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NIS EXPORT CONTROL Observer

ОБОЗРЕНИЕ ЭКСПОРТНОГО КОНТРОЛЯ

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Special Report

Export Control of Dual-Use Biological Equipment and Goods in the Republic of Moldova. 18
<i>by Sergiu Spataru, Center for Nonproliferation of the Republic of Moldova</i>

Recent Developments in the NIS

New Ukrainian Cabinet of Ministers Proposes Disbanding the State Service on Export Control

On February 12, 2005, the Cabinet of Ministers of Ukraine agreed to submit a proposal to the president that would disband 14 state committees and services, including the State Service on Export Control (SSEC), according to the Ukrainian Prime Minister Yuliya Tymoshenko, who informed the press of the decision after the meeting of the Cabinet of Ministers ended.[1,2] Tymoshenko explained, “Today we are starting to get rid of the redundant agencies that were created to allow a few individuals to extract personal profit from government functions; [these agencies] do not perform any serious functions or if they do, such functions will be transferred to the appropriate ministries.”[1] Tymoshenko specified that some of the disbanded committees and services would be transformed into departments and included within the relevant ministries.[1] As of mid-March, it was not clear which ministry would absorb the SSEC. Nevertheless, on March 2, 2005, newly appointed Defense Minister Anatoliy Hrytsenko indicated that one of the proposals that the government is considering entails merging or subordinating the SSEC to the Ministry of Economics.[3]

The planned government restructuring will not affect the State Customs Service (SCS) of Ukraine, which will become subordinate to the Ministry of Finance. Intelligence services on the other hand, Tymoshenko said, will be consolidated into one institutional unit.[1]

The drafts of the corresponding edicts are to be reviewed and approved by the president. Once the edicts are signed by the president, the government is expected to prepare legislative proposals within a matter of weeks and submit them to the Verkhovna Rada (Ukrainian Parliament) for deliberation, final approval, and enactment.[2]

Sources: [1] “Kabmin prynyal resheniye o likvidatsii 14 gosudarstvennykh komitetov” [Cabinet of Ministers made a decision on liquidation of 14 state committees], Ukrainian Business Information Portal – Liga BusinessInform, February 13, 2005, <<http://www.liga.net/news/137786.html>>. [2] “Pravitelstvo Ukrainy reshilo sokratit 14 gosudarstvennykh organov” [Government of Ukraine decided to disband 14 state bodies], Agency of Economic Information – Prime-Tass, February 14, 2005, <<http://www.prime-tass.ru/news/show.asp?id=484094&ct=news>>. [3] “Gritsenko: MO ne dolzhno torgovat oruzhiyem, a Gossluzhba eksportnogo kontrolya mozhet voyti v Minekonomiki” [Hrytsenko: Ministry of Defense must not sell weapons, while State Service on Export Control might be absorbed by the Ministry of Economics], Podrobnosti.ua website, March 2, 2005 [based on the materials of the Ukrainian Independent Information Agency – UNIAN], <<http://www.podrobnosti.ua/power/govt/2005/03/02/184678.html>>.

Ukrainian Parliament Fails to Ratify Additional Protocol

On January 12, 2005, the Verkhovna Rada failed to ratify the Additional Protocol to the agreement between Ukraine and the International Atomic Energy Agency (IAEA) for the application of safeguards in connection with the Treaty on Non-Proliferation of Nuclear Weapons (NPT), previously signed by the Ukrainian government on August 15, 2000. The Additional Protocol, based on a model text adopted by the IAEA in 1997, would have granted the international agency expanded inspection rights and required additional reporting by Ukraine regarding its peaceful nuclear activities.

There is some speculation that the failure to ratify the protocol was due to Ukrainian parliamentarians’ dissatisfaction over the possible financial costs of complying with its terms. Specifically, if Ukraine had ratified the Additional Protocol, it would have been required to provide the IAEA with information about its scientific research, design activities, and tests related to the nuclear fuel cycle; the production of nuclear-related dual-use items and their export; and decommissioned reactors. According to Ukrainian experts, if international inspectors were to detect certain inconsistencies and shortfalls in Ukrainian nuclear facilities, the burden for resolving them would fall exclusively on the Ukrainian government, because the IAEA would not be able to provide any consulting or financial assistance to help in the effort. Many Ukrainian parliamentarians reportedly found this arrangement unfair.[1]

However, interviews conducted by CNS staff with Ukrainian Foreign Ministry officials in mid-March 2005, as well as other press reports, indicate that the protocol, while it failed to pass, was not actually rejected by the Rada. According to one Rada staff member, the protocol came to a vote on January 12, 2005, as parliamentarians were preoccupied with other matters, including the formation of the new

government led by President Viktor Yushchenko, elected on December 26, 2004.[4] Although only one parliamentarian voted against the measure, and 125 for it, the vote was held without a quorum present (the remainder of the 450 Rada deputies was absent), and therefore the protocol was not adopted. The four Rada committees that considered the legislation had all agreed to ratification, but the deputies had withdrawn a previous version of the ratification legislation, along with all other pending legislation, in anticipation of the coming government reorganization. The new government is expected to resubmit the legislation in the spring session.[2,3]

Editor's Note: One of the major roles of the IAEA is to administer inspection and accounting arrangements to assure the international community that individual countries are honoring their obligations under the NPT not to develop nuclear weapons. In this capacity, the IAEA regularly inspects civil nuclear facilities, checks inventories, and takes samples of materials to make sure countries are not illegally pursuing nuclear weapons programs and to deter diversion of materials. After it became known in the early 1990s that Iraq had successfully circumvented IAEA safeguards and established a nuclear weapons program by exploiting the agency's system of limiting inspections to declared facilities, the IAEA launched an effort to strengthen and extend its safeguards system. This effort resulted in the adoption by the IAEA on May 15, 1997, of the model Additional Protocol, a voluntary, bilateral arrangement that substantially expands the IAEA's ability to check for illegal nuclear activity by providing the agency with authority to visit any facility—declared or not—to investigate questions or inconsistencies. As of March 1, 2005, 90 countries have signed and 65 have ratified Additional Protocols.[4]

In September 1994, Ukraine signed an agreement with the IAEA on “full-scope safeguards”—inspection and accounting arrangements that apply to all nuclear materials of importance to the development of nuclear weapons in a non-nuclear weapon state, even though at that time, Ukraine was not yet a member of the NPT. Ukraine formally became a non-nuclear weapon state party to the NPT on December 5, 1994, and on January 13, 1995, the full-scope safeguards agreement with the IAEA came into force. The agreement provided for IAEA inspections of all Ukrainian civilian nuclear facilities. The first inspections began in February 1995. Ex-Soviet nuclear weapons were still on the territory of Ukraine at the time, and were excluded from IAEA inspections. In May 1996, the last nuclear warhead was transferred to Russia, and Ukraine became nuclear weapons-free.

The following states in the Former Soviet Union have signed or ratified Additional Protocols to their IAEA safeguards agreements for the agency's application of strengthened safeguards.[5]

Strengthened Safeguards System: States in the Former Soviet Union with Additional Protocols

State	IAEA Board Approval	Date Signed	In Force
Armenia	Sept 23, 1997	Sept 29, 1997	June 28, 2004
Azerbaijan	June 7, 2000	July 5, 2000	Nov 29, 2000
Estonia	Mar 21, 2000	Apr 13, 2000	
Georgia	Sept 23, 1997	Sept 29, 1997	June 3, 2003
Kazakhstan	June 18, 2003	Feb 6, 2004	
Latvia	Dec 7, 2000	July 12, 2001	July 12, 2001
Lithuania	Dec 8, 1997	Mar 11, 1998	July 5, 2000
Russia	Mar 21, 2000	Mar 22, 2000	
Tajikistan	June 12, 2002	July 7, 2003	Dec 14, 2004
Turkmenistan	Mar 1, 2005		
Ukraine	June 7, 2000	Aug 15, 2000	
Uzbekistan	Sept 14, 1998	Sept 22, 1998	Dec 21, 1998

Sources: >.[1] “Verkhovna Rada Plenary Meetings” (in Ukrainian), January 12, 2005, Verkhovna Rada website, <http://gska2.rada.gov.ua/control/uk/publish/article/news_left?art_id=55354>. [2] CNS Interview with Ukrainian Foreign Ministry official, Kiev, March 16, 2005. [3] CNS Interview with Verkhovna Rada staff member, March 13, 2005. [4] “The 1997 IAEA Additional Protocol At a Glance,” Arms Control Association fact sheet, January 2005, ACA website, <<http://www.armscontrol.org/factsheets/IAEAProtocol.asp>>. [5] “Strengthened Safeguards System: Status of Additional Protocols,” March 1, 2005, IAEA website, http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html>.

United States and Russia Sign Agreement on MANPADS

On February 24, 2005, U.S. Secretary of State Condoleezza Rice and Russian Defense Minister Sergey Ivanov signed the United States-Russia Arrangement on Cooperation in Enhancing Control of Man-Portable Air Defense Systems (MANPADS) during the Bush-Putin presidential summit in Bratislava, Slovakia.[1,2,3]

This arrangement provides a bilateral framework for cooperation in the control of MANPADS that can threaten global aviation if obtained by criminals, terrorists, and other non-state actors. The arrangement will allow the two countries to share information about MANPADS sales and transfers to third countries. It also provides for mutual assistance in destroying MANPADS that are obsolete or otherwise in excess of legitimate defense requirements through an exchange of information on the methods and means of destroying them, as well as through the provision of technical and financial assistance in carrying out their destruction; an exchange of information on controlling MANPADS, including improving measures to enhance physical security and the taking of inventory, and control during the production, safeguarding, transfer, and destruction of MANPADS and individual components thereof; and further mutual coordination on preventing the global proliferation of MANPADS.[1]

According to Sergey Ivanov, “the parties commit themselves to inform each other on MANPADS transfers to third parties since the United States and Russia are the only producers of MANPADS in the world.” [2,3] *[Editor’s Note: It must be noted that Ivanov’s statement regarding the U.S.-Russian monopoly on MANPADS production is inaccurate. According to Small Arms Survey 2004: Rights at Risk, a recently released report compiled by the Small Arms Survey <<http://www.smallarmssurvey.org/>>, an independent research project located at the Graduate Institute of International Studies, Geneva, Switzerland, there are at least 15 companies and consortia in more than 15 countries that produce various reverse engineered copies of U.S. and Russian MANPADS systems, including the People’s Republic of China (HY-5, QW-1, QW-2, QW-4), Islamic Republic of Iran (Misagh-1), Pakistan (ANZA MK I, ANZA MK II, ANZA MK III), and Egypt (Ayn as Saqr, Tayir as Sabah). In addition, according to the aforementioned report, it is estimated that there are MANPADS stockpiles in 105 countries. Similarly, the report Nonproliferation: Further Improvements Needed in U.S. Efforts to Counter Threats from Man-Portable Air Defense Systems released by the U.S. General Accounting Office (GAO) on June 30, 2004, notes that “20 countries have developed or produced at least 30 different types of MANPADS, with between 500,000 and 750,000 weapons believed to be in the worldwide inventory today.”[4,5,6,7,8,9] The U.S. Department of State has focused on both multilateral and bilateral efforts to combat the threat of MANPADS. Multilateral efforts include the G-8, where leaders agreed at the Evian summit in 2003 to a U.S. action plan on banning transfers to non-state actors, exchanging information on uncooperative countries and entities, adopting more stringent national export controls on MANPADS, and considering the feasibility of adding technical devices to these systems to prevent their unauthorized use. In October 2003, APEC countries issued a statement on MANPADS similar to the G-8 action plan. The 33-nation Wassenaar Arrangement on Controls for Conventional Arms and Dual-Use Goods and Technologies has also adopted strengthened guidelines for controlling MANPADS. A U.S.-Russian bilateral agreement would complement these multilateral initiatives by focusing on improved controls of excess stocks of MANPADS.]*

Ivanov stressed that the arrangement does not prohibit nor limit MANPADS sales. He added that the two countries will step up their efforts to induce their allies to take measures preventing the proliferation of MANPADS.[2,3] According to Russian presidential aide Sergey Prikhodko, the initiative to sign the arrangement on MANPADS came from Russia.[3]

Editor’s Note: As defined in the Wassenaar Arrangement, MANPADS, commonly described as shoulder-fired anti-aircraft missiles, are surface-to-air missile systems designed to be man-portable and fired by a single individual; and other surface-to-air missile systems designed to be operated and fired by more than one individual acting as a crew and portable by several individuals.[10]

Sources: [1] “U.S.-Russia Arrangement on Cooperation in Enhancing Control of Man-Portable Air Defense Systems (MANPADS),” U.S. Embassy in Russia fact sheet, February 24, 2005, <http://www.usembassy.ru/bilateral/joint_statement.php?record_id=40>. [2] “Rossiya i SShA dogovorilis o sotrudnichestve v oblasti usileniya kontrolya za perenosnymi zenitnymi raketnymi kompleksami” [Russia and the United States agreed to cooperate in strengthening control of man-portable anti-aircraft missile systems], ITAR-TASS, February 24, 2005; in Integrum Techno, <<http://www.integrum.com>>. [3] “Rossiya i SShA podpisali soglasheniye ob usilenii

kontrolnya za perenosnymi zenitnymi raketnymi kompleksami” [Russia and the United States signed an agreement to strengthen control of man-portable anti-aircraft missile systems], RIA Novosti, February 24, 2005; in Integrum Techno, <<http://www.integrum.com>>. [4] *Small Arms Survey 2004: Rights at Risk*, Chapter 3: “Big Issue Big Problem? MANPADS,” p. 78, Small Arms Survey website, <<http://www.smallarmssurvey.org/Yearbook%202004/03%20MANPADS.pdf>>. [5] “China Military Guide. Missiles. QW-1/ANZA MK-II,” GlobalSecurity.org, <<http://www.globalsecurity.org/military/world/china/qw-1.htm>>. [6] “Iran: Missile Chronology 1993,” Country Profiles: Iran, Nuclear Threat Initiative (NTI) website, <http://www.nti.org/e_research/e1_iran_mch_1993.html>. [7] “Man Portable Air Defense Systems (MANPADS),” GlobalSecurity.org, <<http://www.globalsecurity.org/military/intro/manpads.htm>>. [8] Federation of American Scientists/Military Analysis Network, DoD 101, “An Introduction to the Military, Rest-of-World Missile Systems: Missiles: SA7 GRAIL, 9K32M STRELA-2, HN-5 (Hongying 5) China, Anza MK I – Pakistan, Ayn as Saqr – Egypt,” Federation of American Scientists (FAS) website, <<http://www.fas.org/man/dod-101/sys/missile/row/sa-7.htm>>. [9] United States General Accounting Office (GAO), *Nonproliferation: Further Improvements Needed in U.S. Efforts to Counter Threats from Man-Portable Air Defense Systems*, Report to Congressional Committees GAO-04-519, May 2004, p. 2, <<http://www.gao.gov/new.items/d04519.pdf>>. [10] “Elements for Export Controls of Man-Portable Air Defence Systems (MANPADS),” Wassenaar Arrangement website, <http://www.wassenaar.org/2003Plenary/MANPADS_2003.htm>.

First Anniversary of the Center for Nonproliferation of the Republic of Moldova

By Sergiu Spataru, Executive Director of the Center for Nonproliferation of the Republic of Moldova

In April 2005, the Center for Nonproliferation of the Republic of Moldova (CNRM) will celebrate its first anniversary. CNRM is a nongovernmental organization, specializing in nonproliferation issues in Moldova that strives to achieve the following main objectives:

- Promote the positive international image of the Republic of Moldova as a country in full compliance with international nonproliferation norms related to weapons of mass destruction (WMD) and other types of weapons, as well as a reliable partner in strengthening regional and international security;
- Bring together Moldovan experts, government officials responsible for international issues, and industry representatives in order to facilitate the implementation of new national and international rules in the field of export control and nonproliferation of WMD and other types of weapons;
- Expand contacts with other international NGOs dealing with export control and nonproliferation issues;
- Assist institutions and individuals in complying with national and international export control rules in their commercial activities.

In order to reach these objectives, CNRM engages in the following activities:

- Retraining and education of specialists in fields related to export control and other nonproliferation issues;
- Providing consultations on various aspects of compliance with existing norms in business activities;
- Engaging in specialized research activities;
- Publishing information materials;
- Familiarizing new personnel with existing nonproliferation norms and practices;
- Submitting proposals on improvements in national legislation in accordance with international norms and standards to Moldovan government agencies.

Even though the CNRM has a very small staff of four specialists, during its first year of activity, the center achieved positive results. For example, in 2004, with assistance from the U.S. Department of Commerce, the center created an indigenous version of the U.S. Licensing Officer Instructional Simulation (LOIS) program. This program is now successfully used by Moldovan officials involved in licensing of strategic commodities (dual-use goods and technologies, as well as arms and munitions). In addition, in 2004 the CNRM, in cooperation with the U.S. Department of State, organized several training seminars on targeting and risk management in export-import operations for Moldovan customs and border officials.

In the near future, the CNRM plans to participate in the integration of the electronic Product Identification Tool (PIT) program into the day-to-day activities of the Moldovan Customs Department. The PIT program was developed by the U.S. Department of State for customs services, and it has been adapted to the Moldovan legislative norms. This program will last two years and will involve the organization of a

number of seminars to train customs officials in using this tool. The first training seminar is scheduled for April 2005.

The CNRM is also involved in designing a website devoted to issues of export control in the Republic of Moldova. The website will soon be available online. In the future, CNRM plans to facilitate the introduction of internal compliance programs at facilities involved in exports of strategic goods.

Although at present the center is mainly involved in export control–related programs sponsored by the U.S. Departments of State and Commerce, CNRM specialists will gladly share their experience and cooperate with other organizations on the full range of issues related to the problem of nonproliferation.

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Changes in NIS Export Control Personnel

Yushchenko Dismisses Heads of Export Control Service and Ukrspetseksport; Appoints New Customs Chief

On February 18, 2005, President of Ukraine Viktor Yushchenko signed Edict No. 277/2005 dismissing Oleksandr Leheida from his position as head of the State Service on Export Control (SSEC).[1] As of mid-March, it was not clear who would be in charge of the SSEC owing to the pending government restructuring (see “New Ukrainian Cabinet of Ministers Proposes that the State Service on Export Control be Disbanded” in this issue of the *NIS Export Control Observer*).

On February 25, 2005, President Yushchenko signed Edict No. 335/2005 dismissing Mykola Kalenskyy from his position as chairman of the State Customs Service (SCS) of Ukraine.[2] On March 4, 2005, President Yushchenko signed Edict No. 419/2005 appointing Volodymyr Skomarovsky SCS chairman.[3]

In a related development, on March 3, 2005, Yushchenko signed Edict No. 410/2005 dismissing Valeriy Shmarov, the director general of Ukrspetseksport, a state-owned company for the export and import of commodities and services of military and special purpose.[4] The Ukrainian government is conducting an ongoing investigation of the company’s past weapons sales.[5] On March 24, 2005, President Yushchenko appointed Verkhovna Rada member Serhiy Bondarchuk director general of Ukrspetseksport.[6]

Editor’s Note: Thirty-four-year-old Serhiy Bondarchuk was elected member of the Verkhovna Rada in 2002 by the 20th electoral district (Volyn Oblast). Prior to becoming a parliament member, Bondarchuk was deputy chairman of Energooborudovaniye (“Energy Equipment”) at the Malyshev State Enterprise (one of the largest manufacturers of tanks and armored vehicles in the CIS, located in Kharkiv).[6,7,8]

Sources: [1] Edict No. 277/2005, “Ob osvobozhdenii O. Leheydi ot dolzhnosti Glavy Gosudarstvennoy sluzhby eksportnogo kontrolya Ukrainy” [On dismissal of O. Leheida from the position of the Head of State Service on Export Control of Ukraine], February 18, 2005, President of Ukraine website, <<http://www.president.gov.ua/rus/officdocuments/326231847.html>>. [2] Edict No. 335/2005, “Ob osvobozhdenii N. Kalenskogo ot dolzhnosti Glavy Gosudarstvennoy tamozhennoy sluzhby Ukrainy” [On dismissal of M. Kalenskyy from the position of the Head of State Customs Service of Ukraine], February 25, 2005, President of Ukraine website, <<http://www.president.gov.ua/rus/officdocuments/330042885.html>>. [3] Edict No. 419/2005, “O naznachenii V. Skomarovskogo Predsedatelem Gosudarstvennoy tamozhennoy sluzhby Ukrainy” [On appointment of V. Skomarovsky the Chairman of the State Customs Service of Ukraine], March 4, 2005, President of Ukraine website, <<http://www.president.gov.ua/rus/officdocuments/331398141.html>>. [4] Edict No. 410/2005, “Ob osvobozhdenii V. Shmarova ot dolzhnosti generalnogo direktora Gosudarstvennoy kompanii po eksportu i importu produktsii i uslug voennogo i spetsialnogo naznacheniya” [On dismissal of V. Shmarov from the position of the general director of the State Company for Export and Import of Commodities and Services of Military and Special Purpose], March 3, 2005, President of Ukraine website, <<http://www.president.gov.ua/rus/officdocuments/331133823.html>>. [5] On the investigation involving Ukrspetseksport, see: “Ukraine Investigates Alleged Illicit Weapons Sales to Iran and China,” *NIS Export Control Observer*, No. 24, February 2005, pp. 11-12, <<http://cns.miis.edu/nis-excon>>. [6] “S. Bondarchuk naznachen generalnym direktorom ‘Ukrspetseksporta’” [S. Bondarchuk appointed director general of the Ukrspetseksport], Ukrainian Business Information Portal – LigaBusinessInform, March 24, 2005, <<http://www.liga.net/news/show/?id=141717>>. [7] “Ukrainian President Appoints New Head of State Weapons Exporter,” Ukrainian Independent Information Agency – UNIAN, March 24, 2005; in FBIS Document CEP20050324000433. [8] “Yushchenko naznachil

International Supplier Regimes

Conversion Provisions of CWC Modified

On November 30, 2004, the Conference of the States Parties (CSP) of the Organization for the Prohibition of Chemical Weapons (OPCW), at its ninth annual meeting in The Hague, the Netherlands, agreed to modify Part V of the Chemical Weapons Convention (CWC) Verification Annex to make it possible for new members of the CWC to convert former chemical weapons (CW) production facilities for non-prohibited purposes.[1]

Prior to this change, the CWC required the conversion of former CW facilities to be completed within six years after the entry into force of the convention, namely by April 29, 2003. Libya, which did not accede to the CWC until January 6, 2004, submitted a request to the OPCW Executive Council to convert two former CW production facilities at Rabta into pharmaceutical plants. The Executive Council considered the Libyan request and recommended on November 24 that the CSP approve it.[2]

In approving the Libyan request, the CSP established a deadline for the conversion of the Rabta facilities of no later than three years after the entry into force of the change to Part V of the Verification Annex. The converted Libyan pharmaceutical complex will manufacture low-cost medications to treat diseases that plague the African continent and the developing world, including HIV/AIDS, malaria, and tuberculosis.[3] Once the CSP decision enters into force, the conversion option will be available to all new and future parties to the CWC, a change that the United States and other countries hope will serve as an inducement for universal adherence to the convention.[3]

Editor's Note: The CWC currently has 167 states parties, including all of the states of the former Soviet Union and the former Yugoslavia. Significant non-parties include Egypt, Iraq, Israel, Lebanon, Syria, and North Korea.

Sources: [1] "Report of the Ninth Session of the Conference of States Parties," OPCW Conference of the States Parties, Ninth Session, C-9/6, December 2, 2004, OPCW website, <<http://www.opcw.org/docs/csp9/c906.pdf>>. [2] "Request by the Libyan Arab Jamahiriya to Use the Chemical Weapons Production Facilities Rabta Pharmaceutical Factory 1 and Rabta Pharmaceutical Factory 2 (Phase II) in Rabta, the Libyan Arab Jamahiriya, for Purposes Not Prohibited Under the Chemical Weapons Convention," OPCW Conference of the States Parties, Ninth Session, C-9/DEC.9, November 30, 2004, OPCW website, <<http://www.opcw.org/docs/csp9/c9dec09.pdf>>. [3] "United States Supports Libyan Weapons Plant Conversion Plan," U.S. government press release, United States Embassy in Japan website, <<http://tokyo.usembassy.gov/e/p/tp-20041014-15.html>>.

International Export Control and WMD Security Assistance Programs

EXBS Program Welcomes New Advisors to the Caucasus and Central Asia

By Erin E. Harbaugh, Foreign Affairs Officer, Office of Export Control Cooperation, Bureau of Nonproliferation, U.S. Department of State

The U.S. Department of State-funded Export Control and Related Border Security Assistance program (EXBS) welcomes three new program advisors to the NIS. Mr. Charles Hiscock will serve as the program advisor in Baku, Azerbaijan; Mr. Andrew Offenbacher in Almaty, Kazakhstan; and Mr. Paul Shott in Dushanbe, Tajikistan. Each of the new advisors brings with him a wealth of program management, training, and international experience to the cadre of what is currently a total of 10 EXBS program advisors posted to the region.

The EXBS program, managed by the U.S. Department of State's Bureau of Nonproliferation in consultation with other U.S. government agencies, is aimed at working cooperatively with key countries to help them establish or strengthen export and related border control systems. The initiative is part of the overall effort to prevent the proliferation of WMD and their delivery systems, as well as potentially destabilizing accumulations of conventional weapons. The program currently operates in 45 countries,

including 10 former Soviet republics: Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

The primary goals of the program are to work with recipient countries to strengthen the political commitment and legal authority related to effective export controls, to improve their ability to evaluate transfer requests involving items of proliferation concern, to enhance their capabilities to detect and prevent illicit transfers of controlled items, to promote effective government-to-industry outreach and interagency coordination, and to improve capabilities to investigate and prosecute those who violate export controls. The program is implemented by a variety of U.S. agencies, industry, and non-governmental organizations, including the Departments of Commerce, Defense, Energy, Homeland Security, and State. The EXBS advisors are a critical part of the program, working in-country to implement and support all activities—including trainings, workshops, exchanges, and equipment distribution—within their countries. The advisors also serve an important role as a liaison to Washington.

United States Organizes Training Courses in Latvia and Azerbaijan

Latvia

On January 17-28, 2005, the second of a series of Commodity Identification Training (CIT) courses was presented at the Latvian Customs Academy of the Riga Technical University. The course was attended by 20 active-duty customs officers from customs posts throughout Latvia. Technical information for development of the nuclear-related commodity identification course materials was provided by the International Nonproliferation Export Control Program (INECP) of the U.S. Department of Energy's (DOE) National Nuclear Security Administration (NNSA). Course modules were developed under a contract with the Radiation Protection Center in Riga. The Latvian instructors presenting the nuclear-related lectures were trained by U.S. technical experts sponsored by INECP.

Instruction on nuclear-related commodity identification was integrated with information on the manufacture of chemical and biological weapons of mass destruction and information on Latvian customs laws and export control procedures. Staff from the Radiation Protection Center and instructors from the Riga Technical University prepared a two-volume set of Latvian-language textbooks for use in this course. The first volume contains 180 pages of information on the visual recognition of nuclear-related dual-use commodities, based on information provided by INECP. Each student attending this course received copies of both volumes of the textbook for use during the course, and as reference when returning to assigned customs posts. In order to receive course credit, each officer attending the course was required to pass a final examination with a score of 70 percent or higher.

Azerbaijan

A team of DOE/NNSA technical export control specialists traveled to Baku, Azerbaijan, to conduct a Nuclear CIT workshop on January 24-26, 2005. The opening ceremony for the workshop was attended by the head of the Export Control Department of the Azerbaijani State Customs Committee (SCC), and the director and deputy director of the Institute of Radiation Problems (IRP). The three-day Nuclear and Nuclear-Related Commodity Identification Training course was organized in cooperation with Azeri technical specialists from the IRP. Twenty-three trainees representing the SCC (12), the Border Guard (6) and the Maritime Brigade (5) stationed at posts around the country attended the training. The course was conducted at the SCC Regional Training Center, a state-of-the-art facility outside of Baku. The course included modules on international nonproliferation regimes, nuclear and dual-use commodities subject to export control, and Azeri export control legislation. Also included were several sets of practical exercises, worksheets that had to be filled out by the students during the lectures, and a final exam.

Participant evaluations of the course showed a high level of satisfaction with the content of the course and noted its usefulness and relevance for fulfilling professional duties. The results of a test administered to the participants at the conclusion of the workshop suggested an adequate level of material assimilation. A manual with copies of all presentations was given to each workshop participant. It is expected that the attendees will use the manual at their posts as a basic reference guide.

Illicit Trafficking in the Newly Independent States (NIS)

Containers of Cesium Discovered in Crimea

As reported by Russian and Ukrainian media, Ukrainian police seized six metal containers marked with radioactivity sign and holding highly radioactive isotope cesium-137 in the village of Ishun, Krasnoperekopskiy district, Crimea, Ukraine on January 22, 2005.[1,2,3,4] The containers, discovered as a result of a search for illegal drugs, were found between a house wall and a stack of hay.[3,4] The markings on the containers indicated that these were BGI 75-Ts 2, made in 1982, and weighing 83 kilograms each (approximately 183 pounds). Each container also had a serial number on it.[4] [*Editor's Note: BGI stands for "gamma source assembly."*]

According to *Krymskaya pravda* (Simferopol, Crimea), each container could hold up to 30 grams of cesium-137.[3] The radiation level of the containers exceeded the normal background by 380 times; this prompted authorities to evacuate the residents of the house and their neighbors.[1,3] The containers were sent to the Odessa, Ukraine, branch of Radon Special Combine for storage.[2,3]

The origin of the containers is still unclear. *Krymskaya pravda* reported that the house owner had received the containers from a relative in September 2004, who planned to resell them. However, the regional office of the Ministry of Internal Affairs indicated to the Ukrainian Independent Information Agency (UNIAN) that the house owner had received the containers for storage from a locksmith residing in Krasnoperekopsk and employed at the Brom Joint Stock Company, a local manufacturer of bromine and magnesium products.[4] The police subsequently detained the locksmith, who admitted that in 2000 he had accepted payment from another Krasnoperekopsk resident to store the containers. This person, the supplier of the containers, died in 2003. The Ukrainian news agency speculated that radiation exposure could have been the cause of his death.[4] The police launched an investigation to establish the origin of the seized containers.[2,3]

In its June 2004 issue, the *NIS Export Control Observer* reported a similar event involving cesium-137 in Crimea. In early April 2004, the Security Service of Ukraine and an Alfa special force unit arrested members of an organized crime group in the city of Armyansk, northern Crimea, while they were attempting to sell two containers with cesium-137 for \$60,000 each to buyers from Kiev. The group was headed by three residents of Sevastopol, Crimea, and included accomplices in other regions of Ukraine.[5]

Editor's Note: Cesium-137 is a potent radioactive material used in industry and medicine, but which might also be used in a "dirty bomb" to cause extensive radioactive contamination.

Sources: [1] "V Krymu naydeny 83-kilogrammovyye radioaktivnyye konteynery" [83-kg radioactive containers discovered in the Crimea], Lenta.ru, January 23, 2005, <<http://www.lenta.ru/world/2005/01/23/container/>>. [2] Lev Ryabchikov, "V Krymu obnaruzhena krupnaya partiya radioaktivnykh izotopov, dostatochnaya dlya izgotovleniya 'gryaznoy bomby' v terroristicheskikh tselyakh" [A large batch of radioactive isotopes sufficient to make a 'dirty bomb' for terrorist purposes was discovered in the Crimea], ITAR-TASS, January 24, 2005; in Integrum-Techno, <<http://integrum.com>>. [3] "Tseziyevaya 'zanachka' sluchayno obnaruzhena sotrudnikami militsii v odnom iz chastnykh domovladeniy" [Cesium 'stash' discovered by chance during police search in a private house], *Krymskaya pravda* (Simferopol) online edition, No. 14 (23633), January 26, 2004, <http://www.kp.crimea.ua/text/num6/jan_2005_26.html>. [4] "V Krasnoperekopskom rayone Kryma v odnom iz chastnykh domovladeniy obnaruzheny konteynery s tseziyem" [Containers with cesium discovered in a private house in Krasnoperekopsk district, Crimea], Podrobnosti.ua website (based on the materials of the Ukrainian Independent Information Agency – UNIAN), January 24, 2005, <<http://www.podrobnosti.ua/criminal/2005/01/24/175276.html>>. [5] "Ukrainian Security Service Arrests Cesium Dealers," *NIS Export Control Observer*, No. 17, June 2004, pp. 6-7, <<http://cns.miis.edu/nis-excon>>.

Russian Scientist Charged with Selling Dual-Use Materials to South Korea

On March 2, 2005, Dr. Oskar Kaybyshev, a physicist and director of the Russian Academy of Sciences Institute of Metal Superplasticity Problems (IPSM), located in Ufa, Bashkortostan, was officially charged with illegally selling a titanium alloy to the South Korean tire producer—Artisan Spirited Alloy (ASA), a subsidiary of Hankook Tire, which is based in Seoul.[1] The sale took place in 2003. The metal was produced using a method known as superplasticity that the Russian Federal Security Service (FSB) avers constitutes a state secret.

Specifically, Kaybyshev was charged with violating articles 283 (on state secrets), 189 (on illegal export of dual-use technologies), 285 (on abuse of office), 160 (on misappropriation of funds), and 327 (on using falsified documents) of the Russian Criminal Code.[2] The charge of revealing state secrets was later dropped owing to a lack of evidence.[3] The Russian law enforcement authorities also charged Kaybyshev's deputy, Irina Zeygman, with fraud, but this charge, too, has been dropped.[2] The FSB originally opened its case against Kaybyshev on March 29, 2003. On January 18, 2005, Kaybyshev was fired from his job and put under house arrest.

Dr. Kaybyshev has denied all charges, explaining that the metal cannot be used for military applications.[2,4] Further, he noted that the production of superplastic metal has not been considered a secret for a long time, and has been sold abroad on multiple occasions in the past.[2,5] Superplasticity, the process of lining up molecules in a metal to provide resistance to breaking under stress, was patented by Kaybyshev in the United States, and has been the subject of several scientific research articles.[6] The technology in question is also described in a forthcoming book by Kaybyshev and Farid Utyashev, to be published by Futurepast, a Virginia-based training and consulting firm, with funding from the International Science and Technology Center.[3,7] Kaybyshev has noted that IPSM has not been involved in any secret work in the past 15-20 years.[4]

IPSM has been cooperating with foreign countries that wish to use IPSM technology in the manufacture of automobile tires, and exported the metal to India in 1987, as well as to Italy in 1990. Kaybyshev related that IPSM has been involved in a related joint research project with India since 1987.[4] Before engaging in these transactions, however, IPSM conducted an examination of both the technology and the product to be exported and determined that neither was subject to export controls. Russian customs had its doubts and launched an investigation. This time, IPSM turned to the Russian Academy of Sciences (RAS) for an independent, expert examination. RAS determined that neither the technology nor the product was subject to controls.[4,8] According to the Russian news organization Gazeta.ru, the Russian Ministry of Economic Development and Trade, when contacted about the Kaybyshev case, responded that the South Korean deal "does not fall under the category of 'dual use technology.'"[4]

Scientific work at IPSM has been halted due to the FSB activity at the facility. Two doctors of science and five individuals with master's degrees, all of whom are experts in superplasticity, have reportedly left Russia since the FSB action.[4] Kaybyshev has accused the FSB of opening the case against him at the behest of a competitor.[5] The American Association for the Advancement of Science (AAAS) has issued an action alert concerning the case of Dr. Kaybyshev, as well as an article detailing why the scientist's actions should not be considered illegal.[6] Under Russian law, this type of dispute should be referred to the interdepartmental Commission on Export Control; however, the edict on the formation of this commission has not yet been issued.[8]

Sources: [1] Bryon MacWilliams, "Russian security arrests institute head for spying," *Nature*, Vol. 433, No. 789 (February 24, 2005), <http://www.nature.com/cgi-taf/DynaPage.taf?file=/nature/journal/v433/n7028/full/433789b_fs.html>. [2] Gulchachak Khannanova, "Akademika otchislili iz shpionov" [Academic removed from list of spies], *Kommersant*, March 3, 2005; in Integrum Techno, <<http://www.integrum.com>>. [3] "Ufimskomu fiziku predyavleny obvineniya po chetyrem statyam" [Ufa physicist charged with violating four articles], *Gazeta.ru*, March 2, 2005; in Integrum Techno, <<http://www.integrum.com>>. [4] Fazil Kashayev, "Sharoballony massovogo porazheniya" [Metal spheres of mass destruction], *Gazeta.ru*, March 2, 2005; in Integrum Techno, <<http://www.integrum.com>>. [5] Gulchachak Khannanova, Natalya Pavlova, "Na akademika katyat shar-ballon" [They are throwing a metal sphere at an academic], *Kommersant*, February 21, 2005; in Integrum Techno, <<http://www.integrum.com>>. [6] "AAAS: 'Release Russian Scientist Dr Kaibyshev'," Network for Education and Academic Rights website, <<http://www.nearinternational.org/alerts/Russia2020050302en.php?PHPSESSID=e707329bba58d3c54e4fb865fc33c532>>. [7] "World Renowned Russian Scientist Under Investigation by FSB For Allegedly Divulging 'State Secrets'," Futurepast Incorporated press release, February 16, 2005, Futurepast Incorporated website, <<http://www.futurepast.com/kaib20050216.pdf>>. [8] CNS correspondence with Russian export control expert, March 30, 2005.

Summaries from the NIS Press

Ukrainian Defense Minister Comments on Illegal Exports

Ukrainian Defense Minister Anatoliy Hrytsenko told reporters from the Ukrainian Independent Information Agency (UNIAN) that on March 2, 2005, the Council of National Security and Defense of Ukraine (CNSDU) discussed unauthorized transfers of Ukrainian weapons abroad. Hrytsenko observed that the

number of unauthorized transfers peaked in 2000-2001.[1,2] Hrytsenko stated that the Ministry of Defense must not be allowed to sell weapons independently. He also reminded the press corps that on March 2, 2005, the Ukrainian government made a decision according to which the Ukrspetsekспорт company, which was once the sole state-owned arms trading company in Ukraine, has been included in the list of enterprises that will be subject to a comprehensive audit.[1,2] In his comments on the Ukrainian export control system, Hrytsenko emphasized: “It is necessary for Ukraine to preserve the integrity of the export control system, to determine the proper place for the state export control service and the committee on questions of military-technical cooperation under the President of Ukraine.”[2]

Sources: [1] “Grytsenko: MO ne dolzhno torgovat oruzhiyem, a Gossluzhba eksportnogo kontrolya mozhnet voyti v Minekonomiki” [Hrytsenko: Ministry of Defense must not sell weapons, while State Service on Export Control might be absorbed by the Ministry of Economics], Podrobnosti.ua website [based on the materials of the Ukrainian Independent Information Agency – UNIAN], March 2, 2005, <<http://www.podrobnosti.ua/power/govt/2005/03/02/184678.html>>. [2] “Ukraina bolshe vsego oruzhiya nezakonno eksportirovala v 2000-2001 godakh” [Ukraine exported the most weapons illegally in 2000-2001 years], Rosbalt news agency, March 3, 2005, <<http://www.rosbalt.ru/2005/03/03/198589.html>>.

Russian Official Outlines Russia’s WMD Proliferation Concerns

On February 15, 2005, a spokesman from the Russian Ministry of Foreign Affairs, Aleksandr Yakovenko, underscored Russia’s strong concerns “about the possible proliferation of weapons of mass destruction (WMD) because of the danger of ‘threshold’ states as well as terrorists getting access to them.”[1,2] Yakovenko’s comment came as a response to the February 13, 2005, statement UN Secretary General Kofi Annan made at the 41st Munich Conference on Security Policy about the possible “cascade of nuclear proliferation” unless more drastic measures are taken to control this threat.[3]

According to the Russian official, Russia will take an active part in the 2005 Review Conference of the Parties to the NPT that will meet on May 2-27, 2005, at the United Nations in New York. “We think it is important for the meeting to reaffirm the significance of this international document as a means of strengthening the nuclear nonproliferation regime under current conditions,” Yakovenko said, adding that “it is necessary to discuss possible steps to be taken in case countries withdraw from the treaty or breach provisions of this crucial international document.” Yakovenko emphasized that Russia was among the initiators of UN Security Council Resolution 1540 aimed at preventing international terrorist organizations from accessing WMD, their components, or related technologies and fighting WMD “black markets.” According to Yakovenko, in order to strengthen the nonproliferation regime, states must establish effective export control systems and adopt legislation that punishes those who fail to adhere to the resolution’s tenets. The Russian official concluded by saying: “The implementation of this UN Security Council document is gaining momentum. The Counterproliferation Committee that has been set up is actively expanding its work and is called upon to play a significant role in this sphere.”[1,2]

Editor’s Note: UN Security Council Resolution 1540 envisioned the establishment of a special committee consisting of all UN Security Council member states that will function for a period of two years and will report to the Council on the progress in implementing the provisions of this resolution.

Sources: [1] “Rossiya obespokoyena vozmozhnostyu rasprostraneniya OMU kak za schet ‘porogovykh’ gosudarstv, tak so storony terroristov – MID RF” [Russia is concerned about the possible WMD proliferation on account of ‘threshold’ states as well as terrorists – Russian MFA], RIA Novosti, February 15, 2005; in Integrum Techno, <<http://www.integrum.com>>. [2] “MID RF: Rossiya obespokoyena vozmozhnostyu rasprostraneniya yadernogo oruzhiya za schet ‘porogovykh’ gosudarstv i ego popadaniya k terroristam” [Russian MFA: Russia is concerned about the possible proliferation of nuclear weapons on account of ‘threshold’ states as well as terrorists getting access to them], ITAR-TASS, February 15, 2005; in Integrum Techno, <<http://www.integrum.com>>. [3] “Munich, Germany, 13 February 2005 – The Secretary-General’s Address to the 41st Munich Conference on Security Policy: ‘A More Secure World: the future role of the United Nations’,” UN Secretary General Office of the Spokesman, UN website, <<http://www.un.org/apps/sg/sgstats.asp?nid=1304>>.

Allegations Regarding Chechen Possession of Suitcase Nukes Resurface

In an interview with Russian daily *Komsomolskaya pravda* published on February 8, 2005, London-based Russian billionaire Boris Berezovskiy declared that Chechen terrorists are in possession of a portable atomic bomb. Berezovskiy stated that “trustworthy people”—whom he did not name—had told him that one component of the weapon was missing, but that it was a minor part. Berezovskiy stated further that he had written to Russia’s Federal Security Service Chief Nikolay Patrushev about the information in the fall of 2004.[1] In response to the article, on the same day the Information and Press Department of the Russian Ministry of Foreign Affairs issued the following commentary: “Of late we have been witnesses of the

appearance in a number of media of all kinds of threats against us. We shall give as an example the British television Channel Four, which a few days ago aired a story featuring terrorist/murderer Shamil Basayev, who threatened Russians with ‘new Beslans.’ Now London political émigré Boris Berezovsky is trying to scare us with portable nuclear bombs at the disposal of Chechen gunmen. We do not rule out that there will follow more scary tales of this kind, the aim of which is to spread in Russia feelings of vulnerability and nervousness. As the substance of the matter, Moscow does not believe the Chechen gunmen might have such a nuclear device. Accordingly, we do not consider a terrorist act with its employment possible.”[2]

Berezovskiy has made similar allegations in the past. In an October 24, 2004, interview with London’s *Sunday Times*, Berezovskiy provided some more details saying that he had been approached in 2002 by a Chechen man who offered to sell him a suitcase nuclear device. Berezovskiy explained that he did not know whether the proposal was earnest or “a provocation,” but that he reported it to U.S. and U.K. intelligence. British officials confirmed that Berezovskiy had contacted them regarding the supply of illicit nuclear and radioactive materials, but provided no details. Berezovskiy related that with the aid of CIA operatives he arranged a meeting with the Chechen, whom he knew as Zakhar, and asked him to provide proof that the nuclear device existed. Zakhar did not comply with this request, which led Berezovskiy to speculate that Zakhar might have realized the meeting was a trap. The tycoon had no further information about the Chechen or whether intelligence officials had pursued the matter further.[3]

Editor’s Note: Stories regarding so-called suitcase nuclear devices have periodically surfaced in the press since 1997, after the late General Aleksandr Lebed—former Secretary of the Russian Security Council and later governor of Krasnoyarsk Krai—alleged that approximately 100 portable nuclear devices were unaccounted for. These allegations have been reviewed by experts at the Center for Nonproliferation Studies, who concluded that any loss of a portable nuclear weapon was highly unlikely. For a summary of the evidence, please see the article, “Experts Doubt New Allegations that Al-Qai’da May Have Suitcase Nukes” in the March 2004 issue of the NIS Export Control Observer at <<http://cns.miis.edu/nis-excon>>, as well as the study “‘Suitcase Nukes:’ A Reassessment,” available online at <<http://cns.miis.edu/pubs/week/020923.htm>>.

Sources: [1] Andrey Sedov, “Oligarkh-emigrant Boris Berezovskiy: U boyevikov uzhe yest atomnaya bomba” [Emigrant oligarch Boris Berezovskiy: The fighters already have an atomic bomb], *Komsomolskaya pravda* online edition, February 8, 2005, <<http://www.kp.ru/daily/23456/36589>>. [2] “Russian MFA Information and Press Department Commentary Regarding a Media Question Concerning Political Émigré Boris Berezovsky’s Statement About Chechen Gunmen Having Atomic Weapons,” Ministry of Foreign Affairs of the Russian Federation, Information and Press Department, Commentary 251-08-02-2005, February 8, 2005, <http://www.in.mid.ru/brp_4.nsf/e78a48070f128a7b43256999005bcb3/388b0b25dc877ca0c3256fa200422f6e?OpenDocument>. [3] “Berezovsky Says US/UK Intelligence Helped Foil Chechen Plot To Sell Nuclear Bomb,” *Sunday Times*, October 24, 2004; in FBIS Document EUP20041024000067.

International Developments

Presidential Directive Outlining U.S. Maritime Security Policy

This article provides an overview of the U.S. maritime security strategy as described in a presidential directive of December 2004, which aims at coordinating the work of various U.S. government agencies and preventing the threat of terrorism.

On December 21, 2004, President George W. Bush signed the National Security Presidential Directive (NSPD) 41/Homeland Security Presidential Directive (HSPD) 13, entitled “Maritime Security Policy,” outlining the Bush Administration’s “vision for a fully coordinated U.S. Government effort to protect U.S. interests in the maritime domain.”[1,2,3] The main objective of this policy document is “to integrate all U.S. Government maritime security programs [such as the Container Security Initiative (CSI), Proliferation Security Initiative (PSI), and Operation Safe Commerce] and initiatives into a comprehensive and cohesive national effort involving appropriate Federal, State, local, and private sector entities.”[1] More specifically, NSPD 41/HSPD 13 contains the elements listed below.

- Maritime Security Policy Coordinating Committee: The directive creates a standing interagency committee for coordinating U.S. government maritime security policies. The committee is mandated by its charter to review existing interagency practices, coordination, and execution of

U.S. policies and strategies relating to maritime security, and to recommend improvements as needed.

- National Strategy for Maritime Security: The directive mandates the secretaries of Defense and Homeland Security to lead the collaborative interagency effort to develop the national strategy for maritime security, which will build on and capitalize on existing strategies, tools, and resources.
- Maritime Domain Awareness (MDA): The directive establishes the Senior Steering Group for MDA, which will be co-chaired by representatives of the secretaries of Defense and Homeland Security. The Senior Steering Group is charged with coordinating national efforts to develop an enhanced capability to identify “threats in the maritime domain as distant from our shores as possible.” The Senior Steering Group is also responsible for developing a national plan for maritime domain awareness.
- Global Maritime Intelligence Integration: The directive mandates the development of a plan to use existing capabilities to integrate all available intelligence on a global basis regarding the location, identity, and operational capabilities and intentions of potential threats to U.S. interests in the maritime domain.
- Domestic Outreach: The directive mandates the creation of an engagement plan that will guarantee that the interests of state and local governments, as well as those of the private sector, are considered in the federal government’s development and implementation of maritime security policies.
- Coordination of International Efforts and International Outreach: The directive provides details of a coordination process for all maritime security initiatives undertaken with foreign governments and international organizations. Furthermore, the directive requires the development of a comprehensive outreach strategy to solicit international support for an improved global maritime security framework.
- Maritime Threat Response: The directive mandates the development of a comprehensive National Maritime Response Plan that will clearly delineate the lead agency roles and responsibilities with regard to the threats in the maritime domain. The National Maritime Response Plan will supplement the National Response Plan required by HSPD-5 [Management of Domestic Incidents] and complement the critical infrastructure protection plans outlined in HSPD-7 [Critical Infrastructure Identification, Prioritization and Protection] and the domestic all-hazards preparedness goals and structures as presented in HSPD-8 [National Preparedness].
- Maritime Infrastructure Recovery: The directive mandates the development of recommended minimum federal standards for maritime recovery operations, comprehensive national maritime infrastructure recovery standards, and a plan that will be complementary to the national preparedness goals and standards required by HSPD-8. The development of the aforementioned standards for maritime recovery operations should be carried out in consultation with key industry stakeholders.
- Maritime Transportation System Security: The directive mandates the development of recommendations for improvements to the national and international regulatory framework with respect to licensing, carriage, communications, safety equipment, and other critical systems for all private vessels, including commercial vessels, operating in the maritime domain. The development of the aforementioned recommendations should be carried out in consultation with appropriate industry representatives.
- Maritime Commerce Security: The directive mandates the development of a comprehensive maritime supply chain security plan in consultation with appropriate industry representatives.[1,4]

In addition to the above-mandated actions, NSPD 41/HSPD 13 reiterates the following U.S. interests in the maritime domain:

- Preventing terrorist attacks or criminal or hostile acts in, or the unlawful exploitation of, the maritime domain, and reducing the vulnerability of the maritime domain to such acts and exploitation;
- Enhancing U.S. national security and homeland security by protecting U.S. population centers, critical infrastructure, borders, harbors, ports, and coastal approaches in the maritime domain;
- Expediting recovery and response from attacks within the maritime domain;

- Maximizing awareness of security issues in the maritime domain in order to support U.S. forces and improve U.S. government actions in response to identified threats;
- Enhancing international relationships and promoting the integration of U.S. allies and international and private-sector partners into an improved global maritime security framework to advance common security interests in the maritime domain; and
- Ensuring seamless, coordinated implementation of authorities and responsibilities relating to the security of the maritime domain by and among federal departments and agencies.[1,4]

NSPD 41/HSPD 13 also lists and provides brief descriptions of the existing initiatives in the maritime domain, which include the CSI, the PSI, and the Megaports Initiative, as well as the following initiatives and operational concepts, which have not been covered in previous issues of the *NIS Export Control Observer*.

- **Advance Information:** Through the 96-hour Advance Notice of Arrival (ANOA) regulation, ships must notify the U.S. Coast Guard 96 hours before arriving in a U.S. port and provide detailed information about crew, passenger, cargo, and voyage history. All sea carriers, with the exception of bulk carriers and approved break bulk cargo, are required to provide proper cargo descriptions and valid consignee addresses 24 hours before cargo is loaded at the foreign port for shipment to the United States through the Sea Automated Manifest System. By obtaining this information well in advance of arrival, the U.S. government is able to make determinations about which vessels require additional scrutiny, including security precautions such as at-sea boarding or armed escort during transit to and from port.
- **Customs-Trade Partnership Against Terrorism (C-TPAT):** Launched in November 2001, C-TPAT is a public/private initiative that teams government with importers, carriers, brokers, and other industry sectors to create a seamless security-conscious environment throughout the entire commercial process, from manufacture through transportation and importation to ultimate distribution. Under the C-TPAT initiative, business participants providing verifiable security information are eligible for special benefits. At present, C-TPAT unites more than 7,000 members and represents the largest public/private federal government partnership in U.S. history.
- **Joint Harbor Operations Centers:** This joint U.S. Navy-U.S. Coast Guard initiative establishes interagency prototype joint harbor operations centers in select Navy homeports to improve both port security and force protection capabilities. Prototypes have been completed in San Diego, California, and Hampton Roads, Virginia.
- **Operation Safe Commerce (OSC):** In the context of this program, the U.S. government is working with business interests, the largest U.S. container load centers, and the maritime industry to evaluate technologies and business practices that perfect and secure the end-to-end global supply chain, enhance maritime security, and facilitate the flow of commerce. OSC's results will inform U.S. policies that protect America's vital cargo supply routes against terrorist attack and ensure the safe and expeditious movement of cargo from origin to destination.[1,4]

Sources: [1] Fact Sheet: President Bush Signs *Maritime Security Policy National Security/Homeland Security Presidential Directive*. Handout material distributed at the WIIS briefing "New Lines of Defense: Protecting America's Ports," Washington, DC, March 10, 2005. [2] "New presidential directive targets maritime security," Government Computer News (GSN.com), January 18, 2005, <http://www.gcn.com/vol1_no1/security/34821-1.html>. [3] Martin Edwin Andersen, "New Bush national security directive on maritime issues charts Administration course during his second term," Port Security News Service, January 18, 2005, <<http://www.porttechnology.org/industry.news/2005/27.01.05-feature.html>>. [4] National Security Presidential Directive NSPD-41/Homeland Security Presidential Directive HSPD-13, "Maritime Security Policy" [Unclassified Version], December 21, 2004; National Security Presidential Directives [NSPD]: George W. Bush Administration, Intelligence Resources Program (IRP), Federation of American Scientists website, <<http://www.fas.org/irp/offdocs/nspd/nspd41.pdf>>.

Workshops and Conferences

Australia and Indonesia Co-Host Regional Workshop on Biological Weapons Convention

On February 21-25, 2005, a regional workshop on the Biological Weapons Convention (BWC), co-hosted by the governments of Australia and Indonesia, was held in Melbourne, Australia.[1] Officials and experts representing health and foreign ministries, disease control centers, and scientific institutions from 12 South East Asian and Pacific BWC party nations attended the event, the first of its kind in the region.[1,2] The workshop aimed to demonstrate the continued strong commitment in the region to halting the proliferation

of WMD and keeping the Asia Pacific region free of biological weapons. Workshop participants discussed ways to reduce the possibility of bioterrorism in the region, improve security and oversight of pathogens and toxins, and establish effective codes of conduct for biological scientists. The workshop was also intended to assist regional officials in introducing the BWC provisions into appropriate national legislation and preparing progress reports for the sixth BWC Review Conference, to be held in Geneva in late 2006. Participants also discussed national implementation of effective export controls as provided for by UN Security Council Resolution 1540.[2,3,4]

Speaking at the opening ceremony, Australian Minister of Defense Robert Hill said that regional cooperation is the key to stopping the proliferation of biological weapons, stressing that “the prevention of bio-terrorism and the proliferation of biological weapons cannot be assured by any one country acting in isolation... The threat [of bioterrorism] is not only real but a growing one, because of the rapid advances in the biological sciences and bio-technology, and the widespread availability of associated information and material. These trends have coincided with the emergence of non-state actors determined to seek weapons of mass effect to use against civilian populations,” Hill said. According to Hill, “the Australian government would support further meetings of this kind, should regional governments find them useful,” and is ready to offer short courses of familiarization training on disarmament and arms control issues to officials throughout the region as well as assistance in the development of relevant national legislation.[2]

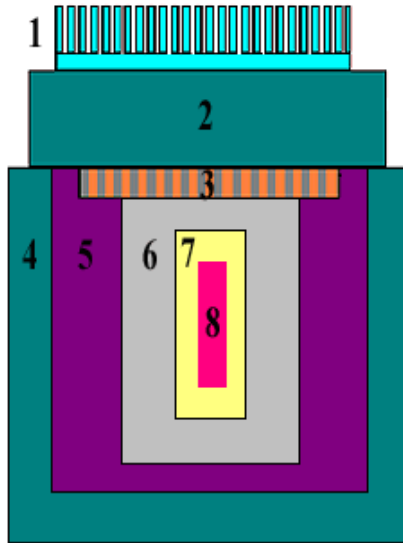
Hill also pointed out that in 2004 Australia hosted two significant events in support of WMD nonproliferation in the region: the ministerial-level Asia-Pacific Conference on Nuclear Safeguards and Security, which focused on the prevention of nuclear and radiological terrorism, and a meeting of countries participating in the PSI, which examined ways to open the PSI further to more practical involvement by other states, particularly in the Asia Pacific region. According to Hill, in 2005, Australia will host the 20th Anniversary Plenary meeting of the Australia Group and the third senior-level meeting of the Asian Export Control Policy dialogue. In 2006, Australia will chair the Wassenaar Arrangement, which seeks to control transfers of conventional arms and sensitive technologies.[2]

Sources: [1] “Australia Hosts Conference on Bio-Terrorism, Melbourne: February 21-25, 2005,” Australian High Commission in Malaysia press release, February 22, 2005, <<http://www.australia.org.my/home/index.cfm?ArtID=231>>. [2] “Opening Speech. Biological Weapons Convention Workshop, Melbourne, February 21, 2005,” Australian Department of Defence website, <<http://www.minister.defence.gov.au/HillSpeechtpl.cfm?CurrentId=4646>>. [3] “Defence Minister to open Biological Weapons Convention Regional Workshop,” Australian Department of Defence website, February 20, 2005, <<http://www.defence.gov.au/media/AlertTpl.cfm?CurrentId=4642>>. [4] “Regional cooperation will stop bioterrorism, Hill says,” ABC News Online, February 21, 2005, <<http://www.abc.net.au/news/newsitems/200502/s1307323.htm>>.

Oslo Workshop on RTG Decommissioning and Replacement

On February 16-18, 2005, a workshop entitled “Security and Safety of Radioactive Sources: Decommissioning and Replacement of Radioisotope Thermoelectric Generators” was held in Oslo, Norway. The workshop was hosted by the Norwegian government, under the auspices of the IAEA Contact Expert Group (CEG) for International Radioactive Waste Projects in the Russian Federation. The CEG, which was established in 1996, has generally focused on nuclear submarine dismantlement issues and related environmental remediation. The February workshop was the first focused on the problem of radioisotope thermoelectric generators (RTGs), sometimes referred to as “nuclear batteries.” RTGs use heat energy from the decay of the radioactive isotope strontium-90 or the isotope plutonium-238 to generate power. [Editor’s Note: While some of the small RTGs for powering space probes have used plutonium-238, the large RTGs for terrestrial applications, for example, for powering Russian lighthouses, have employed strontium-90.] Each RTG has a radioactivity level of around 40,000 curies, making them some of the most powerful radioactive sources in the world. Until recent years, nearly 1,000 RTGs were located in northwest Russia and the Russian Far East to power navigational beacons and lighthouses. Despite international efforts to replace these radioactive sources with non-radioactive power sources, approximately 700 RTGs are estimated to be in use in these applications.

Schematic of a Russian RTG



1. Finned Cooling Head
2. Pressure Vessel Housing Lid
3. Thermoelectric Converter Module
4. Pressure Vessel Housing
5. Thermal Insulation
6. Radiation Bio-shield
7. Fuel Cladding
8. Sr-90 Radionuclide Head Source (RHS)

Source: Norwegian Radiation Protection Authority,
<<http://www.nrpa.no>>.

Norway has been concerned about the generators, many of which are neglected and not well secured, for nearly a decade, and has been engaged in their removal since 1997. Oslo has already spent more than 1 billion Norwegian crowns (NOK; approximately \$150 million) to improve nuclear safety and environmental protection in northwest Russia within the framework of Norway's Nuclear Action Plan, of which approximately 15 million NOK (about \$2.4 million) have been spent to date on RTG removal.[1,2] Specifically, Oslo has facilitated the removal of 60 RTGs and the installation of environmentally friendly solar-cell panels in 37 Russian lighthouses.[1] The United States is engaged in parallel efforts; in a program carried out by the U.S. DOE, 63 RTGs were removed from northwest Russia in the summer of 2004. Plans call for the removal of 21 RTGs in the Russian Far East in the summer of 2005, which will be the first such activity in this region. DOE is awaiting a proposal from Russia regarding continued work in northern Russia.[3] Norway intends to remove 31 RTGs from Murmansk during the summer of 2005.[4]

In a major announcement toward the end of the workshop, Norway committed to financing the replacement of all RTGs in Murmansk and Arkhangelsk Oblasts and the Nenets Autonomous Okrug, a total of 110 RTGs, powered by about 150 radionuclide heat sources. (Some of the RTGs incorporate more than one strontium source).[4,5] Canada and the United States are in discussions regarding the removal of RTGs east of the Nenets Autonomous Okrug (in the Yamalo-Nenets, Krasnoyarsk, Yakutiya, and Chukotka regions).[3] Other countries, in particular France and Germany, have expressed interest in this field as well, and are looking for ways to contribute to the removal of RTGs in the near future.[2]

The February workshop, which brought together representatives of nearly a dozen countries, was an important first step in coordinating the growing international interest in helping to handle the RTGs. As the Russian Federal Atomic Energy Agency (Rosatom) has recently taken the lead role in this area on the Russian side from the Ministry of Transport, the Navy, and various hydrographic organizations that own the RTGs, there are some delays in project planning while the structural transition takes place. Workshop participants indicated that the workshop sessions were very useful in coordinating international efforts, and similar events should take place in the future.[3] One important outcome of the workshop was the establishment of an international coordination group addressing these issues.[2]

Sources: [1] Kim Traavik, Norwegian Deputy Minister of Foreign Affairs, opening statement, Contact Expert Group Seminar on RTGs, Oslo, February 16, 2005, ODIN (Information from the Government and the Ministries) website, <http://odin.dep.no/ud/norsk/aktuelt/taler/politisk_ledelse/traavik/032171-090343/dok-bn.html>. [2] CNS communication with Ole Reistad, Norwegian Radiation Protection Authority, March 15, 2004. [3] CNS interview with DOE official, March 14, 2005. [4] "Norway to sponsor replacement of all nuclear lighthouses in northwest Russia," Bellona environmental foundation website, March 14, 2005, <<http://www.bellona.no/en/international/russia/navy/co-operation/37453.html>>. [5] "Assessment of environmental, health and safety consequences of decommissioning radioisotope thermal generators (RTGs) in Northwest Russia," Norwegian Radiation

U.S. Experts Discuss Maritime Security Issues

On March 10, 2005, the U.S. non-profit organization Women in International Security, organized a briefing entitled “New Lines of Defense: Protecting America’s Ports” in Washington, DC. The panel of experts featured at the briefing included Bethann Rooney, manager of port security at the Port Authority of New York and New Jersey; U.S. Coast Guard Lieutenant Commander Laura Hartline Weems, Waterways Management Division chief at the U.S. Coast Guard Sector in Baltimore; and Tracy P. Mustin, director of the Second Line of Defense (SLD) program at the U.S. DOE’s NNSA.

Bethann Rooney began her presentation by stating that out of the total 361 ports dotting the U.S. coastline, 161 are under the supervision of the Port Authority of New York and New Jersey. Rooney pointed out that the majority of these ports belong to various private companies; the Port Authority actually owns only 13 of them. This underlines the importance of cooperation with private industry in order to ensure its compliance with federally mandated security guidelines. The economic activity of the port of New York alone accounts for some 30 percent of the U.S. gross domestic product, Rooney said. In its daily operations, the Port Authority leads a logistically complex multi-agency effort to guarantee port security without interrupting the flow of commercial activities. Under the aegis of the U.S. government’s Operation Safe Commerce (OSC), the Port Authority employs a performance-based, rather than purely prescriptive, approach to evaluate the compliance of private businesses with mandatory security guidelines. In discussing container screening procedures, Rooney observed that the typical transportation scheme of an average cargo container consists of 25 nodes and requires 45 different documents. In conclusion, Rooney indicated that the Port Authority’s main source of intelligence about incoming vessels is the FBI-New York City Police Department Joint Terrorism Task Force (JTTF).

Laura Weems discussed planning and preparedness at the Baltimore seaport. Weems spoke about the functions of the U.S. Coast Guard, which include search and rescue operations, oil spill management, and vessel inspections. She noted that the U.S. Coast Guard units operate in close cooperation with customs and border protection officials. The coast guard and customs officials compile targeting matrices that allow them to determine what represents “actionable intelligence” warranting the establishment of moving security zones around so-called high interest vessels, and their subsequent boarding and inspection. *[Editor’s Note: Moving security zones are established by the U.S. Coast Guard as the ships move in and out of harbors and ports. For instance, in Hilo Harbor, Hawaii, the moving security zone covers the waters within a 100-yard radius centered on each cruise ship.]*[1] Weems emphasized, however, that despite the passage of the *Maritime Transportation Security Act of 2002*, the U.S. Coast Guard continues to experience lack of funding and shortages of both personnel and equipment.

Tracy Mustin outlined U.S. cooperation with international partners in the context of the SLD program. The program’s main objective is “to prevent illicit trafficking in nuclear and radiological materials” by installing radiation detection equipment at “international land borders, seaports and airports that may be used as smuggling routes for materials needed for a nuclear device or a radiological dispersal device.”[2] Mustin also mentioned that the second component of the SLD program is the Megaports Initiative, which was launched in 2003. Under the Megaports Initiative, DOE is pursuing cooperation with other countries to equip major foreign seaports with radiation detection equipment that can be used by host government officials to detect, deter, and interdict illicit trafficking in nuclear and other radioactive materials. Currently DOE is engaged with more than 20 countries to discuss their participation in the Megaports Initiative, including, among others, the Bahamas (Freeport), Belgium (Antwerp), Greece (Piraeus), and Sri Lanka (Colombo). Mustin noted that the DOE coordinates its activities in close cooperation with the Department of Homeland Security’s CSI, which focuses on identifying high-risk containers, and U.S. customs.[3]

Finally, in their brief presentations as well as during the subsequent question-and-answer session, the speakers also mentioned NSPD 41/HSPD 13, which was signed by President George W. Bush on December 21, 2004 and which outlines U.S. Maritime Security Policy. (See in this issue “Presidential Directive Outlining the U.S. Maritime Security Policy.”)

Sources: [1] G. A. Wiltshire, "Security Zones; Oahu, Maui, Hawaii, and Kauai, HI," Rules and Regulations, Federal Register, Vol. 68, No. 80, April 25, 2003, p. 20347, <<http://www.cms.hhs.gov/providerupdate/regs/cms1809f3.pdf>>. [2] "Second Line of Defense Program," NA-25: Office of International Material Protection and Cooperation, National Nuclear Security Administration, U.S. Department of Energy, <<http://www.nnsa.doe.gov/na-20/sld.shtml>>. [3] For more information on CSI, see: "U.S. Container Security Initiative Operational at 32 Ports," *NIS Export Control Observer*, No.22, November 2004, pp. 9-10, <<http://cns.miis.edu/nis-excon>>.

Correction Note

In the article "United States Provides Patrol Boats, Vehicles, and Equipment to Uzbekistan and Kyrgyzstan," which appeared in the February 2005 issue of the *NIS Export Control Observer*, the U.S. Department of State's Aviation/Interdiction Project (A/IP) is incorrectly described as "part of the U.S. Department of State-funded Export Control and Related Border Security Assistance (EXBS) program."

According to the Director of Security and Military Programs at the U.S. Department of State's Office of the Coordinator of U.S. Assistance to Europe and Eurasia, David A. Martin, who oversees the implementation of the A/IP project, this project is complementary to the EXBS program. Furthermore, the A/IP project has separate funding. The A/IP budget was appropriated for fiscal year 2002 through the Supplemental Appropriations Act/Response to Terrorist Attacks on the United States (Public Law 107-206).

The A/IP is a border security assistance project that is aimed at enhancing air patrol and aviation/border interdiction capabilities of the Ministries of Defense and border guard agencies in Kyrgyzstan and Uzbekistan in order to prevent weapons proliferation and complement counterterrorism assistance. The A/IP is administered jointly by the Department of State's Office of the Coordinator of U.S. Assistance to Europe and Eurasia and the Department of Homeland Security's Customs and Border Protection Agency, while its implementation is carried out in cooperation with the EXBS program and the U.S. Department of Defense.

In 2002, the A/IP allocated \$3.3 million to refurbish two Mi-8 helicopters used by the Ministry of Defense of Kyrgyzstan for aerial monitoring of the border to deter, detect, prevent, and interdict illegal incursions onto the territory of Kyrgyzstan. In January 2005 the A/IP provided Uzbekistan with two Gyrza riverine patrol boats (for more information, see: "United States Provides Patrol Boats, Vehicles, and Equipment to Uzbekistan and Kyrgyzstan," *NIS Export Control Observer*, February 2005, No. 24, pp. 4-5, <http://cns.miis.edu/nis-excon>). As of mid-March 2005, the A/IP funds have nearly been exhausted with no additional funds planned for the future.

Source: CNS e-mail communications with David A. Martin, Director of Security and Military Programs, Office of the Coordinator of U.S. Assistance to Europe and Eurasia, U.S. Department of State, March 24-29, 2005.

Special Report

Export Control of Dual-Use Biological Equipment and Goods in the Republic of Moldova

By Sergiu Spataru, Center for Nonproliferation of the Republic of Moldova

This article provides an overview of exports, imports, transit, and in-country transfers of equipment and material related to biological weapons in Moldova. The author is presently the executive director of the Center for Nonproliferation of the Republic of Moldova. Prior to this, Sergiu Spataru was in charge of export controls at the Ministry of the Economy of Moldova.

I. Export Control Legislation for Dual-use Biological Goods and Equipment

The legal documents regulating the export, re-export, import, and transit of strategic goods, including those that may be used for the production of biological weapons,[1] include the following acts:

1. *Law On Control of Export, Re-Export, Import and Transit of Strategic Goods* (No. 1163-XIV) of July 26, 2000, which entered into force on October 27, 2000, after publication in *Monitorul Oficial* (No. 137-138/970 of October 27, 2000).

This law establishes a strict procedure for the control of strategic goods transported through the territory of Moldova, including dual-use goods that may be used in BW production. In particular, the law specifies the principles of export control enforcement, lists the categories of controlled strategic goods,[2] identifies the respective competencies of the national parliament and government in exercising export control, and defines the national export control system.

2. Government Decision *On the National System for Control of Export, Re-Export, Import and Transit of Strategic Goods* (No. 606 of May 15, 2002, published in *Monitorul Oficial* No. 69-70 of May 30, 2002) introduced a number of documents supporting the *Law on Control of Export, Re-Export, Import and Transit of Strategic Goods*. Three of these documents form the basis for licensing of dual-use goods and equipment that can be used to produce BW. These are:

- *Regulation of the Interagency Committee for Control of Export, Re-Export, Import and Transit of Strategic Goods* (Appendix 1).[3] This Regulation defines the role and specific activities of the committee and its decisionmaking mechanism;
- *Regulation on the Procedures of Control of Export, Re-export, Import and Transit of Strategic Goods* (Appendix 2). This regulation introduces the rules and principles governing the process of applying for licenses to export or import strategic goods, including examination of applications, processing times, duties of the applicant, and the interaction between various ministries and departments in controlling movement of strategic goods.
- *Control List of Strategic Goods* (Appendix 3). The list names strategic goods, including dual-use goods and equipment, that can be used to produce BW.

A set of *additional* documents also regulates BW-related goods and equipment. These include:

- *Law On Biological Safety* (No. 755-XV of December 21, 2001, published in *Monitorul Oficial* No. 75/631 of June 13, 2001). This law regulates activities that involve production, testing, manufacture, use, or sale of genetically modified organisms and the use of modern biotechnologies. The law establishes a special regulation, licensing, and monitoring regime that aims to ensure safety of the above activities and prevent, eliminate, or limit the risk of the adverse effects that genetically modified organisms may have on human health, biodiversity, ecological balance, and the environment.
- *Law On Licensing of Specific Activities* (No. 451-XV of July 7, 2001, published in *Monitorul Oficial* No. 108-109/836 of September 6, 2001). This law regulates legal, organizational, and economic aspects of specific types of activities subject to licensing and ensures state control over compliance with all requirements and standards set for these types of activities.[4]

At present, draft amendments to the Criminal and Administrative Codes of Moldova are being reviewed and developed. These amendments will focus on the violation of existing procedures for licensing the export and import of strategic goods, including dual-use goods and equipment that can be used for BW production.

II. Respective Roles of Government Agencies Involved in the Export Control Process

Within the export control system of Moldova, the Interagency Committee for Control of Export, Re-export, Import and Transit of Strategic Goods, a permanent government committee for control over export of strategic goods, enforces Moldova's export control policy. The Interagency Committee comprises authorized representatives at the level of heads or deputy heads of the Department of Commerce; Ministries of Economy, Defense, Foreign Affairs, Internal Affairs, and Industry; the Information and Security Service; the Customs Department; and the Division for Special Problems under the prime minister's office. The Interagency Committee is headed by the general director of the Department of Commerce. *[Editor's Note: The Department of Commerce was created on April 22, 2004, as an independent agency dealing with trade issues. All the functions of the Ministry of the Economy related to the trade, including the licensing of dual-use and military goods, were transferred to this new organization.]*

The committee:

- reviews proposals for signing or accession to interstate or intergovernmental agreements (bilateral or multilateral) in the sphere of nonproliferation of WMD and other strategic goods;

- monitors compliance with interstate and intergovernmental commitments in the sphere of nonproliferation and control over movements of WMD and other strategic goods;
- reviews applications and issues licenses for export, re-export, import, and transit of strategic goods through the territory of the Republic of Moldova.

The committee, if necessary, may establish working groups composed of representatives of other ministries and agencies in order to review and prepare decisions on specific issues. In the case of dual-use goods and equipment for the production of BW, meetings of the committee are arranged with the participation of the Ministry of Health, Ministry of Agriculture and Processing Industry, or other specialized agencies of these ministries.

Licensing of export, re-export, import, and transit of strategic goods, including dual-use goods and equipment for the production of BW, is performed by the Division on Dual-Use Goods Trade Control, under the Department of Commerce.

In order to *obtain* a license for export, re-export, import, or transit of dual-use biological goods and equipment, the exporter/importer must submit to the division a license application form [5] with the following documents:

- a copy of the applicant's certificate of registration as an economic agent;
- a copy of the license allowing work in the sphere of genetics and microbiology;
- documents confirming the origin of goods;
- documents containing qualitative, quantitative, and technical descriptions of goods and, if applicable, the codes of such goods in accordance with the export control list;
- the contract (or its copy) signed with the foreign organization importing or exporting such goods or equipment;
- a copy of the permit issued to the foreign company by the relevant authorized national agency confirming that the agent is allowed to engage in export-import operations with strategic goods;
- the end-user certificate;
- the international import certificate.

When the application file is submitted, the division consults with other ministries and agencies involved in export control procedures in order to examine and verify the submitted documents.

During the interagency review process, the various ministries involved review the application file according to their respective responsibilities, as follows:

- The Ministry of Foreign Affairs
 - makes sure that the application does not violate the international nonproliferation commitments and the foreign policy of the Republic of Moldova; this includes full or partial embargoes against the countries listed in the resolutions of the UN Security Council and the recommendations of the UN General Assembly, as well as the decisions of the Organization for Security and Cooperation in Europe;
 - verifies, through the embassies of the Republic of Moldova in foreign countries and through foreign embassies accredited in the Republic of Moldova, the authenticity of end-user certificates and international import certificates submitted by applicants.
- The Information and Security Service
 - checks whether domestic and foreign economic agents have violated relevant legislation;
 - verifies, through special channels, the authenticity of documents submitted by the applicant;
 - investigates violations of relevant legislation;
 - apprehends, in cooperation with other specialized agencies, violators of the current legislation.
- The Ministry of Internal Affairs
 - applies sanctions to violators of the licensing procedures;
 - investigates violations of relevant legislation;

- apprehends, in cooperation with other specialized agencies, violators of the current legislation;
 - ensures secure shipping of hazardous cargo.
- The Ministry of Health
 - supervises imports of controlled biological substances;
 - analyzes dangerous biological substances.
- The Customs Department and Border Guard Department
 - verifies the authenticity of documents submitted by the applicant;
 - intercepts cargo and apprehends violators in the case of a known violation of the applicable export control legislation.

Under the Statute on Interagency Committee and the Statute on the Procedures of Control of Export, Re-export, Import, and Transit of Strategic Goods adopted by Government Decision No. 606 of May 15, 2002, the Department of Commerce and the Interagency Committee may request additional information from any government agency, whenever such information is required for deciding on the license application.

In the case of dual-use goods and equipment that may be used for the production of BW, the following specialized research centers presently functioning in the Republic of Moldova may be engaged:

- National Research and Practical Center for Preventive Medicine of the Ministry of Health of the Republic of Moldova;
- Central Methodological Center of the Ministry of Health for Training and Retraining of Medical Personnel;
- Republican Veterinary Diagnostic Center of the Ministry of Agriculture and Processing Industry;
- Republican Plant Protection Station at the Ministry of Agriculture and Processing Industry.

Whenever necessary, the Department of Commerce may also consult with the National Biological Safety Committee (established by Government Decision No. 603 of May 20, 2003) or the Supervisory Committee for Microbiology, Virology, and Immunology Laboratories (established by Order of the Ministry of Health No. 187 of July 4, 2000). Results of consultations with other ministries and agencies are submitted for review to the Interagency Committee, which will grant a transaction authorization at the suggestion of the division. If there is a disagreement within the committee regarding the nature of the transaction, the decision is made by simple majority vote.

Depending on the committee's decision, the division will grant or refuse export, re-export, import, or transit licenses for dual-use BW-related goods and equipment. The division will communicate its decision to the applicant within 30 calendar days after submission of the application.

If the information contained in the license application file requires a more detailed review, the division may extend the application review period for another 30 days; the applicant must be informed no later than five days after the end of the first 30-day period. Thus, the maximum length of the application review is 60 days.

License applications may be *rejected* for the following reasons:

- Issuing the license would impair national security, national interests, or the foreign policy of the Republic of Moldova or violate decisions of international organizations to which the Republic of Moldova is a member.
- The country of destination is under embargo.
- The country of destination fails to fulfill its obligations to the Republic of Moldova.
- An investigation shows that the documents accompanying the original application contained fraudulent information.
- Exported goods and equipment could be used for the production of BW, or there is a suspicion that the country of destination may be interested in developing and producing WMD.
- The economic agents involved in the transaction are questionable or have a history of violation of laws, or may be connected to terrorist groups.
- Some facts concerning the transaction in question have been concealed.

By the decision of the Interagency Committee, the division may also *cancel* a previously granted license if:

- the license for import, export, or transit has been lost;
- new facts have been disclosed, which at the time of the application review would have led to a rejection of the request;
- the applicant violated the current legislation on control of export, re-export, import, and transit of strategic goods.

III. List of Controlled Dual-use Materials and Equipment that May be Used for the Production of BW

The Control List of Strategic Goods adopted by Government Decision No. 606 of May 15, 2002, which matches the U.S./EU control list, includes the following categories of dual-use biological materials and equipment:

- Materials
 - Human and zoonotic pathogens, as well as toxins: viruses, rickettsiae, bacteria, toxins and sub-units of toxins (natural, enhanced, or modified), either in the form of “isolated live cultures” or as material, including living material, that has been deliberately inoculated or contaminated with such viruses, rickettsiae, bacteria, toxins and sub-unit of toxins;
 - Animal pathogens: viruses and mycoplasma mycoides (natural, enhanced, or modified), either in the form of “isolated live cultures” or as material, including living material, that has been deliberately inoculated or contaminated with such viruses and mycoplasma mycoides;
 - Plant pathogens: bacteria and fungi (natural, enhanced, and modified), either in the form of “isolated live cultures” or as material, including living material, that has been deliberately inoculated or contaminated with such bacteria/fungi.
- Equipment
 - Equipment capable of use in handling microbiological materials, including:
 - Complete biological containment facilities at P3 [BSL-3] or P4 [BSL-4] containment levels;
 - Fermenters capable of cultivating pathogenic bacteria, rickettsiae, or viruses or capable of toxin production, without the propagation of aerosols, and having a total capacity of 100 liters or more;
 - Centrifugal separators, capable of continuous separation without the propagation of aerosols, and having a flow rate exceeding 100 liters per hour, components of polished stainless steel or titanium, double or multiple sealing joints within the steam containment area, and capable of in-situ steam sterilization in a closed state;
 - Cross (tangential) flow filtration equipment, capable of continuous separation without the propagation of aerosols, equal to or greater than 5 square meters, and capable of in-situ sterilization;
 - Steam-sterilizable freeze-drying equipment with a condenser capacity exceeding 50 kg of ice in 24 hours and less than 1,000 kg of ice in 24 hours;
 - Equipment that incorporates or is contained in P3 [BSL-3] or P4 [BSL-4] containment housing;
 - Chambers designed for aerosol challenge testing with microorganisms or toxins and having a capacity of 1 cubic meter or greater.

Related technologies are also subject to export control.

IV. Outreach Activities

1. Cooperation with the Customs and Border Guard Services

Cooperation and coordination with the customs and border guard services is one of the central elements of export control. These agencies are regularly involved in various export control activities by the Department of Commerce. Their representatives participate in international conferences, seminars, roundtable discussions, and other events on export control. The Department of Commerce also provides regular consulting to inspectors of these agencies on border issues. Plans for the future include individual meetings

with representatives of all 28 border-crossing points of the Republic of Moldova. In April 2005, the Department of Commerce and the Customs Department, with the support of the Center for Nonproliferation of the Republic of Moldova [see article describing the activities of the Center in this issue of the *NIS Export Control Observer*] plan to conduct the first workshop and introduce the Product Identification Tool that was developed with assistance from the U.S. government and customized in accordance with the Moldovan legislation. It will greatly facilitate the work of the Department of Commerce and border inspectors.

2. Cooperation with Industry

The Department of Commerce organizes regular roundtable discussions, seminars, conferences, and individual consultations for industry representatives and provides information on the obligations of economic agents, licensing procedures, and potential problems. The Republic of Moldova, unlike Ukraine or the Russian Federation, does not require enterprises to introduce internal compliance programs. However, the existence of such systems is considered to be a positive factor when reviewing applications for import and export licenses. In the near future, the Department of Commerce hopes to obtain support in developing the necessary software and introducing internal compliance programs at Moldovan companies.

V. Regulatory Framework for In-country Exchange of Dangerous Pathogens among Research Institutions of the Republic of Moldova and Safety Rules for Handling Dangerous Pathogens in Biological Research Institutions

The exchange of dangerous pathogens among research institutions within the Republic of Moldova is regulated by Order of the Ministry of Health of the Republic of Moldova “*On the Commission Supervising Work at Microbiology, Virology and Immunology Laboratories*” (No. 187 of July 4, 2000.) This order puts into force the following documents: the *Composition of the Commission* (Appendix No. 1) and the *Procedures of the Commission* (Appendix No. 2). The order entered into force on the date of its signature.

According to the order, the commission issues permits to obtain and work with samples of dangerous pathogens to laboratories at national medical institutions, the Central Research and Development Center for Preventive Medicine, research institutions, regional centers for preventive medicine, other specialized laboratories under various ministries and agencies, and accredited private laboratories.

In order to receive permits, laboratories must submit:

- an application form;
- an explanatory note describing the technological procedures and epidemic prevention measures to be used;
- a plan of the laboratory building with a list of required equipment and a description of the technological processes;
- a list of pathogens and planned research activities, including goals of such activities;
- a copy of the decision of the regional office of the commission.

When all documents are submitted, the commission reviews them and reaches a decision.

Biosafety rules regarding the handling of dangerous pathogens are described in two documents developed by the Russian Federation and the World Health Organization. These are:

- Federal Sanitary Rules of the Russian Federation (No. SP 1.2.036-95) *On the Procedures for Accounting, Storage, Transfer, and Transportation of Group I-IV Pathogenic Microorganisms*, issued by the State Committee for Sanitary Control of the Russian Federation, Moscow, 1996.[6] The document formulates safety and security and formulates the necessary environmental safeguards. The rules are compulsory for all individuals and legal entities, regardless of their subordination and forms of ownership.[7]
- *Laboratory Biosafety Manual*, Second Edition, World Health Organization, Geneva, 1994. This manual is of a practical nature and takes into consideration the occurrence and importance of pathogenic organisms, as well as technical features, equipment, resources, and the educational level and skills of personnel. The main sections of the manual include:
 - guidelines for the design of laboratories and their equipment and maintenance at various safety levels, including for work with laboratory animals;
 - information on the methods and procedures of microbiological research;

- descriptions of laboratory equipment and rules for its use;
- information on occupational safety and training, etc.

Editor's Note: The Republic of Moldova ratified the BWC on November 2004 (law No 360 - XV of November 5, 2004). The national agencies responsible for the implementation of the BWC are the Ministry of Defense and the Department of Commerce.[8]

Sources: [1] According to the current legislation, "strategic goods" include dual-use goods and equipment that can be used to produce biological weapons. [2] One of the categories of strategic goods subject to control are "various pathogens, their genetically modified forms, parts of genetic materials, as well as technologies and related services, which may be used for the production and use of bacteriological (biological) and toxic weapons" (Article 5, clause 1.f.). [3] The composition of this committee, headed by the general director of the Department of Commerce was determined by Government Decree No. 1039 of October 3, 2001. [4] Under this law, all activities in the area of genetics and microbiology are also subject to licensing. [5] Sample authorization applications for import/export of strategic goods, including dual-use biological goods and equipment, were approved by Order of the Minister of Economy No. 40 of August 6, 2002 (*Monitorul Oficial* No. 122-123 of August 29, 2002). [6] Adapted for the Republic of Moldova. [7] In accordance with the Law of the Republic of Moldova No. 1513-XII of June 16, 1993, *On Sanitary and Epidemiological Services to the Population*. [8] CNS communication with Sergiu Spataru, April 3, 2005.

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