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Recent Developments

Ukrainian Parliamentary Commission Exposes Past Illegal Arms Sales

On December 16, 2005, during testimony before the Verkhovna Rada (Ukraine's parliament) Serhiy Sinchenko, the head of the parliamentary commission investigating cases of illegal arms and munitions sales to other countries, declared that between 1992 and 1997, US\$32 billion worth of military equipment and munitions that Ukraine inherited from the Soviet Union was stolen and illegally sold abroad. According to Sinchenko, the main reason for such uncontrolled criminal activity was the absence at the time of relevant export control legislation regulating arms transfers.[1,2,3]

According to the commission's report, after the collapse of the Soviet Union, Ukraine inherited the "most powerful military force in Europe"—four combined-arms armies and one tank army, four air fleets, one army corps and three air defense corps, the 43rd Missile Army, heavy long-range bomber aviation capabilities and other units. The military arsenal consisted of about 9,000 tanks, 11,000 armored vehicles, 18,000 artillery systems, and up to 3,900 warplanes and helicopters. Sinchenko pointed out that foreign military experts estimated the value of the Soviet military legacy to be US\$89 billion.[2,3]

The results of the commission's investigation revealed that illegal arms sales peaked in 1996. At this time, 114 companies were engaging in weapons transfers, but only 20 percent of the transactions were carried out by entities officially authorized by the Ukrainian government. According to the commission's findings, high-ranking Ukrainian government officials and members of parliament were involved in this unlawful business. The report claims that a large part of the illegally exported arms went to Croatia and Bosnia. According to Sinchenko, Volodymyr Gorbulin, former secretary of the National Security and Defense Council of Ukraine, was the only person who was fully aware of the extent of the illegal arms trade.[1,2,3]

Other conclusions of the commission are equally troubling. According to the commission's report, after the collapse of the Soviet Union, Ukraine inherited 176 intercontinental ballistic missiles with strategic nuclear warheads, and, separately, 2,883 units of tactical nuclear warheads that were subsequently transferred from Ukraine to Russia. The commission found that there is a discrepancy in Ukrainian and Russian inventories of the transferred nuclear weapons: according to Russian records, Russia received 250 warheads less than Ukraine reportedly transferred. The discrepancy remains unexplained thus far.[1,2,3] On December 16, 2005, after hearing the results of the investigation, the Verkhovna Rada issued special decree No. 3231-IV that prolonged the commission's mandate until March 2006. It also recommended that the government undertake an inventory of the fuel assemblies that Ukraine received from Russia in exchange for transferred strategic nuclear warheads, the quantity and cost of electricity produced from them, and related revenues transferred to the state. Ukrainian parliamentarians also decided to forward the materials presented by the Sinchenko Commission to the Ukrainian General Prosecutor's Office for further investigation.[4,5]

Sources: [1] "Ukraine Reveals \$32Bln Weapons Embezzlement," MosNews, December 19, 2005, <http://www.mosnews.com>. [2] "Komissiya VR zayavlyaet, chto za 5 let s Ukrainy vyvezli oruzhiya na 32 mlrd. doll." (The Verkhovna Rada commission announces that over 5 years \$32 billion worth of weapons were removed from Ukraine), proUA.com, December 16, 2005, <http://www.proua.com>. [3] Marina Soroka, "Za 5 let iz Ukrainy nezakonno bylo vyvezeno vooruzheniya na 32 milliarda dolarov" (Over 5 years \$32 billion worth of arms were illegally removed from Ukraine), Podrobnosti.ua, December 16, 2005, <http://www.podrobnosti.ua>. [4] "VR peredayet v Genprokuraturu materialy o nezakonnoy torgovle oruzhiyem" (The Verkhovna Rada submits materials about illegal arms trade to the General Prosecutor's Office), LigaBiznesInform, December 16, 2005, <http://www.liga.net>. [5] "Pro poperednyu informatsiyu Tymchasovoyi slidchoyi komisiyi Verkhovnoyi Rady Ukrayiny po perevirtsi faktiv nezakonnoyi torhivli zbroyeyu i viyskovym maynom ta yikh nezakonnoyi peredachi v inshi krayiny" (On preliminary information of the Temporary Parliamentary Commission of Verkhovna Rada investigating the cases of illegal arms and munitions sales and their illegal transfer to other countries), Verkhovna Rada Decree No. 3231-IV of December 16, 2005, Verkhovna Rada website, <http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi>.

Ukraine's Export Control Service Issues 2004 Arms Sales Report

On January 16, 2006, Ukraine's State Service on Export Control (SSEC) issued a report on the country's officially sanctioned arms exports in 2004. The report describes the types and quantities of weapons exported, the destinations of the exports, as well as the number of military and dual-use export and import licenses issued to Ukrainian companies.

According to the report, Ukrainian weapons were exported over a wide geographic area, ranging from the United States to Equatorial Guinea. In terms of the categories of exported weaponry, the shipments ranged from small arms, such as pistols, to missile launch systems. The bulk of the exported items consisted of small arms and light weapons. For example, in 2004, Ukraine exported 14,390 units of small arms (rifles and carbines) to the United States; 9,792 automatic weapons and submachine guns to Iraq; and 500 grenade launchers along with 4,724 automatic weapons and 204 light machine guns to Georgia. Another major importer, the United Kingdom, imported 1,100 units of small arms, 1,690 automatic weapons and 151 light machine guns from Ukraine, while the Czech Republic imported 765, 50, and 66 units of these weapons, respectively. Other notable weapons sales mentioned in the report include: 16 R-73 and 22 R-27 air-to-air missiles to Algeria; 114 R-27 missiles to India; three T-72 tanks to

Azerbaijan; 13 BTR-80 and 28 BMP-2 armored personnel carriers to Georgia; 64 BMP-2s to Yemen; 19 BMP-2s to Uganda; and one RS-18 intercontinental ballistic missile to Russia.

As reported, in 2004 the SSEC issued 1,028 export licenses for military goods and 966 export licenses for dual-use items. In addition, the export control agency issued 221 and 34 transit licenses for military and dual-use goods, respectively. The SSEC is currently preparing a new report on arms exports in 2005.

The 2004 report in its entirety is available in Ukrainian on the SSEC website at http://www.dsecu.gov.ua.[1,2]

Editor's Note: The SSEC report on Ukraine's arms exports in 2004 described legitimate, government-authorized transactions—carried out prior to the installation of the reform government of Viktor Yushchenko in January 2005and does not provide information on any illegal weapons Yushchenko administration has opened The sales. investigations into illicit exports from Ukraine made during the tenure of former president Leonid Kuchma, some of which have found extensive illegal export activity. In early 2005, after the "Orange Revolution," Ukraine was shocked by revelations of illicit transfers of Kh-55 nuclear capable, airlaunched cruise missiles to China and Iran in 2000-2001. The year 2006 also started with a scandal related to past illegal arms sales. (See "Ukrainian Parliamentary Commission Exposes Past Illegal Arms Sales" on page 2 in this issue of the International Export Control Observer.) It is possible that these investigations will uncover additional information concerning Ukrainian exports during 2004. The International Export Control Observer will publish additional information on this subject as it becomes available.

Sources: [1] L.V. Checheyuk, "Informatsiya pro obsyahy mizhnarodnykh peredach ozbroyen, zdiysnenykh Ukrainoyu u 2004 rotsi" (Information on international arms transfers conducted by Ukraine in 2004), Ukraine's State Service on Export Control website, January 16, 2006, http://www.dsecu.gov.ua. [2] "Vpervyye obnarodovan otchet ob eksporte

urainskogo vooruzheniya" (A report of Ukraine's arms exports has been made public for the first time), Rupor.info, January 19, 2006, http://www.rupor.info>.

Uzbekistan Joins EURASEC

On January 25, 2006, at a summit meeting of the Interstate Council of the Eurasian Economic Community (EURASEC) held in St. Petersburg, Russia, the presidents of Uzbekistan and EURASEC member states signed a protocol on Uzbekistan's accession to the regional organization. Uzbekistan applied for EURASEC membership in October 2005.[1]

This development effectively finalized the merger of EURASEC and the Central Asian Cooperation Organization (a group of four countries—Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan—that has been in existence under different

names since 1994). It also de facto ended Uzbekistan's membership in GUUAM (an alliance between Georgia, Ukraine, Uzbekistan, Azerbaijan and Moldova, established in November 1997). Both chambers of the Oliy Majlis (Uzbekistan's parliament)—the Legislative Chamber and Senate—ratified the EURASEC accession protocol, on February 9 and 25, respectively. On March 7, Uzbek president Islam Karimov signed the document into law.[2,3]

Uzbekistan's membership generated changes in voting arrangements within EURASEC. Earlier Russia had 40 percent of the voting rights, Kazakhstan and Belarus had 20 percent each, while Tajikistan and Kyrgyzstan had 10 percent each. Under the new distribution of votes, Russia retains 40 percent of the vote, Kazakhstan, Belarus and Uzbekistan will each have 15 percent, while Kyrgyzstan and Tajikistan will share the remaining 15 percent.[4]

It is expected to take about a year for Uzbekistan to be fully integrated in EURASEC; the country must sign and ratify earlier agreements signed by EURASEC member states and adjust its national legislation. According to the Uzbek Ministry of Foreign Affairs, Uzbekistan "is willing to meet the agreed schedule without any transitional periods" and will join 65 EURASEC treaties by the end of 2006.[5] In terms of export controls, as a new EURASEC member, Uzbekistan will sign and ratify the Agreement on a Common Order of Export Control by EURASEC Member States. In accordance with the agreement signed on October 28, 2003, in Moscow, EURASEC members will establish common standardized export control norms, rules, and regulations covering raw materials, goods, equipment, technology, and services that can be used in the production of WMD and other types of military equipment and weapons, and WMD delivery means.

Uzbekistan's departure from the Western-oriented GUUAM and accession to the Russia-dominated EURASEC is a logical continuation of political developments in 2005. The suppression by Uzbek authorities of the May 2005 antigovernment upheaval in Andijan and subsequent Western demands for an international investigation led to a sharp change in Uzbekistan's foreign-policy orientation. The Uzbek leadership requested the departure of U.S. forces from the Khanabad air base drawing itself closer to Russia and China and the organizations where these states play a leading role, such as the Shanghai Cooperation Organization and EURASEC. While membership in EURASEC gives Uzbekistan a number of advantages, such as removing barriers to trade and economic cooperation, investment, and migrant labor, Russia also seeks to capitalize on this U-turn in Uzbek foreign policy by enhancing security cooperation with Uzbekistan, as well as promoting Russian business interests there. It is not clear, however, whether Tashkent will consider returning to the CIS Collective Security Treaty Organization.

Editor's Note: The agreement on the establishment of EURASEC was signed in Astana, Kazakhstan, on October 10, 2000. The successor to the CIS Customs Union, EURASEC seeks to create a customs union among its member states. At present, EURASEC member states include Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. Armenia, Moldova, and Ukraine are observers within the organization.

Sources: [1] "Uzbekistan prinyat v Evraziyskoye ekonomicheskoye soobshchestvo" (Uzbekistan accepted to the Eurasian Economic Community), RIA Novosti, January 25, 2006, http://www.rian.ru. [2] "Parlament Uzbekistana odobril vkhozhdeniye respubliki v EvrAzES" (Uzbekistan's parliament approved the republic's accession to EURASEC), Rosbalt news agency, February 12, 2006, http://www.rosbalt.ru. [3] Law of the Republic of Uzbekistan, "O ratifikatsii Protokola o prisoyedinenii Respubliki Uzbekistan k Dogovoru ob uchrezhdenii Yevraziyskogo ekonomicheskogo soobshchestva ot 10 oktyabrya 2000 goda (Sankt-Peterburg, 25 yanvarya 2006 goda)" (On the ratification of the Protocol on the accession of the Republic of Uzbekistan to the Treaty establishing the Eurasian Economic Community of October 10, 2000 (St-Petersburg, January 25, 2006)), President of Uzbekistan Press Service website, March 8, 2006, http://www.press-

service.uz/ru/gsection.scm?groupId=4347&contentId=17836>. [4] Vladimir Kuzmin, "Tashkent prinyali" (Tashkent has been accepted), *Rosstyskaya* gazeta online edition, January 26, 2006, http://www.rg.ru. [5] Abu-Ali Niyazmatov, "Uzbekistan to Join Several Eurasec Treaties," RIA Novosti, February 6, 2006, http://www.rg.ru.

Russia Ratifies Russian-Tajik Border Cooperation Agreement

On February 22 and March 3, 2006, respectively, the two chambers of the Russian Federal Assembly—the State Duma and the Federation Council—ratified the Agreement between the Russian Federation and the Republic of Tajikistan on Border Cooperation.[1,2] The agreement, signed on October 16, 2004, during Russian president Vladimir Putin's visit to Tajikistan, provides a legal basis for cooperation between Tajik and Russian border guard services.

The agreement creates the Federal Security Service (FSB) Operational Border Guard Group that will work with and advise Tajik border control authorities. [Editor's Note: On March 11, 2003, the Federal Border Guard Service of the Russian Federation was transformed into the Border Guard Service of the Russian Federation and subordinated to the FSB.] Although Russian ratification of the agreement was delayed until 2006, the creation of the operational group, staffed with Russian border guard officers and advisors, started immediately following the withdrawal of Russian border guard troops from Tajikistan in June 2005.

The group is tasked with rendering assistance to Tajik border guards in securing the country's border, including the promotion and implementation of bilateral Russian-Tajik agreements on border issues, improving coordination and exchanging information between the border guard agencies of the two countries, maintaining relations with border guard agencies of non-CIS countries, developing suggestions on Tajikistan's border control issues and relevant legislation, training local border guard personnel, organizing joint border operations, and assisting with logistics and maintenance of military equipment. Russia will also continue training Tajik border guard officers at Russian military institutions.[3]

Under the terms of the agreement, the Tajik side provides free accommodation to Russian border guard personnel and their families, and grants them unhindered travel rights to and from Tajikistan. Russian border guards cannot be arrested and put on trial in Tajikistan without the consent of Russian authorities. The FSB Operational Border Guard Group is exempt from taxes, customs duties and other local charges while engaging in activities covered by the agreement, but Russian border guards cannot engage in entrepreneurial activities. In addition, Tajikistan pledges to provide free office space and communication services to the group.[4,5] The Russian-Tajik border cooperation agreement is to have a duration of five years. It will automatically be extended for another five-year term unless either side notifies the other of its intention to terminate the agreement. The Tajik parliament ratified the agreement in January 2005.[6]

Sources: [1] "Gosduma RF ratifitsirovala soglasheniye s Tadzhikistanom o sotrudnichestve po pogranichnym voprosam" (The State Duma of the Russian Federation ratified a cooperation agreement with Tajikistan on border issues), Interfax, February 22, 2006, < http://www.interfax.ru>. [2] "Sovet Federatsii ratifitsiroval soglasheniye o sotrudnichestve Rossii i Tadzhikistana v okhrane granitsy s Afganistanom" (The Federation Council ratified a Russian-Tajik agreement on cooperation in guarding the border with Afghanistan), Radio Voice of Russia, March 3, 2006, <http://www.vor.ru>. [3] "Soglasheniye mezhdu Rossiyskoy Federatsiyey i Respublikoy Tadzhikistan o sotdrudnichestve po pogranichnym voprosam (Dushanbe, 16 oktyabrya 2004 g.)" (Agreement between the Russian Federation and the Republic of Tajikistan on cooperation on border issues (Dushanbe, October 16, 2004)), Government of the Russian Federation website, <http://npagov.garweb.ru:8080/public/default.asp?no=1056664>. [4] "Ratifitsirovano soglasheniye o pogransotrudnichestve s Tadzhikistanom" (An agreement on border cooperation with Tajikistan has been ratified), Rosbalt news agency, February 22, 2006, <http://www.rosbalt.ru>. [5] "Gosduma ratifitsirovala rossiysko-tadzhikkoye soglasheniye po prigranichnomu sotrudnichestu" (The State Duma ratified a Russian-Tajik agreement on border cooperation), REGNUM news agency, February 22, 2006, <http://www.regnum.ru>. [6] Galina Gridneva, Valeriy Zhukov, "Parlament Tadzhikistana ratifitsiroval ryad mezhpravitelstvennykh rossiysko-tadzhikskikh dokumentov" (Tajikistan's parliament ratified a number of intergovernmental Russian-Tajik agreements), ITAR-TASS, January 19, 2005; in Integrum Techno, <http://www.integrum.com>.

Changes in Personnel

New Heads of Kazakhstani and Uzbek Customs Appointed

On February 1, 2006, Askar Shakirov was appointed new chairman of the Kazakhstani Customs Control Committee (CCC) under the Ministry of Finance. Shakirov, who previously served as Deputy Minister of Foreign Affairs, replaced Berdibek Saparbayev, who was appointed deputy head of the Prime Minister's Office. Askar Shakirov was born in 1956. He graduated from M. Lomonosov Moscow State University's Asia and Africa Institute and completed post-

graduate studies at the Soviet Interior Ministry's Academy. Fluent in English and Chinese, Shakirov started his career at the Kazakhstani Ministry of Foreign Affairs in 1992, and has a diplomatic rank of Envoy Extraordinary and Minister Plenipotentiary. During his career, he served as chargé d'affaires to the Republic of Korea, ambassador at large, Vice Minister of Foreign Affairs, and ambassador to India.[1,2,3]

In an earlier development, on January 11, 2006, President of Uzbekistan Islam Karimov appointed Sodirkhon Nasyrov chairman of the country's State Customs Committee (SCC). Previously Nasyrov served as SCC deputy chairman. Former SCC chairman Bakhodir Matlyubov was appointed Minister of Internal Affairs.[4]

Sources: [1] "Premyer-Ministr RK predstavil novogo predsedatelya Komiteta tamozhennogo kontrolya Minfina" (The Kazakhstani Prime Minister presented a new chairman of the Customs Control Committee under the Ministry of Finance), Kazinform news agency, February 1, 2006, <http://www.inform.kz>. [2] "Glava pravitelstva RK predstavil novogo predsedatelya Komiteta tamozhennogo kontrolya Minfina" (Head of the Kazakhstani government presented a new chairman of the Customs Control. Committee under the Ministry of Finance), Kazakhstan today news agency, February 1, 2006, <http://www.gazeta.kz>. [3] "Eks-glava KTK Minfina Saparbayev naznachen zamestitelem rukovoditelya kantselyarii premyerministra RK" (Ex-chief of the CCC under the Ministry of Finance was appointed deputy head of the Kazakhstani Prime Minister's office), Kazakhstan today news agency, February 1, 2006, < http://www.gazeta.kz>. [4] Edict of the President of the Republic of Uzbekistan, "Ob utverzhdenii Nasyrova S.Kh. predsedatelem Gosudarstvennogo tamozhennogo komiteta Respubliki Uzbekistan" (On the appointment of S.Kh. Nasyrov chairman of the State Customs Committee of the Republic of Uzbekistan), President of Uzbekistan Press Service website, January 11, 2006, <http://www.pressservice.uz/ru/gsection.scm?groupId=4347&contentId=16657>.

Illicit Trafficking

Germany Cracks Down on Suspected Procurement Networks

In January and February 2006, German authorities made a series of arrests in a crackdown against a suspected Iranian procurement network operating in Germany.

On January 23, 2006, in Karlsruhe, a city in Germany's southwestern Baden Württemberg federal state near the French-German border, prosecutors filed charges against two men identified as Volker St., 46, and Peter Paul K., 65. According to the criminal charges, the two men are accused of selling a vibration test system for a reported 200,000 Euros (US\$230,000) to an unidentified foreign military intelligence service. An unnamed source within the German government indicated that the intended destination for this equipment was Iran. German media also reported that the technology was intended to be used for the development of Iran's Shahab medium-range ballistic missiles (MRBM), which have the potential to carry nuclear warheads to Israel and various U.S. military bases in the region.[1,2] [*Editor's Note: Vibration test systems are used for simulating the flight vibrations and* shocks that rockets and unmanned aerial vehicles experience during launch, stage operations, and normal flight. Missiles and subsystems are tested to determine their elastic modes, frequencies, and sensitivities to vibrations and shocks. This information is used to improve missile design and to qualify systems and components as flight-worthy. According to the Missile Technology Control Regime, (MTCR), vibration test systems are controlled as Category II technologies within the regime. Category II technology is subject to case by case review to determine whether a transfer is allowable under the provisions of the MTCR, and such exports generally need government-to-government assurances that the technology will not be used for weapons of mass destruction programs. Category I technologies are subject to even more stringent controls. Iran's Shahab-3 MRBM is a category I missile with a range of 1,300 to 1,500 kilometers and the capability of carrying a 1,000 to 760 kilogram warhead respectively.]

On February 23, 2006, in another series of raids at twelve locations across Germany, German police arrested an unspecified number of individuals. In one of those raids, German authorities arrested Joseph Edward G., 59, a German citizen, and Yousef P., 41, a foreign citizen from an unspecified country. According to the German Federal Prosecutor's Office, the two men attempted to procure control components for projectiles, equipment for the production of the European Ariane IV space launch rocket, and military radio and night-vision equipment, as well as other items. These items and related components are subject to export controls in accordance with the MTCR. The men were brought before a district court in Karlsruhe on February 24, where it was determined they would be held, pending formal indictment, on suspicion of acting as agents for a foreign intelligence service.[3]

According to German officials, Yousef P. was acting as a foreign intelligence agent, while Joseph Edward G. appeared to be his most significant contact in Germany. Joseph Edward G. is suspected of working as the middleman for a procurement network. The Federal Prosecutor's Office said that both men are suspected of purchasing weapons and missile technology on behalf of Iranian intelligence services for shipment to Iran. German customs officials were able to stop one shipment before it left a German port; however other shipments may have been successfully exported.[3]

The other individuals arrested in the February 23 series of raids are accused of attempting to obtain parts for delivery systems and conventional weaponry for a foreign intelligence agency. According to a police spokesperson, the raids took place in Baden Württemberg, Hesse, North Rhine-Westphalia, and Saarland. Two other men were also arrested in Frankfurt. Although German police would not specify the foreign country that was involved in the procurement network, media reports quoted an unnamed government source that singled out Iran.[4] The German raids and arrests have taken place on the heels of the revelation on January 4, 2006, of a report by a leading EU intelligence service warning European states that countries such as Iran, Syria, and North Korea were operating vast international networks that include traders, phony companies, state institutions, and diplomatic missions aimed at procuring equipment and technology for conventional military, WMD and missile programs. According to the British newspaper, The Guardian, which first reported on the document, the intelligence report went on to warn that Western European engineering firms, biotech laboratories, scientific think-tanks and university campuses were being successfully infiltrated by middlemen, front companies, and scholars with hidden agendas for the Iranian, Syrian and Pakistani regimes. The report cites the A.Q. Khan network as evidence of the success that can be attained through procurement networks on the black market in Europe.[5] Many of Khan's collaborators have since been arrested in Europe, including in the Netherlands, Germany and Switzerland. [Editor's Note: For more on criminal cases tied to the A.Q. Khan network, see "Disclosures of Illicit Supply Networks Expose Weaknesses in European Export Control System," International Export Control Observer, December 2005/January 2006, pp. 14-18, <http://cns.miis.edu/pubs/observer/index.htm>.]

Editor's Note: Export controls in Germany are under the supervision of the Federal Office of Economy and Export Control (BAFA). One of BAFA's main tasks is to determine whether items for export require an export license and whether that license should be granted. Any item for export that is on the European or domestic list of controlled items requires an export license. Germany is a member of all international suppliers regimes, including the MTCR, the Australia Group, the Nuclear Suppliers Group, and the Wassenaar Arrangement. German export controls are in line with the common regulations and policies of the EU.[6]

Sources: [1] Louis Charbonneau, "Germans, Russian Aid Iran Arms Programme-Officials," Reuters, February 8, 2006, http://www.alertnet.org. [2] Associated Press, "German Spy Charges 'On Iran Arms'," CNN, February 3, 2006, http://www.alertnet.org>. [3] Louis Charbonneau, "Germany Holds 2 Men Suspected of Buying Arms For Iran," Reuters, February 25, 2006, http://www.alertnet.org>. [4] "German Police Crack Alleged Missile Spy Ring," Deutsche Welle, February 24, 2006, http://www.alertnet.org>. [5] Ian Traynor and Ian Cobain, "Weapons Proliferation: Intelligence Report Claims Nuclear Market Thriving; European Firms Warned They Are Main Target of Illicit Trade in Weapons Parts," *The Guardian*, January 4, 2006; in Lexis-Nexis Academic Universe, http://www.lexis-nexis.com>. [6] "Task -Export Control," Federal Office of Economy and Export Control (BAFA) website, http://www.bafa.de/1/en/tasks/01 control.htm>.

Controversy Over Exports to Iran Shakes Up Belgian State Security Service

In its December 2005/January 2006 combined issue, the *International Export Control Observer* highlighted some of the weaknesses of the export control systems of a number of European countries, in light of revelations concerning the procurement of nuclear-related materials from European companies by the A.Q. Khan network. The following article

provides an additional example of serious flaws in the Belgian export control system. While the export in question did not appear to have violated any Belgian laws, the controversy has highlighted a serious breakdown within the Belgian export control system—particularly the lack of effective communication of relevant intelligence information by the State Security Service—that could assist entities attempting to illicitly acquire items for proliferation purposes.

On January 30, 2006, the head of Belgium's State Security Service, Koenraad Dassen, resigned amidst allegations that his agency did not appropriately inform relevant government officials about a 2004 shipment of a hot isostatic press by a Belgian company to an entity in Iran. His resignation, which came one day before a Belgian parliamentary committee released a scathing report on the Belgian State Security Service's activities in this matter, was officially attributed to Dassen's acceptance of a position within the Belgian Interior Ministry; however, the Belgian media and analysts following the nine-month parliamentary investigation pointed to the parliament's frustration over Dassen's apparent unwillingness to cooperate with their inquiry as the major factor influencing Dassen's career change.[1]

The isostatic press controversy began with a series of articles published in April and May 2005 in the leading Belgian newspapers *Le Soir* and *Gazet van Antwerpen*. These articles reported that a hot isostatic press had been exported by the Belgian firm Engineering Pressure Systems International NV (EPSI) to Iran Aircraft Industries in Tehran in November 2004.[2,3] According to the articles—and later corroborated by the January 31, 2006, parliamentary committee report—representatives of the U.S. Central Intelligence Agency (CIA) informed the Belgian State Security Service as early as July 2004 that an Iranian company was attempting to acquire hot isostatic presses from EPSI.[3]

Editor's Note: Hot isostatic presses (HIPs) allow for the simultaneous application of heat and pressure to an object. HIPs can consolidate "powders, diffusion bonding of similar and dissimilar materials, and healing defects in castings."[4] Isostatic presses are commonly used in aircraft production. However, certain presses can be used for manufacturing components for missile engines and nuclear weapons. According to the customs forms submitted by EPSI, the Iranian end-user intended to use the equipment shipped for high-pressure treatment of aircraft engine turbine blades, but as noted below, the U.S. government believed they were actually intended for use in Iran's missile program.

Dassen's agency did not act immediately to investigate the U.S. government's warnings nor did it properly inform other agencies—including the Belgian Customs Administration— about the impending sale. It was this lack of communication and overall inefficiency of the State Security Service, the parliamentary report argues, that led the isostatic press to be

cleared for shipment to Iran without the necessary scrutiny by export control officials.[3] Additionally, according to the chair of the parliamentary committee investigating the affair, Senate Speaker Anne-Marie Lizin, Dassen was not entirely truthful with the committee about his agency's activities regarding the sale. A number of politicians and commentators noted that based on the findings of the committee, Dassen's position as the head of State Security was "untenable."[5]

In line with Nuclear Suppliers Group (NSG) and Missile Technology Control Regime (MTCR) guidelines, as well as common EU export control policy, Belgian control lists explicitly include hot isostatic presses with chamber cavity diameter above 152 mm. The equipment shipped by EPSI was below that threshold and therefore not explicitly covered by the Belgian control lists. However, the catch-all clause of Belgian export controls stipulates that if any equipment is suspected of being able to assist the WMD or missile programs in the recipient country, then a license for the shipment is required.[2]

Editor's Note: Catch-all provisions require a license for the export of any item to an entity when the domestic exporter or export control agency has reason to suspect that the item could assist in a WMD or missile program, even if the item is not on published control lists. As noted above, HIPs can be used to support both missile and nuclear programs; Iran is known to possess MTCR Category I missiles (capable of carrying a 500-kilogram payload to a distance of 300 kilometers or more) and is suspected of pursuing nuclear weapons. The MTCR annex (under item 6: 6.B.3) states the following with regard to isostatic presses. "Isostatic presses having all of the following characteristics: a.) Maximum working pressure equal to or greater than 69 MPa; b.) Designed to achieve and maintain a controlled thermal environment of 600oC or greater; and c.) Possessing a chamber cavity with an inside diameter of 254 mm or greater." This would suggest that the Belgian control list specifies a diameter substantially less than the MTCR annex, which also includes two other parameters (working pressure and controlled thermal environment) that must be considered to merit case-by-case review. Of course, the catch-all provision would still capture the item no matter what the MTCR or Belgium export controls specifies.

Warnings from U.S. Intelligence Community

According to the parliamentary report, on July 15, 2004, the U.S. Embassy in Brussels sent a classified memo from the CIA to the Belgian State Security Service. The memo was intended to alert Belgian authorities that an Iranian company was attempting to purchase a hot isostatic press from EPSI. U.S. authorities urged the Belgian government "to use this information to investigate this activity and disrupt Iran's ability to procure sensitive equipment for its missile program from Belgium." The CIA pressed Belgian authorities to investigate and to prevent the transaction by all legal means

including the use of Belgian catch-all provisions.[2,3] In reaction to a briefing about the CIA's memo, Dassen commented that Belgian authorities needed to take the warning seriously but cautioned that this could also be an attempt by the United States to inflict "economic damage" on Belgian interests.[2]

Although Dassen called for an investigation into the warning at the time, the State Security Service did little to look into the allegations and did not immediately inform other agencies, including the Belgian Customs Administration. The EPSI deal was first discussed at an interagency level in September 2004—two months after the initial warning was received from U.S. officials. In a September 6, 2004 meeting of the Belgian government's special advisory organ on nonproliferation issues (de Commissie van Advies voor de Niet-Verspreiding van Kernwapens or CANVEK in Dutch; la Commission d'avis pour la Non-Prolifération des Armes Nucléaires or CANPAN in French), representatives from the State Security Service made some references to the CIA warning and shared some of the information about the possible transaction with other members of the group. However, due to the classified nature of the discussions, this information was not recorded in the minutes of the meeting and no representatives from the Belgian Customs Administration were present for these discussions.[2,3]

According to customs administration officials, they were first made aware of this possible export via an email from CANVEK/CANPAN three weeks later, on September 28, 2004, but neither the name of the company nor the intended destination of the exports was mentioned. On the same day, CANVEK/CANPAN held another interagency meeting, where discussions continued with regards to the EPSI transfer. At that meeting, an expert from the State Security Service warned that there was an "unacceptable" risk that the equipment in question could be used in a nuclear or missile program. Once again, no one from the Belgian Customs Administration attended this meeting and the information discussed at this meeting was not passed to relevant customs officials for further investigation.[2]

On October 28, 2004, a customs attaché from the U.S. embassy in Brussels informed Belgian customs officials about the earlier CIA warning regarding EPSI's intended sale of the isostatic press. The attaché noted further that EPSI would be sending the press by truck that very day to Iran. This was the first time that a customs official was given the name of the Belgian company and the intended destination. The five customs offices at locations from which EPSI usually shipped cargo were immediately warned to be on the look out for the shipment. However, the press did not arrive at any of these offices. Instead, on November 3, 2004, the press was transported for customs processing to the customs office in Eynatten, which had not been informed about the impending shipment. According to customs documents presented by the

shippers, regional authorities in Flanders (Vlaanderen) had stated that the item being exported was not dual-use and that no export license was required.[2,3] [Editor's Note: Due to political division between the French-speaking Walloons of the south and the Dutch-speaking Flemish to the north, the Belgian government has granted these two groups-along a minority German-speaking group—significant with autonomy. The Belgian state, therefore, has three levels of government—federal, regional, and linguistic community with various, and each sometimes overlapping, *responsibilities and authority.*]

Investigation of any wrong doing by EPSI was the responsibility of Belgian Customs Administration, which found that the company had acted completely within the law and had not tried to skirt Belgian export controls in this deal. However, the parliamentary inquiry raised questions about the methods the company used to ship the product. In particular, the commission's report noted that EPSI sent the press to a customs office that it usually does not work with-insinuating that the company selected an office that was unfamiliar with the dual-use nature of the company's products.[2] In response to this question, EPSI management pointed out that since the press in question weighs upwards of three metric tons, the company needed to hire an outside transport company to deliver the equipment overland to Iran, and that the choice of customs office was decided by the transport company and not by EPSI.[6] According to EPSI Director Pierre Colman, in the two trips that he had undertaken to Iran to set-up the equipment—most recently in December 2005—he had seen no evidence of its possible diversion to military uses.[7] Colman has declared since the beginning of the controversy that the press sent to Iran was not dual-use and could not be used for Iran's nuclear or missile programs. However, after this initial sale, Belgian authorities denied new requests by EPSI to export a number of larger presses to Iran.[8]

Parliament Questions State Security Service's Handling of EPSI Case

In late April 2005, in reaction to initial press revelations about the export, parliamentarian Muriel Gerkens requested information from Minister of Justice Laurette Onkelinx about this affair. Minister Onkelinx's response—based on direct information from the State Security Service—stated that the State Security Service had no prior knowledge of the hot isostatic press export.[2,3]

By early May 2005, the parliament's standing committee had begun a full investigation on the handling of the case by the State Security Service. On May 12, 2005, in reaction to stonewalling by the State Security Service, which was unwilling to supply relevant documents, the committee—for the first time in its history—invoked exceptional rules in order to force the Service to hand over internal and classified documents to investigators. Within a week of this action, Dassen repeated the claim that his agency had no direct knowledge about the transfer of the press, but admitted that the equipment in question could be used in the development of a nuclear weapon. On May 30, Dassen argued in a letter to the committee that his agency could not cooperate with the investigation since he could not pass on confidential information that was originally from a foreign source (i.e. the CIA). However, the parliamentary investigators stated that this argument was unfounded, as the U.S. government had chosen to pass this information on to the Belgian government—both in the initial instance in July 2004 and in the communication with the Belgian Customs Administration in September 2004.[2]

Belgian customs officials, who were not criticized by the January 2006 parliamentary report, have argued that they would have been able to investigate the deal further if they had received proper notification. In testimony to the parliament's Finance Committee on February 7, 2006, Belgian Finance Minister Didier Reynders argued that the Customs Administration—which falls under his ministry—may have made some mistakes but their actions did not warrant a full-scale investigation.[9]

As the parliament's investigation began to uncover serious flaws and capacity problems within the State Security Service, a debate started within the standing committee as to whether it was appropriate to release the information to the public. However, as one committee member pointed out, public disclosure of the report was imperative since the facts detailed even in the unclassified version of the document "call into question the heart of our institutions."[10]

Editor's Note: EPSI is a small company based out of Temse in the Belgium's East Flanders (Oost-Vlaanderen) Province. The company specializes in high-pressure engineering and the development of equipment for manufacturing, testing, research, and specialized high-pressure applications.[11]

Sources: [1] "Belgian Intelligence Service Watchdog Body Releases Iran Export Report," Le Soir (Brussels), February 1, 2006; in FBIS Document EUP20060201024003 . [2] "Gedeclassificeerd Verslag Van Het Onderzoek Naar De Wijze Waarop De Firma EPSI Eventueel Door De Inlichtingendiensten Werd Gevolgd In Het Kader Van De Strijd Tegen De Proliferatie" (Declassified Report on the Investigation of the Manner in which the Intelligence Services Investigated the Firm EPSI for Reasons relating to Nonproliferation Efforts), January 31, 2006, Belgian Senate website, <http://www.senate.be/foto/20060131-comite-I-R/rapport-nl.pdf>; also available in French < http://www.senate.be/foto/20060131-comite-I-R/rapportfr.pdf>. [3] "Een gebrek aan efficientie"; Chronologie ontslag Koen Dassen leest als politieke thriller" ('A lack of efficiency'; Chronology of Koen Dassen resignation reads like political thriller), Het Nieuwsblad, February 1, 2006; in Lexis-Nexis Academic Universe, http://www.lexis-nexis.com>. [4] Frank V. Pabian, "South Africa's Nuclear Weapon Program: Lessons for U.S. Nonproliferation Policy," Nonproliferation Review, Fall 1995, pp. 12-13, <http://cns.miis.edu/pubs/npr/pdfs/ pabian31.pdf>. [5] "Belgian Security Chief Resigns over Suspect Iran Export" AFP, January 31, 2006; in FBIS Document EUP20060131101001. [6] "Centraal in de storm: EPSI" (At the center of the storm: EPSI), Het Nieuwsblad, February 1, 2006; in Lexis-Nexis Academic Universe, http://www.lexis-nexis.com>. [7] "De pers van Epsi is ongeschikt voor nucleair gebruik, verzekert bedrijfsleider Pierre Colman' (EPSI-made press unsuitable for nuclear use, assures company manager Pierre Colman), De Standaard, February 1, 2006; in Lexis-Nexis Academic

Universe, <http://www.lexis-nexis.com>. [8] "Belgian Firm Denies Allegations It Exported Dual-Use Isostatic Presses to Iran," *Le Soir* (Brussels), April 29, 2005; in FBIS Document EUP20050429024002. [9] Christophe Schoune, "Customs 'Inadequately' Informed Belgian Minister Answers Questions on Customs' Role in Iran Export," February 8, 2006; in FBIS Document EUP20060208024002. [10] Jean-Pierre Borloo and Christophe Schoune, "Koen Dassen Falls over Irangate—Major Malfunction at the Heart of State Security," *Le Soir* (Brussels), February 1, 2006; in FBIS Document EUP20060201024003. [11] Engineered Pressure Systems Inc. (EPSI) website, <http://www.epsi-highpressure.com/en/main.html>.

Turkey Blocks Heavy Aluminum Shipment to Iran

In December 2005, Turkish authorities seized two trucks transporting 3,233 kilograms of Italian-made heavy aluminum alloy destined for Iran.[1] The trucks were blocked at the Turkish side of the Gurbulak border crossing between the two countries. Halil Ebrahim Akpinar, Governor of Turkey's Agri Province, said that the material was manufactured in the northern Italian region of Lombardy (Lombardia) and loaded onto trucks in Milan. [*Editor's Note: One media report identified the manufacturer of the alloy as a Milan-based company named Fond.*] Although the interception took place in December 2005, Turkish authorities did not make information about the incident public until February 2006. The seizure was the result of a joint operation between Turkey's National Intelligence Organization (MIT) and the U.S. Central Intelligence Agency (CIA).[1,2]

Heavy aluminum, which is controlled in Turkey as a dual-use item, can be used to manufacture gas centrifuges for enriching uranium, potentially to the concentrations needed for nuclear weapons. Turkish State Minister Kursad Tuzmen stated that the Istanbul-based Iranian-owned company Step SA, which owns the trucks failed to request a transshipment authorization for the materials from the Turkish Atomic Energy Authority (TAEI).[2,3]

Turkish authorities arrested the two Iranian drivers of the trucks, Mohammad Javad Jaafari and Mahin Falsafi. Step SA's director, Milad Ja'fari, said that the firm "merely acted as middlemen in the transaction." The TAEI has said it believed the cargo was bound for Iran's nuclear sites.[2] Sources: [1] "Nuclear: Turkey Seizes Iran-Bound Italian Aluminum," Adnkronos International (Rome), February 15, 2006, http://www.adnki.com. [2] "CIA-MIT Said Seize Italian Containers Destined for Iranian Nuclear Project," *Milliyet* (Istanbul), February 10, 2006; in OSC Document GMP20060210017006. [3] "Turkish Minister Confirms Interception of Truck Carrying Dual-Use Goods to Iran," *Ankara Anatolia* (Ankara), February 10, 2006; in OSC Document GMP20060210617012.

Japanese Export Controls under Scrutiny as Revelations of Illicit Transfers Continue

A number of Japanese companies have recently come under scrutiny for illicit exports of strategic items that have potential use in the development of weapons of mass destruction and their delivery systems. In its February issue, the *International Export Control Observer* reported on the illegal export of unmanned helicopters by Yamaha Motor Co. Ltd, and precision measurement machines by Mitutoyo Corporation. This article provides additional details about the Mitutoyo case and reports on a suspected illegal export of biologicalweapon relevant technology by the Seishin Trading Company.

Mitutoyo Corporation Illegally Exported Controlled Measuring Equipment

Following a number of raids on February 13, 2006, Japanese authorities revealed that in 2001 and 2002, Mitutovo Corporation may have illegally shipped high-precision measuring instruments that can be used in the manufacture of uranium enrichment centrifuges. Such centrifuges can be used to enrich uranium to the levels needed for nuclear weapons.[1,2,3,4] According to Japanese police authorities, Mitutovo Corporation, which manufactures a wide range of precision measuring tools, violated Japan's Foreign Exchange and Foreign Trade Control Law when it failed to obtain permission from the Ministry of Economy, Trade and Industry (METI) before exporting two three-dimensional measuring devices (and related software), one to a Mitutoyo affiliate in China, and a second to an affiliate in Thailand.[1,2,3,4] [Editor's Note: Precision measurement machines are dual-use equipment that can be used in a variety of civilian industrial applications in which machining of high precision equipment is needed. These machines are also essential for quality control in the manufacturing of uranium enrichment *centrifuges, which must be machined to very fine tolerances.*]

On February 14, 2006, Chinese Foreign Ministry spokesman Liu Jianchao stated at a news conference that the Chinese government had no connection to the illegal trade and that Beijing is firmly committed to the Treaty on the Nonproliferation of Nuclear Weapons (NPT).[5,6] Thai Foreign Minister Kantathi Suphamonkhon declared that "if there is any involvement with Thai nationals, the Thai government is ready to fully coordinate and cooperate with the Japanese government."[7]

Mitutoyo was the subject of a previous investigation after similar high-precision measuring instruments it had produced were discovered in Libya by International Atomic Energy Agency (IAEA) inspectors.[8,9] Libya admitted that it had been pursuing a clandestine uranium enrichment program. Between December 2003 and January 2004, inspectors found three Mitutoyo instruments in Libya's nuclear research facilities. According to authorities in Malaysia (where certain components for Libya's centrifuge program were manufactured), Mitutoyo's equipment and associated instructional videotapes are believed to have been transferred sometime between December 2001 and December 2002. The equipment was sent from Mitutovo's Malavsian subsidiary to Scomi Precision Engineering (SCOPE) in Malaysia, and then to SMB Computers in Dubai, and finally to Libya.[1,8,9,10] Mitutovo reportedly shipped a total of six instruments to SCOPE—which was later revealed to be part of the A.Q.

Khan nuclear smuggling network—but the final destinations of the remaining three units are unknown.[9] [Editor's Note: For more information on SCOPE and A.Q. Khan's nuclear network, see "Politically Connected Malaysian Firm Linked to Nuclear Smuggling Network," Asian Export Control Observer, April 2004, pp. 9-10, <http://cns.miis.edu/pubs/observer/asian/index.htm>, as well as "Disclosures of Illicit Supply Networks Expose Weaknesses in European Export Control Systems," International Export Control Observer, December 2005/January 2006, pp. 14-18, <http://cns.miis.edu/pubs/observer/index.htm>.]

Seishin Trading Company and Unnamed Firm Export Potential BW Equipment

On February 17, 2006, Japanese police raided and searched the offices of Seishin Trading Company and another unnamed trading firm-a total of about ten locations in Tokyo, including the residences of affiliated company officials-on suspicion that they had illegally exported equipment to North Korea that could be used to produce biological weapons.[11,12,13] The investigation has so far revealed that the trading firms may have exported a freeze dryer to North Korea via Taiwan in September 2002 without obtaining an export license from METI. The freeze dryer, designed to dry solid consumables such as coffee grains or instant noodles in a vacuum, can also potentially be used to dry pathogens for use in biological weapons.[11,12,13] The potential export of the equipment raised particular concerns because, despite having acceded to the Biological and Toxin Weapons Convention on March 13, 1987, Pyongyang is believed to have had a biological weapons program since the early 1980s.[14,15] Sources: [1] "Illegal Export of Unmanned Helicopters to China Reveals Gaps in Export Control Awareness in Japan," International Export Control Observer, February 2006, pp. 4-5, http://cns.miis.edu/pubs/observer/ index.htm>. [2] "Police Raid Manufacturer over Exports that Can Be Used to Develop Nukes," Asahi Shimbun, February 13, 2006; in OSC Document JPP20060213969017. [3] "Japanese Police Raid Mitutoyo over Alleged Illegal Exports to PRC, Thailand," Kyodo News Service, February 13, 2006: in OSC Document JPP20060213969008. [4] "Police to Search Firm for Export of Nuclear-Related Device to PRC, Thailand," Jiji Press, February 11, 2006; in OSC Document JPP20060212023001. [5] "FM Spokesman: China Has No Connection with Japanese Firm's Nuclear-Related Export," Xinhua News Service, February 14, 2006; in Lexis-Nexis Academic Universe, http://www.lexis-nexis.com>. [6] "Sensitive Equipment Exports by Japanese Firm Not Linked to China," Xinhua News Service, February 14, 2006; in OSC Document CPP20060214045007. [7] "Thailand to Work with Japan, IAEA on Charges of Nuclear Technology Exports," Agence France-Presse, February 14, 2006; in OSC Document JPP20060214058011. [8] "Nuke Trail Traced to M'sia, Pakistan, Libya," The Daily Yomiuri, February 15, 2006; in Asia News Network, <http://www.asianewsnet.net>. [9] "Mitutoyo Suspected of Evading Rules on Nuke-Tied Exports," Asahi Shimbun, February 16, 2006; in Lexis-Nexis Academic Universe, <http://www.lexis-nexis.com>. [10] "Article Highlights Link Between Nuclear Black Market, Japanese Corporations,' Sankei Shimbun, February 14, 2006; in OSC Document JPP20060215034001. [11] "Trader Allegedly Sold Biological Arms-Linked Device to N. Korea," Kyodo News Service, February 17, 2006; in OSC Document JPP20060217969028. [12] "Japan Firms Raided for Selling Dryer with Weapon Potential to N. Korea," Agence France Press, February 17, 2006; in Lexis-Nexis Academic Universe, <http://www.lexis-nexis.com/> [13] "Japanese Police Raid Trading Firms Suspected of Weapons-Related

Weapons Overview," *North Korea Profile*, Nuclear Threat Initiative webpage, <http://www.nti.org/e_research/profiles/NK/Biological/index.html>. [15] According to the CIA, North Korea has pursued BW capabilities since as early as the 1960s. For more information, see *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions–Attachment A*, 1 July through 31 December 2003, DCI Weapons Intelligence, Nonproliferation, and Arms Control Center (WINPAC), pp. 5-6, <http://www.cia.gov/cia/reports/721_reports/pdfs/721report_july_dec2003.pdf>.

Taiwan National Charged with Plotting Illegal Export of Engines, Missiles to China

On February 9, 2006, Ko-Suen "Bill" Moo (also spelled Mu), a Taiwanese national, was charged in the U.S. Federal District Court of Miami, Florida, with being a covert agent for the People's Republic of China (PRC) and attempting to export military parts and weaponry to the PRC in November 2005. French national Maurice Serge Voros was also indicted along with Moo for attempting to export military-related items to China. Moo has been in U.S. custody since November 2005 and faces up to 50 years in prison if convicted. Voros who remains at large, faces up to 35 years in prison if caught and convicted.[1,2]

According to the federal indictments, the defendants are accused of violating the U.S. Arms Export Control Act by attempting to export sensitive items to China without a license. The nine-count indictment also charged Moo with bribery, obstruction of justice, and money-laundering. He reportedly offered a US\$500,000 bribe for his release from police custody.[3]

According to federal prosecutors, in early 2004, Moo and Voros attempted to purchase 70 Blackhawk helicopter engines, one F-16 jet engine, cruise missiles, and air-to-air missiles for export to China. The Blackhawk helicopter engines were not ultimately acquired because Moo later indicated that purchasing an F-16 jet engine was a higher priority. In August 2005, Moo met with undercover agents from the U.S. Immigration and Customs Enforcement (ICE), in order—he thought—to arrange the acquisition of the jet engine. At the meeting, Moo also showed the ICE agent documents pointing to Chinese government interest in purchasing AGM-129 land-attack cruise missiles and AIM-120 air-to-air missiles. The AGM-129 is capable of carrying nuclear warheads to a range of 3,700km and incorporates stealth technology. [Editor's Note: For technical details on the AGM-129 cruise missile, see *"AGM-129 ACM"* at <http://en.wikipedia.org/wiki/AGM-129_ACM>.] After the meeting, Moo deposited US\$3.9 million into a Swiss bank account to pay for the weapons.[1]

In a final meeting over the deal, Moo disclosed to the undercover ICE agent that the F-16 engine's final destination would be an airport in China. Moo then wired US\$140,000 for shipping fees to a Miami bank account. On November 8, 2005,

Exports to N. Korea," Voice of America News, February 17, 2006; in Lexis-

Nexis Academic Universe, http://www.lexis-nexis.com/. [14] "Biological

Moo allegedly inspected the engine he thought he was purchasing, and he was arrested shortly thereafter.[1]

Moo, a Taiwanese citizen born in South Korea, worked as a local agent for Lockheed Martin in Taiwan. Lockheed Martin is the largest supplier of military-related equipment to Taiwan. (While the F-16 fighter jet is a Lockheed Martin product, Pratt & Whitney and General Electric produce its engine.) According to Taiwanese reports, Moo relied on his extensive connections—particularly in the Taiwanese Air Force—to become a key member of Lockheed Martin's business unit. He represented Lockheed Martin in projects such as the "Posheng" C4ISR system and Taiwan's "An-yu" project, which replaced anti-air combat control radars, and in the construction of regional combat control centers.[4] [Editor's Note: C4ISR stands for "command, control, communication, computer, information, surveillance and reconnaissance."]

During the 10 years that Moo worked with Lockheed Martin in Taiwan, he gained an impressive reputation within the arms industry. Industry insiders saw Moo as a member of the Air Force's "Gang of Four," which also included three highranking Taiwanese generals who dictated many weapons procurement decisions for Taiwan's Air Force. Moo's arrest has come as a shock in Taiwan and those familiar with him are at a loss to explain the motives behind his actions.[4,5]

Taiwan's Ministry of National Defense said that it is uncertain if there is any relationship between the military equipment Taiwanese authorities purchased from the United States and the engines that Moo intended to smuggle to China, but stated that it intends to investigate the situation further. Taiwanese authorities also intend to look into Moo's past activities in order to determine if he had previously smuggled sensitive items.[4,5] [Editor's Note: While U.S. authorities have not indicated how long Moo is suspected of having worked with the PRC government, the Taiwanese government has reason to be concerned about the charges. If Moo was secretly working for Beijing when he was a leading figure in Taiwanese Air Force circles, classified Taiwanese military secrets could have been compromised.]

The Chinese government has denied allegations that it has covert agents in the United States attempting to purchase military equipment on its behalf. In a news conference, China's Foreign Ministry spokesperson Liu Jianchao stated that "this kind of accusation that China is collecting scientific and military intelligence is groundless. China's military imports go through strict surveillance. Chinese enterprises will never purchase any military goods that cannot provide legal documents."[6,7,8]

Sources: [1] Curt Anderson, "2 Charged in Alleged Plot to Ship Engines, Missiles to China," *The Ledger*, February 9, 2006,

<http://www.theledger.com>. [2] "Měi Gúo Zhī Kōng Yī Tái Wān Rén Hé Yī Fă Gũo Rén Xiàng Zhōng Gúo Fēi Fă Chū Shòu Jūn Hǔo" (America charges a Taiwanese and Frenchman with the illegal sale of weapons to China,) Radio Free Asia News, February 10. 2006, <http://www.rfa.org>. [3] Michael Christie and Paul Eckert, "U.S. Charges Taiwanese over China Jet, Missile Deal," Reuters, February 9, 2006, http://go.reuters.com/. [4] "Lockheed Martin Taiwan Agent Bill Mu Indicted in US for Smuggling Arms to China," *Lien-Ho Pao*, January 18, 2006; in FBIS Document CPP20060125310001. [5] "Arrested Arms Dealer Connected with Taiwan Air Force," *Lien-Ho Pao*, January 18, 2006; in FBIS Document CPP20060125310002. [6] "China Rejects Charges on Covert Agents in U.S.," *China View*, February 15, 2006, http://www.chinaview.cn. [7] "China Says U.S. Accusation of Illicit Weapon Imports 'Groundless'," AFX News Limited, http://www.afxnews.com. [8] "Zâi Bīan1 Wú Jī Zhī Tán Měi Gúo Yòu Wū Mie Zhōng Gúo Pài Jiàn Die Mài Wǔ Qi Tú" (Talking without Proof: America Falsely Accuses China of Dispatching Spies to Buy Arms), Xinhua News, February 22, 2006, http://www.xinhuanet.com.

Incidents with Radioactive Materials in Russia

The past several months have seen a number of instances in which Russian authorities have seized radioactive materials at customs checkpoints and other locations.

According to Russian media reports, two incidents involving radioactive materials took place in Vladivostok, Primorskiy Kray, Russia's Far East, in early 2006. In the first case, on January 31, 2006, an alarm went off when a truck was passing through the Yantar radiation detection system installed at the Vladivostok port checkpoint. The inspection of the vehicle revealed a marine navigation sextant manufactured in 1967. Radiation on the surface of the device was more than 30 times higher than the permissible level. According to Ivan Skogorev, director general of Primtekhnopolis, a local company responsible for radiation safety, some components of the sextant contained radium-226. The radioactive item was seized for subsequent disposal in accordance with the existing regulations.[1]

In the second case, on February 20, 2006, another truck with radioactive cargo was detained at the Vladivostok port. Radiation from the truck carrying a minivan smashed in a car accident was up to 500 microroentgens per hour. A spectral analysis conducted by Primtekhnopolis specialists called to the site showed the presence of a radium-based source. Port officials placed the truck in a special guarded storage area for the subsequent extraction and disposal of the radioactive source. According to press reports, local authorities launched an investigation to find the owner of the cargo.[2,3] [Editor's Note: Radium is a naturally-occurring radioactive metal. It has 25 different isotopes, four of which are found in nature, with radium-226 being the most common. Radium is a radionuclide formed by the decay of uranium and thorium in the environment. Ra-226 is a decay product of uranium-238, and is the longest-lived isotope of radium with a half-life of 1,602 years. Long-term exposure to radium increases the risk of developing several diseases. Inhaled or ingested radium increases the risk of developing such diseases as lymphoma, bone cancer, and diseases that affect the formation of blood, such as leukemia and aplastic anemia. External exposure to radium's gamma radiation increases the risk of cancer to varying degrees in all tissues and organs. According to the IAEA, a radium source containing 10 or more curies (370 or

more GBq) could pose safety and security concerns. In other words, a radiological dispersal device, one type of which is known as a "dirty bomb," would have to contain 10 or more curies of radium-226 to have the potential to cause significant harm. Based on the reported information about the radioactive source, it is uncertain how much radioactivity was contained in the source.][4,5]

According to Russia's Federal Customs Service, in early February 2006, the Yantar-2Zh radiation detection system at the Dolbino railway checkpoint in Belgorod Oblast, Russia, signaled the presence of radiation in a coach car of the Moscow-Sevastopol passenger train passing through the checkpoint. Customs officers stopped the train and examined the car identified by the Yantar system using portable dosimeters. While examining the carry-on luggage of a Ukrainian national, they found a carton with two radioisotope ice detector sensors commonly used in airplanes and helicopters. Radiation on the surface of the box was more than 280 higher than the natural level. The sensors registered a radioactivity warning sign. The Belgorod Oblast Center for Hygiene and Epidemiology concluded that these sensors were closed radionuclide sources that require special permission for handling and a license for export from the Russian Federation.

Since the Ukrainian national failed to declare the items and lacked necessary documents, the Russian authorities launched a criminal case under Article 188, Part 2 of the Russian Criminal Code, "Smuggling."[6] This criminal charge carries the punishment of imprisonment for a period from three to seven years, with a possible fine in the amount of up to one million rubles (US\$35,000) or the amount of the defendant's salary or any other income for a period of up to five years.[7]

In a separate development, in mid-December 2005, the Prosecutor's Office of the Chechen Republic opened a criminal case under Article 247, Part 1 of the Russian Criminal Code, "Violation of Rules of Handling Environmentally Dangerous Substances and Wastes," against officials of the oil company Chechenneftekhimprom Federal State Unitary Enterprise following the inspection of the Groznyy Chemical Combine. а subsidiary of Chechenneftekhimprom. According to a news release by the Russian Federation's Prosecutor's Office, the inspection requested by the local Radon Special Combine discovered about 27 to 29 unsecured cobalt-60-based radioactive sources in one of the combine's workshops that emitted radiation exceeding the permissible level by 58,000 times. The Chechen Prosecutor's Office accused the enterprise and combine management in taking no action to secure and dispose of the sources.[8] [Editor's Note: Radon is a network of Russian state enterprises responsible for the disposal of radioactive waste.] As reported by Russian media, as of early February 2006, the situation with radioactive sources at the Groznyy Chemical Combine remains unchanged.[9]

Sources: [1] "Radioaktivnvv morskov sekstant obnaruzhen v rvbnom portu Vladivostoka" (Radioactive sea sextant discovered in fish port of Vladivostok), Vostok Media news agency, January 31, 2006, <http://www.vostokmedia.com>. [2] "Radiatsionnaya avariya likvidiruyetsya vo Vladivistoke" (A radiation accident is being liquidated in Vladivostok), PrimaMedia news agency, February 21, 2006, <http://www.primamedia.ru> [3] "Radioaktivnyy gruzovik zaderzhan vo Vladivostoke" (A radioactive truck detained in Vladivostok), TVTs television channel, February 21, 2006, <http://www.tvc.ru>. [4] "Radium," Wikipedia, the free online encyclopedia, <http://en.wikipedia.org/wiki/Radium>. [5] "Radium," U.S. Environmental Protection Agency, <http://www.epa.gov/radiation/radionuclides/ radium.htm>. [6] "Radioaktivnyy gruz ostanovlen na granitse" (Radioactive cargo stopped at the border), Press Release, Russia's Federal Customs Service website, February 7, 2006, <http://www.customs.ru>. [7] The Criminal Code of the Russian Federation, Article 188, "Smuggling," Chelovek i zakon (Human Being and Law) website, <http://zakon.kuban.ru/uk96/st/188.shtml>. [8] "Prokuraturoy Chechenskoy Respubliki vozbuzhdeno ugolovnoye delo po faktu neprinyatiya neobkhodimykh mer po soblyudeniuy pravil khraneniya radioaktivnykh veshchestv" (The Prosecutor's Office of the Chechen Republic initiated a criminal case in connection with the failure to take necessary measures to comply with storage rules for radioactive substances), News Release, Russian Federation's Prosecutor's Office website, December 15, 2005, <http://genproc.gov.ru/ru/news/news_current.shtml?2005/ 12//2825.html>. [9] Aleksandr Grigoryev, "Posledstviya radiatsionnoy opasnosti v Groznom ne ustraneny do sikh por, schitayut v prokurature Chechni" (Chechnya's Prosecutor's Office believes that consequences of the radiation danger in Groznyy have note been eliminated yet), Caucasian Knot website, February 8, 2006, <http://www.kavkaz.memo.ru>.

International Developments

Djibouti, Haiti, and Liberia Ratify the Chemical Weapons Convention

Djibouti, Haiti, and Liberia deposited their instruments of ratification of the Chemical Weapons Convention (CWC) with the Secretary-General of the United Nation on January 25, February 22, and February 23, 2006, respectively.[1,2,3] In accordance with CWC provisions, 30 days after depositing their instruments of ratification, the three countries will become states parties to the treaty. Djibouti became the 176th member of the Organization for the Prohibition of Chemical Weapons (OPCW). Haiti and Liberia will, likewise, become OPCW members at the end of March, bringing the organization's total membership to 178 states.[1,2,3]

With Djibouti and Liberia joining the CWC, there are now 46 African states parties to the convention, which is consistent with the signing of the Memorandum of Understanding (MOU) by the OPCW and the African Union Commission at the summit in Khartoum, Sudan, on January 24, 2006.[1,3] The MOU aims to bring the remaining seven African countries —Angola, Central African Republic, Comoros, Congo, Egypt, Guinea-Bissau, and Somalia—into the OPCW so that Africa can become a chemical-weapons-free zone. [Editor's Note: The Central African Republic, Comoros, Congo, and Guinea-Bissau have signed but have not ratified the CWC, whereas Angola, Egypt and Somalia have neither signed nor ratified the CWC.][1,2,3] Djibouti's accession to the CWC also increased to 16 the number of Arab League members that are now states parties to the CWC and OPCW members.[1] Similarly, by ratifying the CWC, Haiti joins the majority of Caribbean nations that are already states parties to the convention and OPCW members.[2] [Editor's Note: Of the 15 full member states of the Caribbean Community and Common Market (CARICOM), the Bahamas and the Dominican Republic have signed but have not ratified the CWC.] Haiti's accession to CWC is consistent with the resolution adopted by the General Assembly of the Organization of American States (OAS) in June 2004, which aims to establish the Americas as a biological- and chemical-weapons-free zone.[2]

Editor's Note: Founded in 1945 by Egypt, Iraq, Jordan, Lebanon, Saudi Arabia, Syria and Yemen, the League of Arab States or Arab League is an international intergovernmental organization headquartered in Cairo, Egypt. In accordance with the provisions contained in the Charter, the main goals of the Arab League are the following: to serve the common good of all Arab countries, to ensure better conditions for all Arab countries, to guarantee the future of all Arab countries and to fulfill the hopes and expectations of all Arab countries. The Charter also gives the Arab League the mandate to coordinate economic relations, communications, cultural affairs, public health issues and issues related to nationality, passports and visas. The Charter prohibits Arab League members to resort to force against each other. At present 22 countries are members of the Arab League, including the following: the Hashemite Kingdom of Jordan, United Arab Emirates, Kingdom of Bahrain, Republic of Tunisia, Democratic and Popular Republic of Algeria, Republic of Djibouti, Kingdom of Saudi Arabia, Republic of Sudan, Arab Republic of Syria, Republic of Somalia, Republic of Iraq, Sultanate of Oman, State of Palestine, State of Qatar, Federal Islamic Republic of Comoros, State of Kuwait, Republic of Lebanon, Socialist People's Libyan Arab Jamahiriya, Arab Republic of Egypt, Kingdom of Morocco, Islamic Republic of Mauritania, and Republic of Yemen. In 2003, Eritrea received the status of observer in the Arab League.

CARICOM was established by the Treaty of Chaguaramas (Trinidad and Tobago) and came into effect on August 1, 1973. The founding members of this organization were Barbados, Jamaica, Guyana and Trinidad and Tobago. At present CARICOM members are the following: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago. Associate members include British Virgin Islands, Turks and Caicos Islands, Anguilla, Cayman Islands, and Bermuda. Observer status is held by Aruba, Colombia, Dominican Republic, Mexico, Netherlands Antilles, Puerto Rico, and Venezuela. Sources: [1] "Djibouti Ratifies the Chemical Weapons Convention," OPCW Press Release, January 31, 2006, OPCW website, http://www.opcw.org/ pressreleases/2006/PR05_2006.html>. [2] "Haiti Ratifies the Chemical Weapons Convention," OPCW Press Release, February 24, 2006, OPCW website, http://www.opcw.org/ pressreleases, Zou6, OPCW website, http://www.opcw.org/pressreleases/2006/PR09_2006.html [3] "Liberia Ratifies the Chemical Weapons Convention," OPCW Press Release, March 1, 2006, OPCW website,

http://www.opcw.org/pressreleases/2006/PR11_2006.html>.

Workshops and Conferences

Kyrgyz-U.S. Export Control Workshop Held in Bishkek

by Bolot Kulmatov, Ministry of Foreign Affairs of the Kyrgyz Republic

On January 24-26, 2006, the Kyrgyz Ministry of Foreign Affairs and U.S. Department of Commerce organized a joint technical workshop, in Bishkek, Kyrgyzstan, on issues related to control lists of dual-use and military commodities. The event, organized as part of U.S. methodological assistance to Kyrgyzstan in the creation of the national export control system, brought together representatives of the Kyrgyz ministries and agencies involved in export controls including members of the Permanent Interagency Working Group on Export Control. [Editor's Note: The Permanent Interagency Working Group of Export Control Experts was established by Government Directive No. 121 of March 17, 2003 to develop the legal framework for the implementation of the law of the Kyrgyz Republic On Export Control adopted in January 2003.]

The workshop aimed to familiarize Kyrgyz export control officials with the European Union's (EU) system of export control and international nonproliferation and export control regimes. Experts from the United States, Romania, and Kazakhstan gave presentations on the application of dual-use control lists and multilateral export control measures covering sensitive items. Workshop participants examined the structure of the EU model control list for dual-use goods and learned how EU experts use control lists in commodity classification decisions. Kyrgyz officials made presentations on the status of Kyrgyzstan's export control system and the national control list, which is being developed based on the common control list of the Eurasian Economic Community member states and the guidelines of international export control regimes. At the conclusion of the workshop participants agreed that the continuation of U.S. assistance is essential to support Kyrgyz efforts to implement the country's export control system.

Japanese Authorities Host Nonproliferation Conference, Export Control Seminar

On February 13, 2006, the Japanese Ministry of Foreign Affairs (MOFA) hosted the third Asian Senior Level Talks on

Non-Proliferation (ASTOP) in Tokyo. Representatives from the ten ASEAN nations (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam), the United States, Australia, and South Korea joined host Japan to share their viewpoints on efforts to strengthen nonproliferation measures in Asia.[1]

ASTOP participants discussed recent developments in the stand-off over Iran's nuclear program and called for a peaceful resolution of the North Korea nuclear issue through the six party talks. Noting progress made since the ASTOP meetings in November 2003 and February 2005, seminar participants shared information about national efforts to implement their nonproliferation policies. Developments highlighted at the meeting included: South Korea's implementation of United Nations Security Council Resolution 1540; Thailand, Singapore, and Malaysia's signing of the IAEA's Additional Protocol; Singapore and the Philippines' participation in the Proliferation Security Initiative; and efforts by the Philippines to universalize the Hague Code of Conduct on missile proliferation.[1] [Editor's Note: For reporting on on the second ASTOP meeting, see "Senior Asia-Pacific Officials" Meet to Discuss Nonproliferation", Asia Export Control Observer. February/March 2005, *p*. 7, <http://cns.miis.edu/pubs/observer/asian/index.htm>.]

Additionally, from February 21-23, Japan's Center for Information on Security Trade Controls (CISTEC), in coordination with MOFA and the Ministry of Economy, Trade and Industry (METI) hosted the 13th Asian Export Control Seminar. Participants included representatives from the ten ASEAN countries, Australia, China, Dubai (representing the League of Arab States), Germany, Hong Kong, Japan, Mongolia, Pakistan, South Korea, Taiwan, the United Kingdom, and the United States.

This seminar provided a forum for participants to explain their domestic export control policies, highlight areas of concern and current challenges, and share best practices. The seminar consisted of six panels addressing the following themes: recent developments in WMD proliferation and export controls; the progress of export control policies in Asia; issues in strengthening export control systems; defining an effective export control system (including enforcement, licensing, intangible transfers and transshipment controls); outreach to industry; and international cooperation.[2]

During the first session on recent developments in proliferation and export controls, the Japanese delegation highlighted a number of challenges for export control systems in Asia, including increasing trade volumes, the tension between trade facilitation and trade security, and the diversity of export control systems in the region, which have led to exploitable loopholes. In the same session, the U.S. delegation stressed the ongoing regional problem of weak export control enforcement.[3]

In the second session, a number of delegations gave short presentations on developments in domestic export controls in the region. Pakistan's representative noted that Islamabad had recently improved its control lists and added a catch-all provision to its regulations. [Editor's Note: For more information on the recent changes to Pakistan's control lists, see "Pakistan Announces Expansion of WMD-related Export Control Lists," International Export Control Observer, February 2006, p. 2, <http://cns.miis.edu/pubs/observer/ index.htm>.] The delegation of the United Arab Emirates (UAE) noted that its government was working on a new licensing procedure for the control of dual-use items. The UAE representative also noted that their export control authorities currently employ a number of methods to balance the needs of trade and security-including use of online export processing, accreditation for "good customers," and maintaining a blacklist of suspect companies. The seminar's third session focused on strengthening domestic export controls, and included a discussion by South Korean officials about the country's current review of its export control legislation. [Editor's Note: For information on recent developments in South Korea's export controls, see "South Korea to Strengthen Law on Bio Agents," International Export Observer. February Control 2006. р. 2 <http://cns.miis.edu/pubs/observer/index.htm>.] This session also included small group discussions where different delegations pointed to a substantial need for training and capacity building in the region.[3]

The fourth session focused on issues surrounding enforcement, licensing, intangible transfers, and transshipment controls. A representative from Germany's Federal Ministry of Economy and Technology noted that efforts were underway to harmonize EU rules for the control of intangible technology transfers. Singapore's delegation discussed the importance of effective control on transshipments—noting that about 80 percent of Singapore's incoming cargo consisted of transshipments. The importance of industry outreach was the topic of the fifth session, which included presentations by Japanese officials and industry representatives outlining the Japanese experience with government-industry relations. The final session discussed the importance of international cooperation in the strengthening of export controls.[3] Sources: [1] "Daisankai ajia fukakusan kyougi (ASTOP-III): Gaiyou to heredet for the first for the function of the function

hyouka" (Third Asian nonproliferation seminar: outline and appraisal), Press Release, Japanese Ministry of Foreign Affairs, February 15, 2006, <http://www.mofa.go.jp/mofaj/gaiko/fukaku_j/astop3_0602gh.html>. [2] "Dai 13 kai ajia yushutsu kanri seminaa" (13th Asian export control seminar), Japanese Ministry of Foreign Affairs, March, 2006, <http://www.mofa.go.jp/ mofaj/gaiko/fukaku_j/asia_yu_13.html>. [3] CNS e-mail correspondence with U.S. government official (name withheld by request), March 8, 2006.

Meeting of the CIS Customs Heads Held in St. Petersburg

On January 19, 2006, the 42nd meeting of the Commonwealth of Independent States (CIS) Council of Customs Services Heads (CCSH) was held in St. Petersburg, Russia. The CCSH

is a multilateral forum of heads of CIS customs agencies created in December 1993 to harmonize customs legislations, mechanisms, and procedures of the CIS members. Member countries of the CIS are Azerbaijan, Armenia, Belarus, Kazakhstan. Kyrgyzstan, Moldova. Georgia, Russia. Tajikistan, Turkmenistan, Uzbekistan and Ukraine. The meeting discussed a wide range of issues including amendments to the Rules for Identification of Commodities' Country of Origin approved in 2000; activities of the World Customs Organization (WCO) Regional Communications Center on Law Enforcement for CIS Countries based in Moscow, also known as the Regional Intelligence Liaison Office (RILO-Moscow); the approval of the Russian-language version of the Harmonized Commodity Description and Coding System (4th Edition); training of customs personnel in CIS member states and other issues. The participants unanimously elected Alexander Zherikhov, head of the Russian Federal Customs Service (FCS), the CCSH chairman and approved the work plan for the year 2006.

The meeting was attended by WCO Secretary General Michelle Danet, who briefed the heads of CIS customs services on the principles of the *Framework of Standards to Secure and Facilitate Global Trade* adopted during the WCO June 2005 session in response to the growing concern over vulnerabilities of the global shipping system. The WCO Secretary General informed participants of the steps that national customs administrations of the WCO member states will have to take to introduce the standards, possible assistance measures that more developed countries can render to less developed countries in this process, as well as the WCO role in the implementation of the framework.

Leonid Lozbenko, deputy FCS head, reported on how the CIS customs agencies plan to implement the newly adopted WCO standards. According to Lozbenko, the assessment made by the FCS found that some of the elements of the *Framework of Standards* are already in existence or are being introduced in the customs practices of the CIS countries. These include the automation of customs information technologies, the electronic declaration system, the use of radiation detection devices in customs inspection equipment as well as cooperation and exchange of information on the security of supply chains. As pointed out by the CIS customs heads, to achieve the goals set by the WCO, CIS countries must modernize their respective customs agencies. This includes the

computerization of their systems and the introduction of compatible electronic databases to enhance their performances as well as cooperation and communication among customs agencies, and between customs agencies and businesses.[1] Source: [1] "The Council Meeting of Heads of the CIS customs services," Press Release, Russia's Federal Customs Service website, January 20, 2006, http://www.customs.ru/en/news/index.php?id695=9358>.

Second CWC Implementation Training Workshop for Iraqi Officials in Amman, Jordan

On February 6-9, 2006, experts from the Organization for the Prohibition of Chemical Weapons (OPCW) organized the Weapons second Chemical Convention (CWC) implementation training workshop for Iraqi officials from the National Monitoring Department of the Ministry of Science and Technology, as well as from the Ministries of Defense. Foreign Affairs, and Human Rights. The four-day workshop was hosted by the Jordanian government in Amman. [Editor's Note: The first OPCW workshop for Iraqi officials was held at the OPCW headquarters in The Hague, the Netherlands, on July 6-9, 2005. See: "Iraqi Officials Trained in CWC Implementation at OPCW Headquarters," International Export Control Observer, October 2005, 9. р. <http://www.cns.miis.edu/pubs/observer/index.htm>.]

As in the first workshop, the objective of the second workshop was to train Iraqi officials in the following activities: preparing obligatory declarations in accordance with the provisions of the CWC; operating the National Authority responsible for keeping Iraq in compliance with the CWC; enacting national implementing legislation; and implementing regulatory practices aimed at eliminating chemical weapons and preventing their spread. According to an OPCW press release, the third CWC implementation training workshop for Iraqi officials will be organized later this year.[1]

Editor's Note: Although Iraq has not yet joined the CWC, the Iraqi government formally declared its intention to do so and has repeatedly reiterated its commitment to international nonproliferation standards, including the prohibitions on the development, production and acquisition of nuclear, chemical, and biological weapons and their delivery systems.

Source: [1] "OPCW Conducts Second Chemical Weapons Convention Training for Iraqi Officials," OPCW Press Release, February 15, 2006, OPCW website, http://www.opcw.org/pressreleases/2006/PR06 2006.html>.

Special Report

Missile Nonproliferation: Accomplishments and Future Challenges

By Vann Van Diepen,

Former Director, Office of Missile Threat Reduction, U.S. Department of State

On February 15, 2006, during a briefing organized by the Washington, D.C. office of the Monterey Institute Center for Nonproliferation Studies, Mr. Vann Van Diepen, then the Director of the U.S. State Department Office of Missile Threat Reduction, presented his views on the successes and challenges of U.S. missile nonproliferation efforts. Mr. Van Diepen's main responsibilities included overseeing policy development for the nonproliferation of missiles capable of delivering weapons of mass destruction. In that capacity, he headed the U.S. Delegations to the Missile Technology Control Regime (MTCR) and the Hague Code of Conduct Against Ballistic Missile Proliferation (HCOC). CNS staff member Jennifer Kline edited the following article, which presents the main points of the presentation. These arguments are representative of Vann Van Diepen's personal opinions and should not be interpreted as the views of the U.S. Government.

The past 15 years of U.S. missile nonproliferation efforts have seen a great number of successes, but we still face very serious, evolving obstacles in this arena. Addressing these challenges in new, more effective ways is essential for the future of missile nonproliferation.

Accomplishments

On the strategic level, the United States has achieved four major successes. It has substantially reduced the quality and quantity of missile-related equipment and technology available internationally. It has eliminated certain WMDcapable missile programs. It has dissuaded the majority of states from acquiring Missile Technology Control Regime (MTCR)-controlled missiles. Finally, it has impeded the missile programs that remain.

MTCR Successes

Through the MTCR, the United States has been able to substantially reduce the quantity and quality of technology available to missile proliferators. Since the advent of the MTCR in 1987, the group has expanded control lists, improved control list modification procedures, and expanded the number of MTCR states. Additionally, starting in the early 1990s, the United States introduced the idea of "catch-all" export controls, the requirement that items that are believed to be destined for proliferation programs be subject to export controls even if they are not specified on the MTCR Annex (the list of MTCR-controlled items). By 2003, the United States had successfully created multilateral support for "catchalls," and they are now part of the MTCR guidelines. We have used the success and legitimacy of the MTCR in combination with other nonproliferation tools, including the use and threat of sanctions and interdictions, as well as direct diplomacy, to combat missile proliferation. We reduced the level and type of proliferation-related export activity involving China and Russia. We also promoted export-control progress in countries like South Korea and Ukraine, which are on their way to developing significant supply capabilities. Most recently, India has expressed its intention to adhere to the MTCR.

Finally, the MTCR has created an increasingly global predisposition favoring missile export controls. This can be seen in the success of the Hague Code of Conduct Against Ballistic Missile Proliferation (HCOC), which supplements the MTCR by creating politically binding commitments among States to curb the proliferation of WMD-capable ballistic missiles. The HCOC includes "general measures" that require member State vigilance against assisting ballistic missile programs that do not conform to global WMD norms. In addition, UN Security Council Resolution 1540 requires that states establish and enforce export controls specifically on WMD delivery systems and implicitly defines the "related materials" that must be controlled to include the items on the MTCR Annex.

We have been slowly able to extend missile-related export controls to other non-supplier countries, including some of the key transshipment points, such as Cyprus, Malta, and Hong Kong and, to some extent, Singapore. There has also been increased cooperation in interdiction that helps limit the flow of supplies to proliferant programs. This is reflected in the Proliferation Security Initiative (PSI) and the recent amendment to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA). The 2005 SUA Protocols extend the international legal basis to conduct maritime interdictions to transactions related to WMD delivery vehicles.

Elimination of WMD-Capable Missile Programs

The second main achievement of U.S. missile nonproliferation policy has been the elimination of a number of WMD-capable missile programs. Argentina and Brazil, for instance, have agreed to end their missile programs. In addition, the missile eliminations that occurred in the former Soviet Union under the 1987 Intermediate Nuclear Force Treaty removed groundbased systems with a range of 500 km to 5500 km. Several other countries have also made commitments not to possess nor acquire certain missile systems. This, in turn, has helped to eliminate potential supply capabilities by reducing the hardware available and the programs that are looking to recoup economic investments through sales.

Dissuading Acquisition and Development

The third accomplishment of U.S. missile nonproliferation policy has been its ability to dissuade acquisition and development of WMD-capable missiles in the majority of the world's countries. Roughly 20 non-MTCR countries possess the most sensitive MTCR Category I missile systems, those capable of delivering a 500 kg payload to a range of 300 km or more. More than half of those 20 countries have indigenous missile development programs, and the rest are customers who have acquired complete missile systems. That leaves some 160 countries without such programs, which is not inconsequential.

The fact that the great bulk of countries do not have WMDcapable missile programs is an achievement that deserves to be highlighted. It is not as difficult to acquire missile systems as we would like it to be. North Korea is happy to sell anything to anybody, and a fully indigenous program of liquid propellant, short-range ballistic missiles is well within the range of technological capabilities of many countries. In many cases, U.S. policy has merely reinforced an already existing disinterest in missiles, but there are also many countries that we have persuaded not to possess missiles that would otherwise have a plausible rationale for doing so.

The United States has been able to dissuade acquisition and development of WMD-capable missiles through a combination of tools. The MTCR has been successful as a de facto norm on missile-related export activities. The HCOC has 123 Subscribing States and has been endorsed by the UN General Assembly two years in a row, this last time by 158 countries. UN Security Council Resolution 1540 now includes delivery systems as part of the "threat to international peace and security" posed by WMD-the first time that WMD delivery has been given this important designation by the international community. Finally, we have succeeded in making involvement in WMD-capable missile programs undesirable by linking pursuit of such programs to economic and political hurdles in important relations with other countries (for example by the imposition of sanctions).

Impeded Existing Missile Programs

The final key achievement is that we have impeded the remaining missile programs. Using the various tools already mentioned, the United States has been able to make missile programs take longer to develop and cost more. It has made programs less effective and reliable by limiting the quality and quantity of missile exports available internationally. Most importantly, we are buying time for new nonproliferation tools —and the international environment—to evolve in ways that permit us to eliminate more programs.

Obviously there are still major challenges ahead of us. These problems flow from remaining missile programs, in particular those that most directly threaten U.S. interests, such as those in Iran and the DPRK. It is likely, however, that other programs will emerge that will pose a similar threat in the future.

Challenges

I see four key challenges as far as coping with the remaining threat programs: (1) the supply of advanced technology by Russian and Chinese entities; (2) emerging suppliers, or secondary proliferation; (3) more complex avenues of procurement that evade export controls; and (4) the international community's lack of willingness to trade off other policy priorities in the interest of putting added pressure on missile programs. These challenges are not independent; they combine with and complement each other. For example, the use of complex procurement methods to move high technology from Russian entities into Iran could allow Iran, as a secondary supplier, to qualitatively boost Syrian missile programs.

Coping with these challenges is critical to hampering the advance of missile programs. However, this is an area where the accomplishments that the United States has enjoyed until now are facing diminished marginal utility. In particular, it is becoming harder to use traditional tools to continue to impede threat programs because a technological breakout is taking place. Flight tests of medium-range ballistic missiles and solid-propellant systems are becoming more common, for example. Similarly, as long noted by Center for Nonproliferation Studies scholar Dennis Gormley, proliferant development of cruise missile systems is becoming more evident, with systems that have obviously been in development for a long time now being tested.

High Technology Supplies from Russian and Chinese Entities

With the MTCR, we have effectively removed the United States, Western Europe, and Japan as appreciable sources of missile technology. As a result, the principal sources of high technology to proliferators today are Russian and Chinese entities, which supply key items that fuel indigenous missile production programs. As threat programs achieve greater levels of indigenous production, the level of sophistication of equipment or material needed from other countries decreases; materials and subcomponents become more sought-after than complete systems. Russian and Chinese entities are a main source of subcomponents, enabling technology (particularly in challenging areas like solid-propellants and guidance), and "know-how"-the "black art" that enables a properly operating indigenous system. "Know-how" involves quality control of production, indigenous design capability, and a lot of other "black art" [expert tacit knowledge]. It is a key driver for advances in areas like range and payload capabilities, solid-propellant systems, mobility, and accuracy.

Secondary Proliferation

The second key challenge is the emergence of new suppliers and secondary proliferation. As traditional recipients of missile technology transition to indigenous production, they can become exporters, creating the potential for "onward proliferation." As such countries develop increasingly sophisticated missile systems, the chance that technology might be transferred either deliberately or inadvertently is a real concern. It is also likely that threat programs will assist each other, sharing what they have to help each other overcome certain blockages. Export controls, interdiction and sanctions become less effective tools against indigenous programs that help each other out.

Complex Procurement Networks

The third key challenge is the use of increasingly obscure avenues of procurement. In the past, exports consisted of complete missile systems sent directly from the supplier to the buyer. Exports have shifted, however, from complete systems to subsystems, components, subcomponents, and materials. It is harder to identify and track these exports because suppliers and importers are using complex routing networks, including multiple layers of front companies and intermediaries, the misuse of transit and transshipment, and diversion using intermediary points.

In addition, a shift in needs from hardware to "know-how" in indigenous missile production programs has created the problem of intangible technology transfer. Controlled technology is not transferred in a physical form, but through intangible means such as the Internet, speech, and direct interaction between technical experts. This is how proliferant countries have been able to address "black art" limitations.

All these things are harder to detect and characterize, which makes it difficult to act. A government will be more reticent to take action against possibly illegal exports that have many plausible alternative uses or a multitude of intermediaries that obscure the true end-user. However, just as this is a relatively new procurement challenge, it is also a relatively new area of nonproliferation, and there remains great marginal utility if we can make progress in this area. I'm very optimistic about what Resolution 1540 requirements will allow us to do in combination with export control cooperation programs like the U.S. Export Control and related Border Security (EXBS) Program, PSI, and the tools the United States has under the new executive order against WMD proliferation finance.

International Community Willingness to Prevent Proliferation The final key future challenge I see is insufficient willingness to trade off other policy priorities for missile nonproliferation, particularly among countries other than the United States. I would submit that there are "carrot and stick" ways of doing this, but the positive ways of doing this have diminishing impact. We are facing hard-case countries that resist easy solutions. In order to make positive headway and, increasingly, just to stay even with these threat programs and proliferation challenges, we will need more persuasive action, particularly on suppliers and intermediaries, who are more susceptible to pressure.

Historically, it has been difficult for governments applying pressure to be prepared to incur costs in other areas of their relationships with the country being pressured. In a bureaucracy there are always many reasons why it is not convenient to pressure a country on proliferation, including trade, arms sales, military basing, and, today, support in the global war of terror. Overcoming these concerns is essential for missile nonproliferation to succeed. The United States has done much more than any other country in this area, but no matter how much the United States does, it is going to be more and more difficult to keep impeding programs and, ultimately, shut programs down, if the United States is the only country applying pressure. Unless the United States convinces other countries to join it in constraining emergent missile programs, our inroads against such programs will start to level off.

It will be very interesting to see how the on-going nuclear issues with Iran and the DPRK develop in relation to other governments' willingness to apply pressure to prevent proliferation. The international community is more motivated than I've ever seen it to start applying pressure. The extent to which countries are prepared to use pressure to address nuclear proliferation will be a bellwether of what is possible on the missile side.

I also hope that if the time comes to apply nuclear-related measures, officials will look for opportunities to promote missile nonproliferation, as well. An example of using pressure in one arena to achieve progress in a second one can be seen in the case of Libya, where the United States was able to impede the Libyan missile program effectively because Libya was subject to a UN arms embargo due to the Lockerbie terrorist attack. The embargo was not imposed for nonproliferation reasons, but we obtained a substantial amount of nonproliferation benefit from that measure.

Conclusion

We have made quite a few strides over the past 15 years in developing and applying proliferation tools that have an impact on missile proliferation. We have achieved very impressive results with direct security benefits for the United States and our friends and allies. However, continued efforts by threatening missile programs are reducing the rate and extent to which we are impeding those efforts. New nonproliferation tools, building on Resolution 1540, PSI and the new executive order against WMD proliferation finance will be needed to redress the balance and increase our ability to meet the continuing missile proliferation challenge.

