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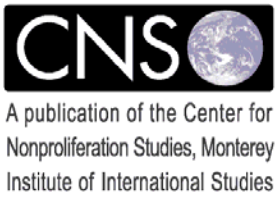

NIS Export Control Observer

ОБОЗРЕНИЕ ЭКСПОРТНОГО КОНТРОЛЯ

Издание Центра исследований проблем нераспространения, Монтерейский институт международных исследований

Inside this Issue

Special Report

NIS Export Control Observer (http://www.cns.miis.edu/nis-excon) is published monthly in English and Russian by the Center for Nonproliferation Studies, Monterey Institute of International Studies.

Letter from the Editor

As the Newly Independent States (NIS) develop and improve their national export control and border security systems, these nations confront considerable difficulties in obtaining information needed to support their progress in this field. Simultaneously, while the U.S. government and the international community have launched significant initiatives to support these efforts, they lack systematic and regular feedback on the success of these initiatives. This makes it difficult for the United States and other supporting governments to evaluate the impact of their contributions and to customize subsequent assistance to local conditions.

To help fill these gaps, the Monterey Institute's Center for Nonproliferation Studies is launching the *NIS Export Control Observer.* Each month, the *Observer* will provide updates on a broad range of issues pertaining to export controls, border security, and nonproliferation in the NIS. The *Observer* will be five to ten pages in length (following this expanded inaugural issue) and will be augmented four times each year by in-depth reports on export control-related matters.

Information will be provided by all three Center for Nonproliferation Studies' offices – in Monterey, Washington, D.C., and Almaty, Kazakhstan – as well as by correspondents throughout the NIS and the University of Georgia's Center for International Trade and Security (CITS). International experts, as well as NIS and other officials, will also be invited to contribute to the newsletter. In our opening issue, Ambassador Pavel Vacek, director general of the Nuclear Suppliers Group, writes about recent developments in this critically important element of the WMD export control system.

By making updated information available and allowing direct informal exchanges of views, we hope that the *NIS Export Control Observer* will become a shared professional publication that will help build a sense of common purpose among NIS and Western export control specialists and reinforce international efforts to prevent the proliferation of WMD.

We hope you find our inaugural issue informative and look forward to a rewarding collaboration with our readers.

Sonia Ben Ouagrham, Editor-in-Chief

Recent Developments in the NIS

Uzbekistani Government Reviews Draft Export Control Law

According to Tashmukhamed Satiboldiyev, department head at the Institute of Strategic and Inter-Regional Studies under the aegis of the President of the Republic of Uzbekistan, Uzbekistan's draft law on export controls was sent for review to the Cabinet of Ministers of Uzbekistan on November 27, 2002. Work on the bill was coordinated by the Agency for Foreign Trade and involved members of the Uzbekistani parliament, the Oliy Majlis. Upon approval by the Cabinet of Ministers, the bill will be submitted to the parliament.

Russia Expands Coverage of Export Control Violations

In June 2002, amendments to Articles 188 and 189 of the Russian Criminal Code took effect, expanding coverage of violations of export control regulations. Amendments to Article 188 expanded the list of items, the illicit trafficking of which is subject to criminal prosecution. These include radioactive materials, radiation sources, fissile materials, and weapons of mass destruction (WMD) delivery systems. Article 189 was amended to expand the list of activities considered a crime under the Criminal Code. For instance, illegal transactions for or rendering of services to a foreign organization or its representatives that may contribute to the development of WMD is now a crime, in addition to the illegal transfer of goods, technologies, materials, and information.[1] Commenting on the amendments in a news bulletin, the Russian Federation's Ministry of Foreign Affairs declared that "Russia is once again strikingly

demonstrating its firm and consistent commitment to nonproliferation, backing its principled line by concrete moves in national legislation…."[2] However, analysts from the Russian-based Center for Democratic Development and Human Rights noted that these amendments in some respect weaken the enforcement power of export control legislation. Indeed, the explanatory note to Article 189 restricts responsibility for wrongdoing to the exporter. This could allow the actual organizers of illegal transfers, who often act indirectly through intermediaries, to go unprosecuted.[3] Criminal penalties have been imposed only twice in Russia: one case involved imprisonment of an employee of Khimavtomatika Design Bureau (an organization specializing in rocket engine design, based in Voronezh); a second case involved illicit arms sales.[4] In addition, approximately 20 enterprises are under investigation.

In July 2002, the Russian Administrative Code was also amended and now includes clauses that call for penalties for export control violations. The five relevant clauses are Article 14.20 (Violation of Export Control Legislation); Article 19.5 (Failure to Fulfill Orders of Oversight Agencies); Article 19.6 (Failure to Avoid Causes and Conditions Contributing to Administrative Violation); Article 19.7 (Failure to Provide Data or Information); and Article 23.9 (Export Control Bodies). However, some believe these provisions are vague and fail to give adequate guidance to agencies on implementation of the code. To date, no administrative penalties have been imposed on Russian institutions for export control violations.

Sources: [1] O vnesenii izmeneniy v statyi 188 i 189 Ugolovnogo kodeksa Rossiyskoy Federatsii, May 7, 2002, Rossiyskaya gazeta, online edition, <http://www.rg.ru/oficial/doc/federal_zak/50.shtm>. [2] "On the Measures Being Taken by Russia to Raise the Efficiency of the System of Control over Export of Dual-Use Goods and Technologies," Ministry of Foreign Affairs Website, <http://www.ln.mid.ru>. [3] "O vnesenii izmeneniy v statyi 188 i 189 Ugolovnogo kodeksa Rossiyskoy Federatsii," Zakonotvorcheskii protses v Gosudarstvennoy Dume #37, Center for Democratic Development and Human Rights Website, <http://www.demokratia.ru>. [4] Interview with Sergey Yakimov, Director of the Office of Export Control, Ministry of Economic Development and Trade, CITS/CEC Export Control Bulletin No. 3, 2000.

Russian Authorities Consider Automated Export Control Licensing System

The Russian Ministry of Economic Development and Trade is studying the possibility of establishing an automated export control licensing system. There is growing concern among Russian authorities and export control experts that private companies and state enterprises are bypassing Russia's export control system because of the lengthy process required for obtaining export licenses. Some officials believe that compliance would increase if export licensing were expedited; however, funding and security for such a system remain a concern.

Russia Establishes Classification Centers to Assist Exporters

The Russian government established eight regional Classification Centers in accordance with Government Decree No. 477, June 21, 2001. These Classification Centers are expected to assist exporters and customs officials in determining whether items are subject to licensing. Currently, only two of these Centers – the Russian Academy of Science, in Moscow, and the Center for Industry Development Projects, in Saint Petersburg – have expertise to cover the entire range of controlled commodities. The other institutes tapped to establish Classification Centers, such as the Urals Polytechnical Institute and TsNIIChermet (Central Research Institute for Ferrous Metallurgy), have more limited expertise, on select control lists. Thus, Russian experts believe that many of the new Classification Centers will not be able to fulfill the objectives of this program and that centers with broad expertise covering all the control lists would be more effective.

Russian Government Continues Accreditation of Companies with Internal Compliance Programs

The Russian Ministry of Economic Development and Trade continues to offer accreditation to institutes and enterprises establishing internal compliance programs. This accreditation gives such institutes and enterprises the opportunity to obtain general licenses, that is, licenses permitting the export of specified items to particular end-users for a fixed period, without the need for additional governmental approvals. All other institutions must obtain individual licenses for each individual export. Among the organizations that have obtained governmental accreditation are TENEX, the Russian Academy of Sciences, the Kurchatov Institute, and TsNIIMash (the Central Research Institute for Machine Building).

Source: [1] University of Georgia Interview with Andrey Pinchuk and Sergey Mikhaylov, deputy heads of the Department of Export Controls at the Russian Ministry of Economic Development and Trade, December 2002.

Changes in NIS Export Control Personnel

Changes in the Russian Export Control Commission

Presidential Edict No. 96 of January 29, 2001, re-established the Russian Export Control Commission, which had been abolished in August 2000. On June 17, 2002, Andrey Kudrin replaced Ilya Klebanov, Minister of Industry, Science, and Technologies, as Russia's Export Control Commission chair (Presidential Edict No. 607 of June 17, 2002). The functions of the Commission, defined in Article 9 of the Russian Export Control Law, include coordinating interagency activities, defining Russia's position on international regimes, developing long-term export control strategy, and providing guidance to the government on Russian export controls. The Commission also reviews the most controversial licensing cases. For example, in 2001, the Commission, in response to U.S. concerns, reviewed the proposed transfer of laser equipment to Iran by the Yefremov Scientific Research Institute for Electrophysical Apparatus (NIIEFA). The Commission decided to block the proposed transfer and return the equipment, which had been detained at a Customs holding area.

International Supplier Regimes

IAEA Head Suggests Modification of the NSG Guidelines

In his speech at the annual Carnegie Endowment International Non-Proliferation Conference in Washington, D.C. (November 14-15, 2002), Mohamed ElBaradei, director general of the International Atomic Energy Agency (IAEA), made important remarks regarding the possibility of revising the Nuclear Suppliers Group (NSG) Guidelines.[1] Dr. ElBaradei stated that the safety conditions at nuclear reactors and related facilities in India and Pakistan, which are subject to IAEA safeguards, are below international standards and represent a matter of concern. Yet, due to export controls, neither country is able to secure the required nuclear safety equipment and technology. Mr. ElBaradei suggested implementing "an exception foreseen under the NSG Guidelines," by which India and Pakistan could receive nuclear safety assistance in exchange for commitments to "follow the NSG Guidelines and to actively support the CTBT [Comprehensive Test Ban Treaty] and FMCT [Fissile Material Cut-off Treaty]."[2] These remarks raised some concerns among international experts in the audience, who noted that the proposed revisions could be interpreted by some states as a reward for proliferation and, therefore, could actually weaken the nonproliferation export control regime. In response, Mr. ElBaradei stated that the objective of the new approach would be to use the NSG Guidelines as incentives, not only as sanctions, for encouraging outsiders to subscribe to the NSG Guidelines and "become part of the global effort towards nuclear disarmament and nonproliferation."[2]

It should be noted that on November 9, 2001, during Indian Prime Minister Atal Bihari Vajpayee's official state visit to the United States, he and President George W. Bush agreed to restart cooperation – suspended after the May 1998 nuclear weapons tests by India – on a limited number of civilian nuclear safety projects. The U.S. government carefully crafted these areas of assistance to be certain that NSG Guidelines are not violated.[3] Recently there has been discussion within the United States about expanding the areas of assistance in accordance with the NSG Guidelines. The U.S. Nuclear Regulatory Commission and the Indian Atomic Energy Regulatory Board are expected to discuss these nuclear reactor safety issues in the near future. U.S. government officials also considered providing nuclear safety assistance to Pakistan, but no definite decision has been made so far.

Sources: [1] The text of the NSG Guidelines is available on the NSG website, <http://www.nsg-online.org/guide.htm>. [2] Speech by Mohamed ElBaradei, Carnegie Endowment International Non-Proliferation, November 14, 2002, <http://www.ceip.org/files/projects/npp/resources/2002conference/home.htm>.[3] Barbara Leitch LePoer, "India-U.S. Relations," CRS Issue Brief for Congress," Updated December 31, 2001, <http://fpc.state.gov/documents/organization/7930.pdf>; Robert D. Blackwill, U.S. Ambassador to India, "The Transformation of U.S.-India Relations: A Status Report," Address to the Delhi Policy Group, February 26, 2002, <http://usembassy.state.gov/posts/in1/wwwh12.html#book5>.

The Australia Group Expands its Control List

Formed in 1984 as a way to develop and institute complementary measures in support of the Geneva Protocol (1925), the Biological and Toxin Weapons Convention (1972), and the Chemical Weapons

Convention (CWC) (1993), the Australia Group (AG) aims to prevent the proliferation of chemical and biological weapons. The AG is an informal association of 33 states from Europe, the Asia Pacific region, and the Americas that meets annually at the Australian Embassy in Paris to harmonize national export controls on precursor chemicals, toxins, and dual-use equipment; to share information on target countries; and to seek other ways to curb the proliferation of biological and chemical weapons and related technologies. The AG is not a treaty-based organization, has no charter or constitution, and operates by consensus.

During its plenary meeting of June 7, 2002, the AG adopted stricter controls over biological and chemical warfare-related materials and expanded its control list to include equipment and toxins that could be used by terrorist groups. One of the main decisions made during the plenary meeting was the adoption for the first time of formal guidelines, which include, among other elements, a "catch-all" provision and a "no-undercut policy." Participants also decided to extend the AG's controls over intangible transfers of information and technology that could be used for biological and chemical warfare purposes, including transfers by fax, phone, or email.

The catch-all provision requires AG members to adopt regulations under which exporters will be required to obtain export licenses for non-listed items, if the exporter is informed by the member government that the item might be intended for use in connection with chemical or biological weapons activities. In addition, the regulations must specify that if exporters learn independently that a non-listed item might be intended for such use, they must inform their governments of this fact, which will decide whether the item should be subject to export licensing. Previously, the AG was the only international export control regime with no formal guidelines; it now has not only adopted such guidelines, but is the only international regime to incorporate a catch-all provision.

The no-undercut policy is triggered when an AG member receives a request to license an item for which a license has previously been denied by another AG member. Under the policy, the second country to consider the license must consult with the member country that previously denied the export, before granting a license for an essentially identical item. This no-undercut process is the same as that of the NSG and the Missile Technology Control Regime (MTCR). The terms of the group's no-undercut policy do not apply to denials of items under national catch-all provisions.

Another important AG decision concerns stricter controls imposed over equipment and technology that can be used for the production of biological and chemical weapons. Previously, only fermenters with a capacity of 100 liters or more were controlled. The AG decided to decrease the capacity threshold to 20 liters, thus limiting the accessibility of small-scale biological production equipment that was previously freely traded. In addition, eight toxins were added to the AG's biological control list, bringing the total to 19. The newly added toxins include cholera toxin, four plant toxins, and three fungal toxins (the latter are trichothecene mycotoxins, the alleged components of Yellow Rain). The eight newly added toxins have little or no military application (with the possible exception of the trichothecenes) but could be useful to terrorists. For instance, one of the plant toxins – abrin, which is similar to but more toxic than ricin – is listed in the al-Qaeda training manual.

The United States has already put these new guidelines into effect, and it is expected that the other AG members will institute them by the time the Group holds its next plenary meeting in June 2003. However, the AG has no provision for punishing or sanctioning any member that does not adhere to its guidelines. The text of the new guidelines, as well as the list of controlled equipment and biological and chemical agents, are available on the Australia Group website.[1,2]

Sources: [1] Australia Group Website, <http://www.australiagroup.net/>. [2] CNS discussions with DOE and DOC officials.

Changes in the MTCR Control List

At its September Plenary meeting, the Missile Technology Control Regime (MTCR) adopted changes to the MTCR Annex that define the missile range-payload relationship. The clarification will make it more difficult for exporters to understate the characteristics of exported systems, especially cruise missiles, in an attempt to give the appearance that they are in conformity with MTCR rules, when in fact they will provide

capabilities over the 300 kilometer/500 kilogram threshold of concern. In addition, certain items were added to the control list, such as integrated flight navigation systems (auto-pilots). The revised annex can be found on the MTCR website [http://www.mtcr.info].

The Hague Code of Conduct on Missile Proliferation

On November 25, 2002, representatives of 80 nations attended a ceremony in the Hague, Netherlands, inaugurating the Hague Code of Conduct, previously known as the International Code of Conduct Against Ballistic Missile Proliferation, a multilateral agreement that addresses the production, development, testing, and transfer of ballistic missiles. MTCR partners began developing the Code in 1999 as a supplement to the MTCR. As of November 27, 2002, when the Code was formally adopted, it had 93 subscribing states.

The voluntary Code does not prohibit members from possessing ballistic missiles. Instead, it commits its members to exercise "maximum possible restraint" in developing and deploying ballistic missile systems and not to provide assistance to missile programs of countries thought to be developing weapons of mass destruction (WMD). Members agree to provide annual reports outlining ballistic missile and space launch vehicle policies, as well as information on launches during the previous year. In addition, members are to provide pre-launch notification, including information on the generic class of the missile or space launch vehicle, the launch area, and planned direction of flight. Members will meet annually to further develop the Code. All decisions must be accepted by consensus.

Several countries that the United States believes to be acquiring or proliferating missiles rejected the Code. India rejected the Code because it does not do enough to distinguish between the development of ballistic missiles and space launch vehicles. Pakistan opposed the Code in part because it does not address complementary delivery systems, such as cruise missiles. China opposed the Code's confidence-building measures intended to increase transparency among members. North Korea, Israel, and Iran also rejected the Code. Iraq was not invited because of its past violations of UN Security Council resolutions and because it is prohibited by such resolutions from possessing missiles with a range of over 150 km. Libya, however, attended the meetings and signed the Code.[1,2,3]

Sources: [1] Mike Nartker, "International Response: More Than 40 Countries Expected to Sign Missile Code," Global Security Newswire, November 22, 2002, Nuclear Threat Initiative Website, <http://nti.org/d_newswire/issues/2002/11/22/8s.html>. [2] Mike Nartker, "International Response: Missile Code of Conduct Launches in The Hague," November 26, 2002, Nuclear Threat Initiative Website, Global Security Newswire, <http://nti.org/d_newswire/issues/2002/11/26/9s.html>. [3] The International Code of Conduct against Ballistic Missile Proliferation, Ministry of Foreign Affairs of The Netherlands Website, <http://www.minbuza.nl/default.asp?CMS_ITEM=MBZ460871&CMSSPL=1>.

International Export Control and WMD Security Assistance Programs

U.S. Department of Energy Commodity Identification Training

In the spring of 2002, the U.S. Department of Energy (DOE) initiated a series of Commodity Identification Training courses for the export control enforcement community in the NIS – customs officials, security services, and border guards. The purpose of the Commodity Identification Training is to familiarize inspectors with nuclear-related materials and equipment, with an emphasis on locally produced equipment and material, when relevant. The training is based on physical observation of unidentified equipment focusing on such criteria as special markings, packaging characteristics, container types, size, and weight of material. As of December 2002, about 200 enforcement representatives had been trained in five countries of the NIS – Georgia, Azerbaijan, and the Baltic States. The training will be expanded to three more republics in the spring of 2003 – Uzbekistan, Kazakhstan, and Ukraine. A large training course will also be organized for representatives of the other Central Asian countries at the end of spring 2003. The training will eventually create a core group of commodity identification specialists in relevant enforcement agencies, who will share knowledge with colleagues. In addition, technical experts from regional nuclear institutes and academies of sciences have been trained to conduct commodity identification courses in their respective countries to support the long-term implementation of this program. In 2003, DOE plans a budget of about $1.5 million for Commodity Identification Training in the NIS.

Source: [1] CNS conversation with DOE officials, November 22, 2002.

U.S.-Russia MPC&A Program Accelerated

In a recent interview with *The Nonproliferation Review,* U.S. National Nuclear Security Administration Acting Administrator Linton Brooks stated that the U.S.-Russian Material Protection, Control, and Accounting (MPC&A) program was making rapid progress and would be completed in 2008, two to three years ahead of earlier schedules. The program seeks to secure 600 tons of plutonium and weapons-grade highly enriched uranium (HEU) in Russia.

Currently, Brooks stated, the program has completed "rapid" security improvements on 40 percent of Russia's fissile material and has completed "comprehensive" security improvements on 17 percent of this material. Rapid security improvements include simple steps, such as replacing wooden doors with steel ones, bricking up windows, and applying modern tamper-resistant seals. Comprehensive upgrades are tailored to specific sites and include integrated alarm systems and modern material accounting measures.

In addition, the program has assisted the Russian Navy in securing nuclear weapons against theft, providing rapid security upgrades for 100 percent of facilities housing those weapons and comprehensive upgrades for 40 percent of those facilities. This phase of the MPC&A program will be completed in 2006, Brooks said. Comprehensive security improvements are also under way at 11 sites used by the Russian Strategic Rocket Forces to house nuclear weapons. This work will be completed by 2008. The full text of the interview can be found on the CNS website [http://www.cns.miis.edu/pubs/npr/index.htm].

Embargoes and Sanctions Regimes

U.S. Sanctions Imposed on NIS Companies

Russian Federation

On September 11, 2002, the U.S. State Department announced sanctions against three Russian companies – Tula Design Bureau of Instrument Building, the State Scientific Production Enterprise "Bazalt," and Rostov Airframe Plant 168 – after the three were accused of selling military equipment to countries that the United States considers supporters of terrorism.[1] Russian media identified the countries as Syria, Sudan, and Libya. The sanctions forbid U.S. exports and U.S. government assistance to, or imports and U.S. government procurements from, the three companies. According to Russian Foreign Ministry spokesman Boris Malakhov, military cooperation between Russia and these countries is legitimate. Malakhov noted that there are no internationally approved bans on selling weapons to Sudan, Syria, or Libya.[1] Company heads assume that the U.S. sanctions were imposed as an attempt to push Russian companies out of a competitive market and to divert attention from U.S. decisions regarding Iraq. The sanctions will last for one year.[2]

In January 1999, the U.S. government imposed sanctions against three Russian organizations (the Scientific Research and Design Institute for Energy Technologies – NIKIET, the D. I. Mendeleyev Russian Chemical-Technological University, and the Moscow Aviation Institute) for "materially contributing to Iran's nuclear weapons and missile programs."[3] Russian authorities, including then-Russian Minister of Defense Igor Sergeyev, vigorously denied the charges.[4] As of December 2002, the sanctions had not been lifted.

Armenia and Moldova

On May 9, 2002, the U.S. State Department imposed sanctions on two companies and their managers in Armenia and Moldova – the Lizen chemical plant near Yerevan and the Chisinau-based Cuanta SA – for providing dual-use technology to Iran. The sanctions were applied in accordance with sections two and three of the Iran Nonproliferation Act of 2000, which provides penalties for the transfers to Iran of equipment and technology controlled under multilateral export control lists (the NSG, the MTCR, the Australia Group, the CWC, and the Wassenaar Arrangement).[5] The Lizen plant was penalized for the transfer of CBW-related equipment listed in the Australia Group list. Sanctions on Cuanta SA were applied

for the transfer of equipment listed in the MTCR export control list.[6] Under the sanctions, U.S. government procurement from, and assistance to, these companies, as well as purchase by them of any item on the U.S. Munitions List, is prohibited. In addition, licenses for transfer to these companies and their managers of items controlled under the U.S. Export Administration Act of 1979 and the Export Administration Regulations are prohibited and existing licenses are suspended.[7] The sanctions will last two years. On May 17, 2002, Armenian President Robert Kocharian stated that the Lizen plant was not a state-run enterprise and that the Armenian government had no involvement with its business activities.[8] On May 18, 2002, Armenian Foreign Minister Vartan Oskanian stated that in 2001, the United States notified the Armenian government regarding Lizen's activities, but Yerevan was unable to block the deals.[9] Both the director of Lizen, Armen Sargsian, and the Iranian Embassy in Armenia denied the U.S. allegations of illegal technology transfers.[8]

At a press conference on May 17, 2002, Moldovan Prime Minister Vasile Tarlev stated that the Moldovan government closed Cuanta SA immediately after the September 11, 2001, terrorist attacks on the United States.[10] However, according to an anonymous Moldovan government official, Cuanta SA was simply renamed CESID and remains operational under state control.[11] Cuanta SA was once part of Moldova's Soviet-era military industrial consortium Signal, which incorporated seven other facilities that produced sophisticated telecommunications equipment used for guidance and tracking systems in Soviet missiles.[12] In April 1998, the Moldovan government reorganized the entire complex into a government holding company, Conversiune. The holding was subsequently closed on August 8, 2000, because government officials deemed it "inefficient." However, its components, including Cuanta SA, continued operations.[11]

Sources: [1] Aleksey Nikolskiy, "SSHA nakazali rossiyskikh oboronshchikov," Vedomosti, WTO Website, <http://www.wto.ru/ru/press.asp?msg_id=2781.html>. [2] "Russia angered by US sanctions," The Russia Journal Website, <http://www.trj.ru/index.htm>. [3] "Trade Penalties against Three Russian Entities," Statement of the White House Press Secretary, January 12, 1999. [4] "V Rossii yest kontrol za nerasprostraneniyem raketno-yadernykh tekhnologii Minoborony," Interfax, No.1, January 13, 1999. [5] Reuters, "Weapons Deals with Iran Spur U.S. Sanctions," The Washington Post, May 9, 2002, p. A19. [6] CNS conversation with official from the Office of Chemical, Biological and Missile Nonproliferation, Bureau of Nonproliferation, U.S. Department of State, December 16, 2002. [7] U.S. Department of State, Public Notice 4020, "Bureau of Nonproliferation; Imposition of Nonproliferation Measures Against Armenian, Chinese, and Moldovan Entities, Including Ban on U.S. Government Procurement," US Federal Register, Vol. 67, No. 95, May 16, 2002 (Washington, DC: US Government Printing Office, 2002), pp. 34983-34984, <http://fr.cos.com/>. [8] "Armenian businessman, Iranian embassy reject U.S. allegations of illegal technology transfers…" RFE/RL Newsline, May 20, 2002. [9] "…As Foreign Minister Says Sanctions Will Not Harm Bilateral Relations," RFE/RL Newsline, 20 May 2002. [10] "Moldovan company appearing on U.S. sanction list was dissolved last year," May 21, 2002, website of the European Commission Delegation to Moldova, <http://www.eumoldova.org/news/200205/20020521.html>. [11] "US government penalizes non-existing company," PRIMA, May 20, 2002, <http://www.prima-news.ru/eng/news/news/2002/5/20/10355.html>. [12] "Moldova's Cuanta SA Sold Sensitive Technologies To Iran – U.S. Report," BASA-press, May 17, 2002, <http://www.transparency.md/News/a057.htm>.

Illicit Trafficking in the NIS

Illicit Trafficking Hoax: "Uranium" Seized in Turkey

On September 28, 2002, the Anatolian News Agency reported that two Turkish citizens were detained by police while trying to smuggle radioactive material in the southeastern Turkish province of Sanliurfa, close to the Syrian border and some 250 km from the Iraqi border.[1] The police, acting on a tip-off, arrested the men while they were riding a taxicab en route from Sanliurfa to the city of Gazi Antep. Initial media reports, which were widely circulated, cited Turkish police as saying they had seized 15 kilograms of weapons-grade uranium.[2] The material was hidden in a secret compartment under the passenger seat. The radioactive material was vaguely described as originating from "an Eastern European country."[2] On September 29, 2002, the mayor of Sanliurfa announced that the actual quantity of the substance amounted to only 140 grams, adding that the previous figure had mistakenly included the weight of the lead container holding the substance.[3] On Monday, September 30, 2002, the container was delivered by the Istanbul Gendarme Command to the Cekmece Nuclear Research and Studies Center (CNAEM) in Istanbul. Tests of the material were performed by specialists from the Nuclear Fuel and Industrial Practices Department of CNAEM. Later in the day, the director of the Center, Dr. Guler Koksal, publicly announced that the seized material was not radioactive and that it was a powdered mix of zinc, iron, zirconium, and manganese.[4] The two men initially arrested on trafficking charges were later released.[3]

Sources: [1] Sylvia Pfeifer, "Turkish police intercept uranium on road to Iraq," The Business, September 29, 2002, p. 1; in Lexis-Nexis Academic Universe, <http://web.lexis-nexis.com/universe>. [2] "Turkish police: Weapon-grade uranium seized," UPI, Washington Times, September, 28 2002, <http://www.washtimes.com/upi-breaking/20020928-111036-6010r.htm>. [3] John King and Fatih Turkmenoglu, "Turkish uranium suspects released," CNN.com, September, 29 2002, <http://www.cnn.com/2002/WORLD/meast/09/29/turkey.uranium>. [4] "Analysis shows substance seized in Turkey not radioactive," Anatolia news agency, BBC Worldwide Monitoring, October 1, 2002.

Authorities Thwart Illegal Sale of Radioactive Material in Southern Kazakhstan

Two Uzbekistani citizens were detained in Yuzhno-Kazakhstan Oblast on February 21, 2002, while attempting to sell 1.5 kg of uranium oxide powder and 50 g of heroin. The two planned to sell the radioactive material for 2 million tenge ($13,000). According to the Kazakhstani Committee for National Security, this is the largest amount of radioactive material ever seized in the region.[1]

Kazakhstani special services had been investigating the smugglers since the end of 2001 on grounds that they were involved in regular trafficking of large amounts of heroin into Kazakhstan. Initially, security services intended to apprehend the group for illegal drug dealing. However, further investigation revealed that the criminals were looking for a potential customer interested in buying uranium.

The operation, conducted jointly with the Uzbekistani police, provided special agents with sufficient information to secretly penetrate the uranium storage area and mark uranium with a special substance so that it could be followed at a distance, Kazakhstani newspaper *Novoye pokoleniye* reports. To avoid compromising the undercover agents, it was decided to seize the drugs and radioactive material during a regular customs inspection at the Kazakhstani-Uzbekistani border. The radioactive material was transported in a metal cylinder 40 cm in length and 5 cm in diameter.

The seized material was sent to the Institute of Nuclear Physics at the Kazakhstani National Nuclear Center in Almaty for examination. Experts confirmed that the radioactivity level of the packet containing uranium powder was 6,800 microroentgen/hour, which exceeds the natural background level by 340 times.[1]

The origin of the uranium oxide remains unknown. The arrested smugglers claimed they were only aware of a supplier who shipped radioactive materials from Tajikistan to Uzbekistan.[1] All of the arrested individuals were charged in violation of three articles of the Criminal Code of Kazakhstan: Article 250, Section 1 "Smuggling"; Article 247, Section 1 "Illegal handling of radioactive materials"; and Article 259, Section 4 "Large-scale illegal trafficking of narcotic substances." They are serving their sentences in Kazakhstan, where the crime was committed.[2]

Sources: [1] "Gruz bez markirovki," *Novoye pokoleniye*, No. 29 (217), July 19, 2002, p. 5. [2] "Nanesli uran," *Kazakhstan Today*, March 13, 2002; in Shymkent Website, <http://www.chimkent.kz/news130302.htm>.

Media Reports Claim Smuggled Kazakhstani Osmium-187 Threatens Russia

Since September 2002, several reports in the Russian and Kazakhstani press have revived the controversy over the possible use of osmium in nuclear weapons. The Russian media, for example, have reported allegations of osmium smuggling from Kazakhstan into Russia and have raised concerns over the possible use of osmium in producing nuclear arms.

Kazakhstani authorities have challenged the allegations that osmium is being illegally exported from Kazakhstan. Osmium-187 is controlled by Kazakhstan as a dual-use material.[2] However, osmium-187 is not a controlled material under U.S. law or the guidelines of the Nuclear Suppliers Group (NSG), and cannot be used in the production of nuclear weapons. Osmium-185, osmium-191m, osmium-191, and osmium-193 are controlled in the United States by Nuclear Regulatory Commission regulations.[3,4] Osmium-187 is frequently used in scams by con artists, however, who claim that it has nuclear weapons applications.

Osmium is a hard metal of the platinum group and is used almost exclusively to produce very wear-resistant alloys for fountain pen tips, instruments pivots, or electrical contacts.[5] Because osmium-187, which is one of the least abundant of the seven naturally-occurring osmium isotopes, is very dense, it might be thought to be an excellent material for a nuclear weapon's tamper, which allows the nuclear explosive

material to stay compact for a relatively long period of time, increasing the explosive yield. However, osmium-187 would not be a logical choice for a tamper because it is very expensive, costing from $50,000 to $100,000 per gram, and other materials, such as uranium-238, are much cheaper and more readily available. In addition, osmium-187 would be too dense to be used as a neutron reflector, which aids in increasing the yield of a nuclear weapon. Instead, beryllium, a lighter material, is typically used to make reflectors because it is less expensive and has better neutron reflecting properties. Finally, osmium-187 is not radioactive, which excludes its use as a component of a "dirty bomb," or radiological dispersal device. For a summary of Russian media reports on the topic, see the NIS Nuclear Trafficking Database [http://www.nti.org/db/nistraff/].

Sources: [1] Dmitriy Starostin, "FSB bespokoit osmiy," Vremya novostey, September 27, 2002; in WPS Yadernyye Materialy, No. 33, October 4, 2002. [2] Kuat Ibrayev, "Kazakhstan oprovergayet obvineniya v nezakonnom eksporte osmiya-187," Panorama online edition, <http://www.panorama.kz/>, No. 36, September 16-20, 2002. [3] U.S. Defense Special Weapons Agency. [4] Carleton E. Thorne, "A Guide to Nuclear Export Controls," (Proliferation Data Services, 2001), p. 354. [5] CRC Handbook of Chemistry and Physics, <http://www.speclab.com/elements/osmium.htm>.

Trial of Nuclear Material Smugglers Begins in Minsk

A court trial began in Minsk over five suspects – a citizen of Ukraine and four citizens of Belarus – who were involved in an illicit nuclear trafficking incident, the Russian newspaper *Trud* reported at the beginning of October 2002. The suspects were arrested in January 2002 as a result of a six-month operation carried out by the Belarusian KGB.[1] Six zirconium fuel rods containing 1.5 kg of uranium dioxide were seized. Five of the rods were 290-300 mm long, and the sixth was 50 mm. There is evidence indicating that the nuclear material may have originated in Chernobyl. One of the suspects, Mr. Veselovskiy, a Ukrainian citizen, worked as a senior technician at the Chernobyl nuclear power plant in the 1990s, where he had access to nuclear fuel.[2] Several zirconium fuel rods were found missing in 1993 while Veselovskiy was still working at the plant. However, there is no proof of his complicity in the theft.

Citizens of Belarus have been involved in illegal sales of nuclear materials in Russia before, but this is the first trial of a uranium trafficking case in Belarus.[3] The court has had several sessions, but, according to the judge, they were defective since each time one of the defendants was absent due to illness.[1] The defendants are being charged with violating several articles of the Belarusian Criminal Code, including smuggling and illicit acquisition, storage, use, or destruction of radioactive materials (Article 332). They face seven to twelve years of imprisonment.[1,2]

Sources: [1] Yuriy Skrebets, "Smert, ukradennaya v Chernobyle?" Trud, No. 177 (24135), March 10, 2002, p. 5. [2] CNS Trafficking Database, <http://www.nti.org/db/nistraff/2002/20020600.htm>. [3] CNS Trafficking Database, <http://www.nti.org/db/nistraff/2002/20020560.htm>.

Summaries from the NIS Press

Search for Orphan Sources in Georgia and Moldova Yields Cesium-137

The NIS media have echoed an article published in the *Washington Post* on November 11, 2002, reporting that the 10-month search for orphan radioactive sources in Georgia and Moldova conducted as part of the IAEA Technical Assistance Program yielded radioactive devices that were once used in a secret Soviet agricultural research project, code named "Gamma Kolos" (Gamma Ears). The research project was designed to measure the effects of radiation on plants and animals. Some of the tests simulated farming conditions after a nuclear strike.[1] For this purpose, the lead-shielded canisters containing cesium-137, with a 4,500 curie strength each, were mounted on tractors to irradiate seeds or were buried in fields to assess the effects of radiation on germination and crop yields.[1,2] Animals were typically exposed to cesium-137 in a special chamber, then transferred to a vivarium and monitored.[3] In Georgia, these sources were used by the Institute of Radiology of the Ministry of Agriculture.[4] In Moldova, cesium-137 was used on experimental fields of the University of Agriculture.[2] It is unclear when this research project ended and how these sources became orphaned. So far, five canisters have been found in Georgia, some of which were found at the former Soviet military base in Vaziani, close to Tbilisi.[5] Five canisters were also found at undisclosed locations in Moldova. The Gamma Kolos canisters contain cesium-137 in the form of cesium chloride, prepared as pellets or fine powder.[1,2,6] These devices are small and portable and could

be used by terrorist groups to produce "dirty bombs." The canisters found in these two republics are now being secured with assistance and funding from the U.S. Department of Energy.

Sources: [1] Joby Warrick, "Hunting a Deadly Soviet Legacy," Washington Post, November 11, 2002, p. A1. [2] "Opposition Paper Confirms Radioactive Material in Moldova," BBC Monitoring International Reports, November, 21, 2002 in Lexis-Nexis Academic Universe, <http://www.lexis-nexis.com>. [3] CNS interview with U.S. Department of Energy official. [4] CNS communication with Mr. Giorgi Nabakhtiani, Head of Inventory and Control Division of Nuclear and Radiation Safety Service at the Ministry of Environment of the Republic of Georgia, December 13, 2002. [5] Bryan Bender, "Radiological Weapons: Georgia Wraps Up Search for Radiological Sources," Global Security Newswire, 23 October 2002, Nuclear Threat Initiative Website, <http://nti.org/d_newswire/issues/newswires/2002_10_23.html>. [6] According to the director of IAEA's Division of Radiation and Waste Safety, Mr. Abel J. Gonzalez, Cesium chloride (CsC1) is a salt whose physical form is a highly dispersible powder similar to talc in its spreading properties. Abel J. Gonzalez, "Security of Radioactive Sources. The Evolving New International Dimensions," IAEA Bulletin, No. 43, April 2001, p. 41.

Break-In Reported at Biological Facility in Kazakhstan

A man was arrested on November 4, 2001, in Almaty after attempting to penetrate a highly guarded facility, the Kazakhstan Scientific Center for Quarantine and Zoonotic Infections (formerly the Anti-Plague Institute). The Center, which focuses on control and prevention of dangerous diseases, houses a collection of pathogen cultures. According to the Center's security service head, the intruder cut the barbed wire on the outside fence, while several accomplices waited behind the fence. They ran away when the intruder was arrested and taken into custody by the local police.[1]

Dr. A. Aykimbayev, deputy director of the Center, said that the break-in was thwarted due to a set of measures taken previously to strengthen the physical protection of the facility under the Cooperative Threat Reduction (CTR) program. Local law enforcement agencies tend to view the incident as a random break-in. Foreign experts, however, were seriously concerned about the incident and helped the Center to develop an action plan to further enhance its physical protection, Dr. Aykimbayev said.[2]

Sources: [1] A. Prokopyev, "'Chumovoye' proisshestviye," Komsomolskaya pravda, No. 205 (22910), June 11, 2002, p. 4. [2] CNS interview with Dr. A. Aykimbayev.

LEU Erroneously Detained on Kazakhstani Border

A large shipment containing 27,681 kg of low-enriched uranium bound for Kazakhstan was seized on October 7, 2002, by Russian customs authorities at a border post in western Siberia. The Russian authorities started a criminal investigation into the incident. Initially, the seizure was reported as a successful customs operation that prevented the smuggling of a large quantity of nuclear material. Later, however, a spokesman for the State Customs Committee of the Russian Federation explained that the uranium was seized due to an error in the customs declaration.

According to Timur Zhantikin, head of the Kazakhstan Atomic Energy Committee, the uranium was sent from Minatom's Angarsk Electrolytic Chemical Plant to the Ulba Metallurgy Plant (UMZ) in Kazakhstan. Under a treaty between Russia and Kazakhstan, uranium ore from Kazakhstan is shipped to the Chepetsk Mechanical Plant, where it is processed into uranium hexafluoride, then forwarded to Angarsk for enrichment and returned to Kazakhstan to be manufactured into fuel pellets at the Ulba Metallurgy Plant. The seized uranium represents one of these shipments.

Zhantikin confirmed that the shipment was legitimate and that the incident was caused by an error in the customs declaration, in which Kazakhstan was declared as the country of origin of the material, whereas according to the tax documents, the country of origin should have been Russia. Uranium transactions between Russia and Kazakhstan are conducted on a regular basis, but this was the first case in which accompanying documents were improperly completed.[1,2,3]

Sources: [1] "Uran prednaznachalsya dlya tabletok," Delovaya nedelya, No. 39 (517), October 11, 2002, p. 9. [2] Nuclear.ru Website, <http://www.nuclear.ru/news/full.html?id=600>. [3] CNS Trafficking Database, <http://www.nti.org/db/nistraff/2002/20020610.htm>.

International Developments

WMD Deals between Pyongyang and Islamabad

According to the U.S. Department of State, North Korean diplomats admitted to the existence of a North Korean program to enrich uranium for nuclear weapons during an October 3-5, 2002 visit to Pyongyang by U.S. Assistant Secretary of State James Kelly. A subsequent CIA assessment to the U.S. Congress in November presumed that the enrichment program, whose existence the CIA confirmed only in summer 2002, had been undertaken with outside assistance.[1] Press reports allege that North Korea and Pakistan engaged in a barter deal in the 1990s, whereby Pyongyang supplied Islamabad with missile technology and components in exchange for enrichment technology and/or equipment. A recent report in the South Korean press, quoting U.S. Defense Intelligence Agency sources, stated that construction on the North Korean nuclear facility began in 2000 and that the facility was not likely to be completed before 2005.[2] There is evidence to suggest that North Korea's enrichment program began even earlier, in the 1980s, and that Pakistan or East Germany supplied technology and hardware.[3] However, it is still unclear whether North Korea has successfully built an enrichment plant with assistance from Pakistan and/or another state.

Sources: [1] "CIA Assessment on DPRK Presumes Massive Outside Help on Centrifuges," Platts Nuclear Fuel, Vol. 27, No. 24, November 25, 2002. [2] Lee Kyo-kwan, "DIA: North Korea Has Two Nuclear Weapons," Chosun Ilbo (Seoul), December 20, 2002. [3] Daniel Pinkston, "When Did WMD Deals between Pyongyang and Islamabad Begin?" October 28, 2002, <http://cns.miis.edu/pubs/week/021028.htm>.

IAEA Code of Conduct on the Safety and Security of Radioactive Sources

In response to renewed concerns over the security of radioactive sources, the International Atomic Energy Agency (IAEA) has recently begun revising the Code of Conduct on the Safety and Security of Radioactive Sources.[1] This non-binding code seeks to improve the regulatory control of radioactive sources from their production to final disposition. Such sources, when used properly, provide benefit to humanity in medicine, industry, and research, but these same materials, if not secured, could end up in radiological dispersal devices – one type of which is a "dirty bomb." Although the current Code of Conduct, which was adopted by the IAEA in December 2000, addresses some *security* issues, it mainly promotes effective *safety* practices to protect public health. In light of the terrorist attacks of September 11, 2001, al-Qaeda's expressed interest in potentially unleashing radiological terror, and increased news media attention to dirty bombs, an intergovernmental working group met in Vienna in August 2002 to revise the Code of Conduct to focus more on security.

The draft revision proposes several changes to the Code. For instance, the working group called for national registries of sources, especially those sources that pose the highest security risk. The IAEA's "Categorization of Radiation Sources" serves as a guide for determining the risk level.[2] In parallel with the Code's revision, another group of experts is modifying the current Categorization in order to emphasize security. Regarding enhanced export controls, the draft revision of the Code stipulates that exports of sources "should, other than in exceptional circumstances, only take place where the exporting State is satisfied that the recipient is authorized to receive the source." While, the working group generally supported stronger export controls, the details, such as validating and translating authorizations, remain to be worked out.

In addition, the draft Code recommends that disused sources be allowed re-entry into the territory of the state of origin if that state has determined that a manufacturer within its borders is qualified to receive these sources. Disused sources are materials whose radioactivity has decayed below the level at which they can perform their intended function, but remain potent enough to pose a security risk. Ideally, users would safely dispose of sources once they are no longer needed, but substantial disposal costs or lack of disposal facilities can lead to users retaining disused sources, thereby increasing long-term security risks.

The group plans to reconvene in March 2003 after the revision of the Categorization has been completed. The IAEA urges all member states to follow the Code of Conduct.

Sources: [1] IAEA, "Code of Conduct on the Safety and Security of Radioactive Sources," December 2000, http://www.iaea.org/worldatom/Press/Booklets/RadioactiveSources/radioactivesource.pdf. [2] IAEA, "Categorization of Radiation Sources," July 10, 2000, <http://www.iaea.or.at/worldatom/About/GC/GC44/Documents/gc44-7_attachment.pdf>.

Workshops and Conferences

International Conference on Illicit Trafficking, Almaty, March 2002: An international conference sponsored by the Swedish Nuclear Power Inspectorate (SKi) on combating illicit trafficking of nuclear and other radioactive materials in Central Asia and the Caucasus was held in Almaty March 12-14, 2002. IAEA and NIS countries representatives took part in the conference. The conference participants adopted a protocol that, among other things, identified "a lack of cooperation and insufficient exchange of information on nuclear trafficking between relevant government agencies of the represented states."

Sixth Central Asia and Caucasus Nonproliferation Export Control Forum, Tashkent, April 2002: The Sixth Central Asia and Caucasus Nonproliferation Export Control Forum, held April 15-18, 2002 in Tashkent, focused on the theme, "Export Control: a Barrier against Weapons of Mass Destruction, Proliferation and Terrorism." The Forum was co-sponsored by the governments of the United States and Uzbekistan and gathered representatives from all Central Asian and Caucasus countries as well as observers from Afghanistan, India, Moldova, Pakistan, Poland, Turkey, and nongovernmental and international organizations. During the plenary sessions, country representatives highlighted the progress made by their respective governments in strengthening their export control systems in the past year. The Forum also addressed the risks of WMD proliferation and terrorism in the region, and the role of interagency coordination and international cooperation to combat these threats. Discussions during break-out sessions concentrated on national export control regulations and licensing processes, the possibility of adopting the European unified control list, the regional Transit Agreement currently under discussion among Central Asia and the Caucasus, and border security.

At the end of the meeting, the delegates produced a list of recommendations to bring back to their respective capitals, stressing, among other things, the importance of completing and signing the Transit Agreement; harmonizing export control systems by adopting the European control list and standardizing end-user certificates; encouraging interagency cooperation and involvement of the scientific community in the export control process; and reinforcing the "second line of defense" by training customs officials and creating export control command centers to assist their work at the borders. The delegates also underlined the importance of facilitating information sharing and coordination, particularly when trafficking incidents occur in the region. Presentations from the conference are posted on the Tashkent Institute of Strategic and Inter-Regional Studies website.
[http://www.uzstrateg.info/frontend/index.cfm?CFID=171466&CFTOKEN=86894031]

Regional Workshop on the Safety of Radiation Sources and Security of Radioactive Materials, August 2002: A regional workshop on the safety of radiation sources and security of radioactive materials was held August 12-16, 2002, in Almaty. The workshop was organized by the Kazakhstani Committee on Atomic Energy and the IAEA and attended by representatives from the NIS, Baltic States, Iran, Iraq, Jordan, Kuwait, and Slovakia. Presentations covered the safety of radioactive sources and the security of radioactive materials in individual countries, as well as relevant international law.

PIR Center Seminar on Export Controls, Moscow, October 2002: A seminar entitled "Export Controls in Russia: Evolution and Perspective" sponsored by the Moscow-based Center for Policy Studies in Russia (PIR) Center and the Partnership for Peace Consortium was held in Moscow on October 24-25, 2002. The seminar brought together over 30 government and nongovernmental organization (NGO) experts from Russia, other NIS countries, the United States, and Europe. The participants discussed achievements of and challenges to the development of Russia's export control system, Russia's role in international export control regimes, and Russian international cooperation on nuclear power and export control issues. More details on the conference can be found on the PIR Center website [http://www.pircenter.org].

Special Report

The Nuclear Suppliers Group: Plenary Meetings of May and December 2002

by Ambassador Pavel Vacek, NSG Chairman

The aim of the Nuclear Suppliers Group (NSG), a multilateral export control regime with 40 Participating Governments and the European Commission as permanent observer, is to contribute to the prevention of the proliferation of nuclear weapons, in support of the nuclear Non-Proliferation Treaty (NPT), through export controls on nuclear-related material, equipment, software, and technology, without hindering international cooperation on peaceful uses of nuclear energy.

The aims of the NSG are pursued through voluntary adherence to and implementation of the NSG Guidelines. The Guidelines have two parts, both distributed through the International Atomic Energy Agency (IAEA) for the sake of transparency and as a token of the synergy between the NSG and the IAEA in global nonproliferation efforts:

- Part 1 contains the Trigger List of nuclear materials and equipment and sets out what items "especially designed or prepared" for the processing, use, or production of special fissionable material may be transferred to non-nuclear weapon states under IAEA full-scope safeguards;
- Part 2 contains the Dual-Use List of equipment, materials, software, and related technology that could make a major contribution to a nuclear explosive activity or an unsafeguarded nuclear fuel cycle activity. Part 2 sets out what is prohibited from transferring if it should contribute to nuclear proliferation and, most recently, also to nuclear terrorism.

The NSG holds annual Plenary Meetings hosted by the rotating Chair (currently the Czech Republic) which, during its annual tenure conducts the work of the Group, and is assisted by the other two Troika members, the past (the United States) and future (the Republic of Korea) Chairs. The inter-sessional work is done primarily within the Consultative Group, which convenes several times between the Plenaries. The Information Exchange Meeting (IEM) convenes before the annual Plenary and provides for information-sharing on nuclear proliferation and supply issues of concern. A new body has been established within the IEM to allow for more intensive and immediate cooperation among licensing and enforcement experts. The NSG does not have a secretariat; the administrative, documentation, and technical support is generously provided by Japan through its Permanent Mission in Vienna.

The NSG is not a cartel. It does not fix prices or coordinate marketing policies. It is not a secret club, either. It is transparent, and all of its principal documents are publicly available. It maintains an intensive outreach program that engages non-members who have developed nuclear programs and are potential suppliers or are involved in transhipment of controlled materials. A country does not necessarily have to join the Group – it can contribute to nonproliferation objectives through an effective national export control system and implementation of the NSG Guidelines. The NSG stands ready to assist in such efforts. The NSG also encourages all states that have not yet done so to conclude comprehensive safeguards agreements with the IAEA and sign on to the Additional Protocol to such agreements, because these steps not only strengthen nuclear nonproliferation, but may even be made a condition for supply in the future.

At the last Plenary held in Prague in May 2002, the first NSG Plenary meeting after the September 11, 2001 terrorist attacks in the United States, the Group addressed the threat of nuclear terrorism. Intensive inter-sessional work followed and resulted in the Extraordinary Plenary Meeting on December 13, 2002, which was held to respond to the new proliferation and security challenges that threaten to strike at the foundations of the global nonproliferation regime. In response to the threat of nuclear terrorism, the Participating Governments of the NSG agreed to several comprehensive amendments to strengthen its Guidelines. These amendments are intended to prevent and counter the threat of diversion of nuclear exports to nuclear terrorism. The notion of "acts of nuclear terrorism" has been incorporated into the relevant provisions of the Guidelines, both in Parts 1 and 2, while wisely avoiding its formal definition. Thus, namely the key provision of Part 1 – the nonproliferation principle contained in paragraph 10 – has

been expanded to entail not only the proliferation of nuclear weapons or other nuclear explosive devices, but also the acts of nuclear terrorism. Part 2 has also been amended to commit suppliers to avoiding transfers of items on the Dual-Use List not only for the hitherto illicit uses but also "when there is an unacceptable risk of diversion to acts of nuclear terrorism."

The Extraordinary Plenary emphasized that effective export controls are an important tool to combat the threat of nuclear terrorism. The Extraordinary Plenary could not fail to address the recent development of the North Korean nuclear challenge. It recalled the IAEA Board of Governor's resolution of November 29, 2002, which recognized, inter alia, that a covert enrichment program or any other covert nuclear activities would constitute a violation of the DPRK's international agreements, including their safeguards agreement pursuant to the NPT. The Plenary also took note of other concerns by Participating Governments that the recent activities of the DPRK are a clear violation of its commitments under the Agreed Framework and the Joint North-South Declaration on the Denuclearization of the Korean Peninsula. In this context, the NSG has called on all states to exercise extreme vigilance so that their exports and any goods or nuclear technologies that transit their territorial jurisdiction do not contribute to any aspect of a North Korean nuclear weapons effort, especially in light of current circumstances. The NSG and its Czech Chair stand ready at any time to assist and provide information to all states for the purpose of maintaining vigilance to prevent the movement of nuclear and nuclear-related items and technologies to a DPRK nuclear weapons program.

The NSG also calls on all states to adopt enhanced export controls as a means to prevent the proliferation of nuclear weapons. This appeal is particularly relevant given current developments and should be heeded by all like-minded partners regardless of whether they intend to join the Group.

NIS Export Control Observer (http://www.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, Monterey Institute of International Studies, with financial support from the U.S. Department of State.

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