State that these entities had engaged in nuclear or missile technology proliferation activities.[1] The first three were originally sanctioned on July 30, 1998, for aiding Iran's ballistic missile program. NIKIET was sanctioned later, on January 8, 1999, for aiding Iran's nuclear efforts.[2] All four entities were then added to the U.S. Entity List.

On March 23, 2004, the Department of State determined that it is in the "foreign policy and national security interests of the United States" to remove nonproliferation measures imposed on these four Russian entities. In conformance with this determination, the BIS final rule removed the aforementioned four entities from the Entity List and cancelled restrictions on export and reexport to these entities, effective November 15, 2004. However, export and reexport restrictions still apply to transactions with these entities involving controlled items if the exporter or reexporter knows or has reason to suspect that the items will be used in a prohibited activity.[1]

According to a January 3, 2005, U.S. Department of State notice in the Federal Register, the United States also lifted sanctions against a Spanish company. Sanctions against the Spanish entity Telstar, which came into effect on September 23, 2004, pursuant to the Iran Nonproliferation Act, were lifted after Telstar agreed to refrain from doing business with Iran.[2] Telstar had been reported in September 2004 to be the first company from a NATO country to "face penalties under the Iran Nonproliferation Act."[4]

Sources: [1] U.S. Department Of Commerce Bureau of Industry and Security (BIS) final rule, "Entity List: Removal of Four Russian Entities," *Federal Register*, November 15, 2004, Vol. 69, No. 219, pp. 65539-65540, http://www.gpoaccess.gov. [2] Mike Nartker, "United States Lifts Sanctions Against Five Russian Entities," Global Security Newswire, April 1, 2004, Nuclear Threat Initiative website, http://nti.org/d_newswire/issues/2004_4_1.html.[3] Mike Nartker, "United States Sanctions Chinese, Other Entities for Allegedly Aiding Iranian Weapons Programs," Global Security Newswire, January 10, 2004, Nuclear Threat Initiative website, http://www.gpoaccess.gov. [2] Mike Nartker, "United States Sanctions Chinese, Other Entities for Allegedly Aiding Iranian Weapons Programs," Global Security Newswire, January 10, 2004, Nuclear Threat Initiative website, http://www.nti.org/d_newswire/issues/2005/1/10/9b3926d1-76e5-49fe-bc08-1ae2c113a192.html. [4] David Gollust, "US Sanctions 14 Foreign Firms, Individuals for Selling Weapons Technology to Iran," VOA News, September 29, 2004, in Pars Times website, http://www.parstimes.com/news/archive/2004/voa/arms_sanction.html.

Illicit Trafficking in the Newly Independent States (NIS)

ElBaradei, U.S. Intelligence Concerned about Trafficking in Russian Nuclear Material

In a January 2005 interview with the *Washington Post*, IAEA Director-General Mohamed ElBaradei said that there is a significant possibility that some terrorist groups have acquired nuclear materials—materials potentially usable for nuclear weapons. According to ElBaradei, "there has been a lot of illicit trafficking of nuclear materials—even some kilogram quantities of highly enriched uranium." Highly enriched uranium (HEU) is one of two materials—the other is plutonium—that have been used as the core of a nuclear weapon. ElBaradei said he could not exclude the possibility that something "significant" went to a terrorist group during the period after the Cold War, when nuclear material was not adequately protected in the former Soviet Union. Acquisition of a stolen nuclear weapon or enough material to develop a crude nuclear weapon would have "disastrous consequences," according to the director-general.[1]

A recent U.S. intelligence publication echoes ElBaradei's concerns. According to the unclassified version of the U.S. National Intelligence Council's *Annual Report to Congress on the Safety and Security of Russian Nuclear Facilities and Military Forces*, released in December 2004, the U.S. intelligence community assesses "that undetected smuggling [of nuclear material in Russia] has occurred, and we are concerned about the total amount of material that could have been diverted or stolen in the last 13 years." The report continues: "We find it highly unlikely that Russian authorities would have been able to recover all the material reportedly stolen."[2]

An independent analysis by the Center for Nonproliferation Studies (CNS), a summary of which appears in Table I below, highlights the publicly known cases involving the theft, smuggling, illegal possession, and illegal trade of NIS-origin HEU or plutonium, known as "fissile" material.[3] Table I focuses on cases that have been corroborated by multiple independent sources and/or were officially reported to the IAEA by national governments. Cases are designated as "proliferation significant" if they involve more than miniscule quantities of HEU or plutonium, or raise unusual concerns owing to the characteristics of the material involved or the circumstances surrounding the case. Additional details about the cases in Table 1 can be found in related entries in the NIS Nuclear Trafficking database, which is maintained by CNS at http://www.nti.org/db/nistraff/index.html.

Case; Date of Diversion	Material Diverted	Origin of Material	Recovery of Material
Podolsk, Russia* 5/92-9/92	1.5 kg of 90-percent HEU	Luch Scientific Production Association, Podolsk, Russia	10/9/92: Russian police intercepted the smuggler in the Podolsk train station as part of an unrelated investigation.
Vilnius, Lithuania early 1992	About 150 g of 50-percent HEU	Institute of Physics and Power Engineering, Obninsk, Russia	5/93: Approximately 150 g HEU was discovered in a Vilnius bank vault embedded in portions of a transit shipment of four metric tons of beryllium.
Andreyeva Guba, Russia* 7/29/93	1.8 kg of 36-percent HEU	Naval base storage facility, Andreyeva Guba, Russia	7/29/93: Russian security forces discovered the missing fuel rods, arrested the thieves, and seized the material.
Tengen, Germany Unknown	6.15 g of plutonium- 239	Unconfirmed; possibly Arzamas-16, Russia	5/10/94: Police stumbled upon the cache of plutonium while at the suspect's apartment for an unrelated matter.
Landshut, Germany Unknown	800 mg of 87.7-percent HEU	Unconfirmed; likely Obninsk, Russia	6/13/94: Undercover German police acted as potential customers in a sting operation.
Sevmorput, Russia* 11/27/93	4.5 kg of 20-percent HEU	Naval shipyard, Sevmorput, Russia	6/94: The brother of a suspect asked a co- worker for help finding a customer for the uranium stolen from fuel rods. The co- worker notified authorities.
Munich, Germany Unknown	560 g MOX fuel; 363 g of plutonium-239	Unconfirmed; likely Obninsk, Russia	8/10/94: Undercover German police acted as potential customers in a sting operation.
Prague, Czech Republic Unknown	2.7 kg of 87.7-percent HEU	Unconfirmed; likely Obninsk, Russia	12/14/94: Police received an anonymous tip giving the material's location (a parked car). In two instances in June 1995, Czech authorities recovered small additional amounts of HEU believed to be from the same source.
St. Petersburg, Russia ** Unknown	3.05 kg of 90-percent HEU	Unconfirmed; likely Machine Building Plant, Elektrostal, Russia	6/8/94: Russian news agencies report that in March 1994, Russian Federal Security Service agents arrested three suspects attempting to sell about 3 kg of HEU.
Moscow, Russia May 1994	1.7 kg of 21-percent HEU	Machine-Building Plant in Elektrostal, Russia	6/8/95: In a sting operation, Russian Federal Security Service agents arrested three suspects trying to sell HEU, one of whom was an employee of Elektrostal.
Sukhumi, Georgia [*] Unknown (sometime between 1992-1997)	Approximately 2 kg of 90-percent HEU	I.N. Vekua Physics and Technology Institute, Sukhumi, Georgia	12/97: A Russian inspection team visited a facility that had been closed by the 1992 Abkhazian-Georgian conflict and found facility abandoned and material included in 1992 inventory missing. <i>Material has not been recovered</i> .

Case; Date of Diversion	Material Diverted	Origin of Material	Recovery of Material
Chelyabinsk Oblast, Russia [*] Unknown	18.5 kg of HEU (enrichment level unspecified)	Unknown, possibly Mayak Production Association, Chelyabinsk-70, or Zlatoust- 36, Russia	12/17/98: Russian Federal Security service reports that it thwarted an attempt by workers at a nuclear facility in Chelyabinsk Oblast to steal 18.5 kg nuclear material. 10/00: Russian Ministry of Atomic Energy official confirms incident involved HEU.
Dunav Most, Bulgaria Unknown	10 g of 76-percent HEU	Unknown	5/29/99: Bulgarian customs officers discovered HEU hidden in the trunk of a car crossing into Bulgaria from Turkey. Driver said he had obtained material in Moldova.
Kara-Balta, Kyrgyzstan Unknown	1.5 g of plutonium metal	Unknown	10/2/1999 According to the IAEA list, Kyrgyzstani National Security Service officials arrested two persons in the act of selling a small metallic disk of plutonium (1.49 g). The individuals were prosecuted and sentenced to prison.
Batumi, Georgia Unknown	920 g of 30-percent HEU	Unknown	4/19/00: Georgian police arrested four suspects and seized HEU.
Elektrostal, Russia *** Unknown	3.7 kg of 21-percent HEU	Unconfirmed, possibly Elektrostal Machine-Building Plant, Bochvar Institute (VNIINM), or Politekh enterprise, Russia	5/2000: A resident of Elektrostal was detained during an attempt to sell 3.7 kg of uranium enriched to 2-percent U-235. The incident was reported by Gosatomnadzor.
Tbilisi, Georgia Unknown	0.4 g of plutonium powder	Unknown	9/16/2000 An individual was arrested for illegal possession of a small quantity of mixed powder containing about 0.4 g of plutonium and 0.8 g of low-enriched uranium.
Paris, France**** Unknown	~5 g of 70-80-percent HEU	Unknown	7/16/2001 French police arrested three men and confiscated approximately 5 g of HEU.

*. This case is not included in the IAEA Illicit Trafficking Database.

** This case is included in this table largely on the basis of reports made to the International Atomic Energy Agency by the Russian Federation. Additional corroborating evidence, however, is not readily available.

*** Although this case is reported by Gosatomnadzor (Russian Nuclear Regulatory Agency), it was not officially confirmed by other Russian government agencies. It does not appear in the IAEA Illicit Trafficking Database.

**** Subsequent analysis of the material seized in this case did not confirm that the HEU originated in the NIS.

Sources: [1] "Q&A: ElBaradei, Feeling the Nuclear Heat," *Washington Post*, January 30, 2005, <http://www.washingtonpost.com/wpdyn/articles/A46420-2005Jan29.html>. [2] *Annual Report to Congress on the Safety and Security of Russian Nuclear Facilities and Military Forces*, National Intelligence Council, December 2004. [3] Table is taken from William C. Potter and Elena Sokova, "Illicit Nuclear Trafficking in the NIS: What's New? What's True?" *Nonproliferation Review* 9 (Summer 2002), CNS website, <http://cns.miis.edu/pubs/npr/index.htm>.

South Korean Businessman Faces Trial in Russia for Importing Radioactive Material without Proper License

On November 20, 2004, the Yantar (Amber) radiation control system at the port of Korsakov on the southern part of Sakhalin Island, Russian Far East, detected radiation from a freight container originating from South Korea. The port authority seized the cargo, and on November 23, Russian customs officers and officials from the Sakhalin Oblast emergency response services examined the container and found 13 lead boxes with radionuclide instruments. According to Yuriy Gurshal, Sakhalin Oblast customs department press secretary, the radiation from the seized devices exceeded natural background radiation by more than 200 times.[1,2,3] According to early Russian media reports, the instruments contained iridium-192[3,4], but later reports indicated that the radioactive material was uranium-238.[5,6] However, according to an assessment by the U.S. Department of Homeland Security's Nuclear Assessment Program, the uranium was most likely "depleted uranium used as shielding material for the radioactive sources."[7]

The subsequent investigation established that the instruments, intended for checking the quality of welding seams, belonged to the South Korean company All Nations Co. and were destined for South Korean Daewoo Engineering and Construction Co., a subcontractor in the construction of a liquefied natural gas factory in the nearby town of Prigorodnoye under the Sakhalin-2 oil and gas project. The instruments were declared in shipping documents, but no permission was obtained from Russian authorities for their import, in violation of Russian regulations governing imports of devices powered with radioactive sources.[1,2,3,4]

In late December 2004, the Sakhalin Oblast Transport Prosecutor's Office summoned the president of All Nations Co., 43-year-old South Korean businessman Kim Jong Hon, to testify on the case. On December 29, 2004, Kim was detained at his arrival from Seoul to Sakhalin, and on December 31, the court ruled to place Kim on two-month pre-trial detention. On January 3, 2005, the Prosecutor's Office charged Kim with illegally importing highly radioactive materials into Russia in accordance with Part 2 of Article 188 of the Russian Criminal Code, "Smuggling of Radioactive Materials," providing for three to seven years in prison and confiscation of property. According to the Transport Prosecutor's Office, the evidence suggested that Kim had been aware of Russian regulations before the shipment was made. Russian media reports claimed that the radioactive cargo was delivered to Sakhalin by the ship *Gloria* chartered in Libya.[8,9,10,11]

On January 18, 2005, Kim was released on bail of 3 million rubles (about \$107,000 as of January 18, 2005) following an appeal from the South Korean consulate general in Vladivostok. According to Sakhalin Transport Prosecutor Viktor Dedov, Kim was released in order to allow the companies involved in the construction of a factory to meet the project deadlines. Russian media reported that the South Korean stayed in Yuzhno-Sakhalinsk to conduct his business while awaiting trial in a Russian court. Sakhalin-2 project operator Sakhalin Energy applied for permission to reexport the instruments.[11,12,13]

A year ago, a similar incident occurred in Sakhalin involving radioactive cargo from South Korea and a foreign subcontractor working in Sakhalin. In February 2004, the Korsakov port authority seized a highly radioactive radioisotope device, powered with strontium and cesium, which emitted radiation more than 100 times higher than the background level. The cargo was destined for a joint Russian-Turkish-U.S. oil and gas company named BETS, which failed to obtain permission to import the device.[14] Following the incident, Sakhalin Oblast Governor Ivan Malakhov issued a directive that would strengthen control over activities of foreign subcontractors working on oil and gas projects in Sakhalin.[15]

Sources: [1] Anatoliy Ilyukhov, "Sakhalinskaya tamozhnya nachala rassledovaniye obstoyatelstv dostavki na ostrov radioaktivnogo gruza iz Yuzhnoy Korei" [Sakhalin customs opened an investigation into circumstances surrounding the delivery of a radioactive cargo from South Korea to the island], RIA Novosti, November 24, 2004, in Integrum Techno, http://www.integrum.com. [2] Yuriy Gurshal, "Iz tamozhni. Yestestvennyy fon prevyshen v 200 raz" [From the customs. Natural background radiation was exceeded 200 times], *Gubernskiye Vedomosti* (Yuzhno-Sakhalinsk), No. 265, November 25, 2004, in Integrum Techno,

<http://www.integrum.com>. [3] "Na Sakhaline zaderzhali radioaktivnuyu kontrabandu iz Yuzhnoy Korei" [Radioactive contraband from South Korea was seized in Sakhalin], NEWSru.com, November 23, 2004, in Integrum Techno, <http://www.integrum.com>. [4] "Radioaktivnyy gruz vvezen na Sakhalin nezakonno," (Radioactive cargo was illegally imported to Sakhalin), Sakh.Com news agency, November 25, 2004, <http://www.sakhalin.info/news/26537/>. [5] Petr Tsyrendorzhiyev, "V obnaruzhennykh na Sakhaline radioaktivnykh priborakh soderzhalsya neobogashchenyy uran" [Radioactive devices found in Sakhalin contained unenriched uranium], RIA Novosti, December 29, 2004, in Integrum Techno, <http://www.integrum.com>. [6] Leonid Vinogradov, "Na Sakhaline za nezakonnyy vvoz radioaktivnykh priborov zaderzhan predstavitel yuzhnokoreyskoy kompanii 'Ol neyshn'" [Representative of the South Korean All Nation company detained in Sakhalin for illegal imports of radioactive devices," ITAR-TASS, December 29, 2004, in Integrum Techno, <http://www.integrum.com>. [7] "Open Source Reporting: Illicit Trafficking of

Nuclear Materials," Department of Homeland Security Nuclear Assessment Program, December 2004. [8] Petr Tsyrendorzhiyev, "Na Sakhaline zaderzhan koreyskiy biznesmen po podozreniyu v nezakonnom vvoze na territoriyu Rossii radiatsionnykh materialov" [Korean businessman detained in Sakhalin on suspicion of illegal import of radioactive materials to the territory of Russia], RIA Novosti, December 29, 2004, in Integrum Techno, http://www.integrum.com>. [9] Pavel Usov, "Yuzhnokoreyskogo biznesmena arestovali za radioaktivnost" [South Korean businessman arrested for radioactivity], *Kommersant* (Khabarovsk issue), No. 4, January 14, 2005, in Integrum Techno, http://www.integrum.com>. [10] Petr Tsyrendorzhiyev, "V Yuzhno-Sakhalinske koreyskiy grazhdanin zaklyuchen pod strazhu po podozreniyu v popytke vvoza radiatsionnykh materialov" [A Korean national arrested in Yuzhno-Sakhalinsk on suspicion of an attempt to import radioactive materials], RIA Novosti, December 31, 2004, in Integrum Techno, http://www.integrum.com>. [10] Petr Tsyrendorzhiyev, "V Yuzhno-Sakhalinske koreyskiy grazhdanin zaklyuchen pod strazhu po podozreniyu v popytke vvoza radiatsionnykh materialov" [A Korean national arrested in Yuzhno-Sakhalinsk on suspicion of an attempt to import radioactive materials], RIA Novosti, December 31, 2004, in Integrum Techno, http://www.integrum.com>. [11] Yelena Tretyakova, "V fevrale nachnetsya sudebnoye razbiratelstov v otnoshenii yuzhnokoreyskogo biznesmena" [Trial of a South Korean businessman will begin in February]. Ostrova news agency, January 25, 2005, ">http://www.tia-strova.ru/rus/index.php?page=articles&article_id=22131>">http://www.tia-strova.ru/rus/index.php?page=articles&article_id=22131>">http://www.tia-strova.ru/rus/index.php?page=articles&article_id=22131>">http://www.tia-stro

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Two Incidents Involving Radioactive Material Reported in Russia

Two trafficking incidents involving radioactive materials were reported in Russia in December 2004-January 2005. On December 29, 2004, ITAR-TASS reported that customs officers at the Ilek customs checkpoint (Orenburg Oblast) on the Russian-Kazakhstani border seized a container filled with 37 kg of uranium. The checkpoint radiation control system indicated the presence of radiation when a CAZel vehicle transporting shift workers to Kazakhstan was passing through the checkpoint. During an inspection of the vehicle, the customs officers found a metal container, which emitted radiation exceeding the permissible level by 60 times. The container belonged to one of the workers who claimed that he had found the container at a dump and had been using it as a dumb-bell without being aware of its radioactivity. A subsequent investigation, opened in accordance with Part 2 of Article 188 of the Russian Criminal Code, "Smuggling of Radioactive Materials," established that the smuggler used to work as a radiographic engineer and nondestructive testing operator at Orenburggazprom, an affiliate of the Russian gas giant Gazprom, and was therefore well-aware of the danger posed by his cargo. According to the ITAR-TASS report, the container was designed for transporting iridium, while the substance in the container was identified as "depleted uranium-238" used in gamma radiography systems (known as "defectoscopes") for detecting defects in foundry products. [Editor's Note: Thirty-seven kilograms of depleted uranium would not give a radiation emission signal 60 times greater than background. Even if the radiation detection probe were in direct contact with the depleted uranium, it would probably not register such a high reading. If the radiation signal did indeed exceed background by 60 times, it is probable that there was a more *potent source material in the container.*]

ITAR-TASS did not specify the date of the incident but was the only media outlet to report it, in December 2004. Subsequent reports appeared only a month later, on January 28, 2005.[2,3] An announcement about the incident on Russia's Federal Customs Service website, which appeared on the same day, was based on these later reports.[4] The January 28 reports described the container as "a shielding container KZ-1 used for remote operations during loading and unloading of radiation source holders," but did not provide any information on the profile of the perpetrator or radioactivity level nor specify other details of the incident.[2,3,4]

The second incident took place on January 17, 2005, at the Nizhniy Zaramag border crossing on the Russian-Georgian border. The Yantar (Amber) radiation control system detected the radiation exceeding five times the background level from a Mercedes minivan bound for Georgia from Pyatigorsk, Russia.[5,6,7] According to Russian media reports, upon examination of the minivan, border control and customs officers found 42 bags, 35 kilogram each, containing potassium hydroxide and 11 casks, 50 kilogram each, filled with aluminum powder.[6,7] Later, A. Khetagurov, department head of the North Ossetian Customs, stated that the tests showed the presence of natural radionucleatides in the seized substances, which caused the radiation alarm. According to Khetagurov, the cargo was sent to its destination after it was established that the transportation of such substances does not require special permission.[5]

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Ukraine Investigates Alleged Illicit Weapons Sales to Iran and China

On February 2, 2005, Hryhoriy Omelchenko, Deputy Chair of the Verkhovna Rada (Ukrainian parliament) Committee on the Fight against Organized Crime and Corruption, made public information about ongoing investigations into the alleged illegal export of 12 Kh-55 (NATO designation AS-15A) and Kh-55SM (AS-15B) nuclear-capable air-launched cruise missiles (ALCMs) from Ukraine to Iran and China, in violation of Ukraine's START I Treaty obligations.[1]

Under the treaty, to which Ukraine became a party by signing the Lisbon Protocol in 1992, Ukraine committed to dismantling or returning to Russia the Tu-160 and Tu-95MS bombers and accompanying Kh-55 ALCMs that remained in the country after the dissolution of the Soviet Union.[2] However, according to a letter from Omelchenko to the Ukrainian General Prosecutor, the Progress trading firm (a subsidiary of the state arms trader Ukrspetseksport) illegally transferred six Kh-55 missiles to China in April 2000 and six Kh-55s to Iran in May 2001. In addition, Progress supplied Iran with an associated ground targeting system, referred to as the KNO-120.[1]

Omelchenko's letter begins with a request to arrest Valeriy Shmarov, head of Ukraine's arms export company Ukrspetseksport. According to the letter, a criminal case regarding the missile sale was opened in February 2004. This case, described in Omelchenko's letter, is now at Kiev's appellate court. Director of the air cargo company UkrAviaZakaz and former Ukrainian Security Service (SBU) staffer V.V. Yevdokymov and three Russian citizens (Oleg G. Orlov, Ye. V. Shilenko, and G.K. Shkinov) stand accused of collaborating with S.M. Samoylenko, then director of Progress, in the missile sale.[1] Orlov, a Russian arms trader accused by the U.N. Security Council in 2001 of selling illegal weapons to Angola[3], and Shilenko approached Ukrspetseksport in early 2000 regarding the sale.[1] The Russians had fictitious documents from the Russian Ministry of Defense and the state-owned Rosvooruzheniye arms trading company, as well as end user certificates, to support their request to purchase 20 Kh-55 missiles. These false documents were evidently accepted by Ukraine's State Export Control Service, which allowed the sale to move forward. Yevdokymov arranged for the missiles to be transported by air from Ukraine to China in April 2000.[1] He provided customs with documents indicating that the flight was departing for an airport in Russia, but instead the six missiles were flown to China.[4] Former Ukrspetseksport head V.I. Malyev reportedly knew that the paperwork was fictitious and that the missiles were headed for China. Progress was paid \$600,000; the payment was made by two firms based in Cyprus via the U.S. firm Technocality Inc. through the Central European International Bank in Budapest.[1]

The six missiles destined for Iran similarly were sold for \$600,000, and related ground targeting equipment for an additional \$200,000, also paid through Technocality Inc. This time, a fictitious contract between a Cypriot firm and Iranian firm for the provision of equipment to oil refineries was used as a cover for the money transfer. Further, the Iranian deal included servicing of the missiles; Ukrainian specialists visited Iran for this purpose several times in 2001-2003.

In October 2004, the SBU opened a criminal case regarding the embezzlement of more than \$13 million by Ukrspetseksport staff, including Director Shmarov, through these and other illegal weapons sales. Omelchenko relates that it was only in the fall of 2003, when SBU head Leonid Derkach was replaced by Ihor Smeshko, that the SBU began to investigate illegal exports, including the Kh-55 sales as well as other illegal arms sales to Sierre Leone and Eritrea.[1]

Omelchenko also stated in his letter that an additional eight missiles were obtained by the perpetrators, but apparently were never sold. The Omelchenko letter does not indicate their current location. [1]

Editor's Note: The Kh-55 missile, also known in the West as a "Kent" missile, is a strategic ALCM (a missile with a range exceeding 600 km) under START I rules. The Kh-55SM is a long-range variant of the missile, with a maximum range of 3,000 km. The Kh-55 and Kh-55SM are designed to carry a 200-kt nuclear warhead; the conventional variant of the Kh-55 was never adopted into service; the conventional variant of the Kh-55S.[5]

Several Kh-55—as well as short-range Kh-22—missiles remained in Ukraine after Russia purchased most heavy bombers and related weapons from Ukraine after the breakup of the Soviet Union. If the illegal export took place—which has not been confirmed yet—it is likely that the missiles were purchased for parts and possibly also reverse engineering of the Kh-55's highly efficient turbofan engine, the R95-300. Kh-55s were designed only for nuclear warheads and only for heavy bombers (Tu-95MS and Tu-160). They are mounted on a rotary launcher that is housed within these large bomber aircraft. According to START I rules, neither the Soviet Union, nor Russia could modify other aircraft to carry these weapons. Russia has only recently begun to deploy ALCMs capable of carrying conventional and nuclear warheads. Consequently, Iran or China would have to modify their Kh-55s to make them capable of being launched from underneath the wing of an aircraft. Although such a conversion is conceivable, given the small number of missiles, it hardly seems worth the effort. START I also prohibits Russia from selling heavy bombers (the number of these aircraft in Russia is very small). Furthermore, a nuclear warhead would have to be designed for the Kh-55s because Ukraine shipped all nuclear warheads to Russia by the mid-1990s.

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<http://www.sobor.org.ua/vr/dep020205_2.htm>. [2] "Protocol to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Arms," in NIS Nuclear and Missile Database, Nuclear Threat Initiative website, <http://www.nti.org/db/nisprofs/fulltext/treaties/start1/s1lis.htm>. [3] Pavel Felgenhauer, "Great Weapons for Rogues," *Moscow Times*, February 15, 2005, <http://www.themoscowtimes.com>. [4] "Utechka informatsii iz Apellyatsionnogo suda Kieva: rakety iz Ukrainy okazalis v Kitaye i Irane!" [Leaked information from Kiev's appellate court: missiles from Ukraine turn out to be in China and Iran!], *Obozrevatel* (Kiev), February 3, 2005, in Integrum Techno, <http://www.integrum.com>. [5] "Russian Heavy-Bomber Delivered Missiles," NIS Nuclear and Missile Database, Nuclear Threat Initiative website, <http://www.nti.org/db/nisprofs/russia/weapons/bombers/bombers.htm>.

International Developments

United States Intensifies Efforts to Prevent Illicit Shipments of Nuclear and Related Materials

In late 2004-early 2005, the Megaports Initiative and Container Security Initiative—two U.S. initiatives aimed at curbing the spread of WMD-related materials and preventing terrorists from acquiring such materials—gained further momentum as a number of states joined these efforts. In addition, the United States is installing advanced radiation detection equipment on the U.S.-Mexican border to prevent smuggling of radiological materials in this setting.

Megaports Initiative

The Megaports Initiative is part of the U.S. Department of Energy (DOE) Second Line of Defense Program, designed to work with foreign governments to deter, detect, and interdict illegal shipments of nuclear and other radioactive materials through the global maritime shipping network. Under the initiative, the DOE works with foreign partners to equip major seaports with radiation detection equipment and to provide training to appropriate law enforcement officials. The specialized radiation detection technology deployed under this program is based on technologies originally developed by DOE laboratories as part of overall U.S. government efforts to improve the security of the international maritime trading system to stem WMD proliferation.[1]

On November 24, 2004, the United States and Belgium signed an agreement in Brussels to install U.S. radiation detection equipment at the port of Antwerp, one of Belgium's busiest seaports. The equipment

will be used to detect hidden shipments of nuclear and other radioactive materials that could be used in a nuclear explosive device or in a "dirty bomb."[1] The U.S. agreement with Belgium became the fourth cooperative agreement under the Megaports Initiative, joining similar efforts currently in place in the Netherlands (port of Rotterdam), Greece (Piraeus), and Sri Lanka (Colombo).

The fifth agreement under the Megaports Initiative was signed with Spain on December 21, 2004, in Madrid. Under the agreement, U.S. special detection equipment will be installed at one of Spain's busiest seaports.[2] On January 11, 2005, U.S. Secretary of Energy Spencer Abraham announced that the Bahamas joined the Megaports Initiative, thus bringing the number of participating countries to six. The Bahamas became the first country in the Caribbean to deploy this type of detection system.[3] [*Editor's Note: The Spanish and Bahamian ports to receive the special equipment were not named in openly available sources.*]

Container Security Initiative

The Container Security Initiative (CSI) is a U.S. initiative launched in January 2002, with the aim of securing maritime containerized cargo shipments against terrorist threats by inspecting such cargo in the port of embarkation to the United States.

On December 16, 2004, the Italian port of Livorno joined the CSI to become the 33rd operational port, thus completing the expansion of the CSI in Italy. According to Italian Customs Director General Mario Andrea Guaiana, "Italian Customs and the Guardia di Finanza recently entered into an operational protocol accord to jointly achieve better preventive analysis in the Italian ports that are part of CSI. The accord is aimed at identifying high-risk shipments and ultimately combating, in a more effective manner, the international terrorist threat."[5]

On January 7, 2005, U.S. Customs and Border Protection (CBP) Commissioner Robert C. Bonner and Director General of French Customs and Excise Service (FCES) Francois Mongin announced the port of Marseilles as the 34th operational CSI port.[4] As of February 2005, the 34 operational CSI ports representing the world's major seaports are: Halifax, Montreal, and Vancouver, Canada; Rotterdam, The Netherlands; Le Havre and Marseilles, France; Bremerhaven and Hamburg, Germany; Antwerp and Zeebrugge, Belgium; Singapore; Kobe, Nagoya, Tokyo, and Yokohama, Japan; Hong Kong; Göteborg, Sweden; Felixstowe, Liverpool, Southampton, Thamesport, and Tilbury, United Kingdom; Genoa, Gioia Tauro, La Spezia, Livorno, and Naples, Italy; Busan, South Korea; Durban, South Africa; Port Klang and Tanjung Pelepas, Malaysia; Piraeus, Greece; Algeciras, Spain; and Laem Chabang, Thailand.[4]

New Measure Implemented on U.S.-Mexican Border

On January 21, 2005, Al Miramontes, assistant port director at the Calexico border station (California) on U.S.-Mexican border, announced that U.S. Customs and Border Protection officers at this border station would soon employ new highly sophisticated radiation detection devices to detect any attempts to smuggle radiological materials into the United States. The passive, ground-mounted devices, called Radiation Portal Monitors (RPMs), are capable of detecting various types of radiation emanating from nuclear devices, "dirty bombs," special nuclear materials, natural sources, and isotopes commonly used in medicine and industry. The portals are being installed on all car and truck lanes at the Calexico border station to screen cars and trucks entering the United States and alert CBP officers if necessary. According to Miramontes, RPMs are passive devices, which means they do not emit any radiation and are completely safe.[6]

Sources: [1] "U.S. and Belgian Governments Launch Initiative to Detect Illicit Trafficking of Nuclear Material," November 24, 2004, National Nuclear Security Administration press release, http://www.nnsa.doe.gov/docs/PR_NA-04-

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Grand Jury Indicts Individuals, Companies for Unlawful Shipments to Iran

A U.S. federal grand jury in Bridgeport, Connecticut, returned a four-count indictment charging two individuals and two companies with unlawful shipment of U.S. goods to Iran and related charges. The February 2, 2005, indictment supersedes an earlier two-count indictment returned by the same grand jury on January 11, 2005.[1,2,3]

The February 2 indictment charges that Mohammad Farahbakhsh, an Iranian national and naturalized U.S. citizen, and another Iranian national, Hamid Fathololoomy, as well as their companies, United Arab Emirates (UAE)-based Diamond Technology LLC and Akeed Trading Company, knowingly conspired to export—and in some cases successfully exported—various U.S. goods to Iran, an embargoed country, beginning in 1997. The indictment alleges that the defendants' efforts continued until Farahbakhsh's arrest on October 20, 2004, in Los Angeles.

The defendants are charged with exporting various goods and technologies to Iran without first obtaining required export licenses from the U.S. Department of Commerce and necessary approvals from the Office of Foreign Assets Control, U.S. Department of the Treasury. The indictment states that the defendants knowingly used various means to conceal the shipments, including falsification of U.S. Shippers Export Declarations and routing of goods through companies in the U.A.E. Specifically, Farahbakhsh, Fathololoomy, and their companies are facing the following charges:

- Between 1998 and 2000, the defendants delivered computer-related items purchased from Austin, Texas-based National Instruments to the Shahid Hemmat Industrial Group (SHIG), a branch of the Iranian Government's Ministry of Defense involved in developing and producing ballistic and cruise missiles. On four occasions—in 1994, 1997, 2000, and 2003—the U.S. Department of State issued executive orders determining that SHIG had engaged in missile technology proliferation activities that required the imposition of sanctions.
- In 2002, the defendants sold a \$65,000 satellite communications system purchased from Concord, California-based Sea Tel Inc. to the Iranian Offshore Engineering and Construction Company. According to the February 2 indictment, the equipment was installed on an Iranian oil tanker.
- The defendants purchased computer-related software from California-based Cisco Systems and delivered it to Sazeman Sanaye Hava Faza, a company affiliated with Iran's Ministry of Defense.
- The defendants conspired to ship pressure sensors and pressure transducers acquired from Omega Engineering, a Stamford-based company (Connecticut) to Iran.[1]

Prosecutors say Farahbakhsh admitted to violating U.S. export laws knowingly, but Farahbakhsh's attorney wrote in court documents that "The alleged unlicensed exports would pose no more danger to the community than the unlicensed importation of Persian rugs from Iran—a crime, no doubt, but not exactly an act of terrorism." Farahbakhsh has accused federal prosecutors of exaggerating the charges against him and mischaracterizing the case in the media.[4,5]

Farahbakhsh is being detained until his trial, which has not yet been scheduled. If convicted of the charges, Farahbakhsh and Fathololoomy face 10 years of imprisonment and a \$250,000 fine for each of the four offenses. Sentences can be ordered to be served consecutively. The companies face maximum fines of \$1,000,000 on each count.[6]

Editor's Note: U.S. Presidential Executive Order No. 12957 of March 15, 1995, and subsequent executive orders imposed economic sanctions, including a trade embargo, on Iran. The executive orders prohibited, among other things, the export, reexport, sale, or supply, directly or indirectly, to Iran of any goods, technology, or services from the United States or by a United States person. (The term U. S. person means any U.S. citizen, permanent resident alien, entity organized under the laws of the United States, including foreign branches, or any person in the United States.)[7] The executive orders authorized the Office of Foreign Assets Control of the U.S. Department of Treasury to promulgate the rules and regulations necessary to carry out the executive orders.

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Progress in CIA and IAEA Probes into A.Q. Khan Network

The U.S. and IAEA investigations into the sales of nuclear technology by Abdul Qadeer Khan continue to progress. Khan, the nuclear scientist who led the Pakistani nuclear weapons program, is believed to have sold uranium enrichment technology and equipment, and a nuclear weapon design, among other commodities, to Libya, Iran, and North Korea.

According to recent testimony before the U.S. Senate by Central Intelligence Agency Director Porter J. Goss, the United States is making a renewed push for access to the Pakistani scientist. Goss stated that the agency has yet to unravel Khan's international web of nuclear suppliers.[1] The IAEA has been investigating Khan's network as well, though without a great deal of cooperation with the U.S. investigation. According to a recent investigative report in *Time* magazine, the Malaysian government has recently agreed for the first time to make Sayed Abu Tahir, a Sri Lankan citizen who managed Khan's clandestine operations, available to IAEA investigators. Tahir, who is currently in a Malaysian jail, is believed to know many details about Khan's illegal nuclear network.[2] The IAEA has recently established a new group—the Nuclear Trade Analysis Unit (NUTRAN)—to probe for clandestine nuclear sales, such as those of the Khan network; the unit has about six specialists.[3] In addition to NUTRAN, individuals in many other IAEA divisions are also working on the issue of clandestine transfers.

While Khan has admitted to "initiating... proliferation activities"[4], the extent of his sales to North Korea, Libya, and Iran, and possible transfers to additional countries, remain the subject of speculation. In January 2005, former Israeli Mossad chief Ephraim Halevy indicated that Syria, Egypt, or Saudi Arabia might have received vital nuclear expertise from the Khan network.[5] The *Time* magazine article particularly points to Saudi Arabia as a possible beneficiary of Khan's nuclear knowledge.[2] The *New York Times* has cited federal and private experts as stating that the list of suspected customers also includes Algeria, Indonesia, Kuwait, Malaysia, Myanmar, Sudan, and the UAE. The IAEA has been investigating Khan's activities in all of the countries Khan visited, which include Afghanistan, Egypt, Iran, Ivory Coast, Kazakhstan, Kenya, Mali, Mauritania, Morocco, Niger, Nigeria, North Korea, Saudi Arabia, Senegal, Sudan, Syria, Tunisia, and the UAE. According to one IAEA staffer cited in the *New York Times*, the IAEA is "getting an idea of" how the Khan network operated and is still looking for additional suppliers and customers. The agency has already discovered ties leading to more than 30 countries.[6] Despite official Pakistani declarations that the Khan network has been closed down, a source close to Khan Research Laboratories in Islamabad told *Time* magazine that "nothing has changed"—the network has not stopped.[2]

Sources: [1] Greg Miller, "CIA Still Trying to Get Access to Pakistani Nuclear Scientist," *Los Angeles Times*, February 17, 2005, http://www.latimes.com. [2] Bill Powell, Tim McGirk, "The Man Who Sold the Bomb: How Pakistan's A.Q. Khan Outwitted Western Intelligence to Build a Global Nuclear-Smuggling Ring that Made the World a More Dangerous Place," *Time*, February 14, 2005, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com. [3] *NIS Export Control Observer* correspondence with IAEA official, February 23, 2005. [4] Transcript of Abdul Qadeer Khan speech broadcast on Pakistani television, February 4, 2004; in Federation of American Scientists Website, http://www.fas.org/nuke/guide/pakistan/nuke/aqkhan020404.html. [5] "Israeli 'Sources:' Pakistan's Khan Gave Arab State 'Potential' for Nuclear Bomb," *Jerusalem Post*, January 4, 2005, in Lexis-Nexis Academic Universe, http://www.fas.org/nuke/guide/pakistan/nuke/aqkhan020404.html. [5] "Israeli 'Sources:' Pakistan's Khan Gave Arab State 'Potential' for Nuclear Bomb," *Jerusalem Post*, January 4, 2005, in Lexis-Nexis Academic Universe, http://www.fas.org/nuke/guide/pakistan/nuke/aqkhan020404.html. [5] "Israeli 'Sources:' Pakistan's Khan Gave Arab State 'Potential' for Nuclear Bomb," *Jerusalem Post*, January 4, 2005, in Lexis-Nexis Academic Universe, http://web.lexis-nexis.com. [6] William J. Broad, David E. Sanger, "As Nuclear Secrets Emerge, More Are Suspected," *New York Times*, December 26, 2004, p. 1.

NIS Export Control Observer (http://cns.miis.edu/nis-excon) is devoted to the analysis of WMD export control issues in the NIS. It is published monthly in English and Russian for the NIS and international export control community by the Center for Nonproliferation Studies (CNS), Monterey Institute of International Studies (MIIS), with financial support from the U.S. Department of State. Although every reasonable effort has been made to check sources and verify facts, CNS cannot guarantee that accounts reported in the open literature are complete and accurate. Therefore, CNS shall not be held liable for any loss or damage caused by errors or omissions. Statements of fact and opinion expressed in *NIS Export Control Observer* are the responsibility of the authors alone and do not imply the endorsement of the editors, the Center for Nonproliferation Studies, the Monterey Institute of International Studies, or the U.S. Government. Copyright 2005 by MIIS. May be freely reproduced and distributed with proper citation.

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