



INTERNATIONAL EXPORT CONTROL  
**Observer**

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## Recent Developments

### China Updates BW-Related Control List

On July 31, 2006, the Chinese Ministry of Commerce published a revised control list of biological weapons-related (BW) dual-use items. The revised list is an update of the control list attached to China's *Regulations on Export Control of Dual-Use Biological Agents and Related Equipment and Technologies*, issued in October 2002. The 2002 control list contained a total of 22 items, including viruses, bacteria, equipment, and technologies that have BW applications. It closely mirrored the Australia Group (AG) Common Control Lists at the time. [Editor's Note: The original control list from 2002 is available at <<http://www.cns.mii.edu/research/china/chiexp/bioctrl.htm>>.]

The revised list issued in July 2006 is the first comprehensive update of China's BW-related control list since 2002. It includes the toxins that were excluded from the 2002 version, as well as items that were added to the AG control list between 2003 and 2005.

*Editor's Note: Although China is not a member of the AG, it has been in consultations with the group for some time. Beijing appears eager to work more closely with the AG, and Chinese officials have expressed interest in joining the group.*[1,2,3]

The amended list released by Chinese authorities adds a total of 14 new items—nine viruses, two toxins, two bacteria, and one category of equipment. The revised list also increases the level of control on 11 varieties of pathogens already on the 2002 list.

The nine added viruses are:

1. Hendra Virus
2. South American Hemorrhagic Fever Virus
3. Pulmonary and Renal Hemorrhagic Fever Virus
4. Nipah Virus
5. Lumpy Skin Disease Virus
6. African Horse Sickness Virus
7. Potato Andean Latent Virus
8. Potato Spindle Tuber Viroid Virus (PSTVd)
9. SARS coronavirus

Items 1 through 6 were added to the AG Common Control List in June 2003, while items 7 and 8 were added in June 2004. SARS is not included in the AG list but, according to Chinese official statements, it has been added to the Chinese list as a result of "extraordinary circumstances." China experienced a SARS outbreak in 2003 and the majority of those killed worldwide by the virus—5,325 of 8,096—were in mainland China. Since the initial SARS outbreak subsided in 2003, at least two scientists, one in Singapore and one in Taiwan, have been infected with the SARS virus during laboratory

experiments in search for a cure or a vaccine. These accidental exposures have led to an effort in a number of Asian countries, including China, to improve control and management of the causative virus.[4,5,6,7]

The two bacteria added to the Chinese list are *Clavibacter michiganensis* and *Burkholderia pseudomallei*, which were both added to the AG list in June 2004. The two added toxins are ricin and saxitoxin. Apart from being on the AG Common Control List as a "Biological Agents" for decades, these two toxins are also listed as Schedule 1 chemicals in the Chemical Weapons Convention (CWC). As such, their export has been controlled by China under its separate regulations and control lists passed in 1998 dealing with CWC scheduled chemicals. While this addition makes no substantive change to the control of these items, it does make the Chinese control list identical to the AG list for biological agents.

Mirroring changes in the AG equipment list introduced in 2005, China also added "spray or spray aerosol generator systems and components" to its list of controlled items.

The 11 viruses and bacteria now subject to an increased level of control by China's control list are:

1. Kyasanur Forrest Virus
2. Louping-ill Virus
3. Murray Valley Encephalitis Virus
4. Omsk Hemorrhagic Fever Virus
5. Oropouche Virus
6. Powassan Virus
7. Rocio Virus
8. St. Louis Encephalitis Virus
9. *Xanthomonas oryzae*
10. *Clostridium perfringens*
11. Enterohemorrhagic *Escherichia coli* (E. coli)

The above items were part of China's 2002 control list and at that point were also on the AG's "Warning List." They were added to AG Common Control List in 2003 and 2004. [Editor's Note: The AG "Warning List" is used by member states to raise awareness about the possible danger of a certain substance being used in the development of a chemical or biological weapons program. The inclusion of an item on this list is an indication that the trade in the substance should be monitored but not necessarily strictly controlled in the way items on the Common Control List are. Items move from the "Warning List" to the control list when member states agree that the item needs to be more tightly controlled.] These 11 items have now been moved from Part I to Part II of China's control list, thus increasing the scrutiny that is placed on their transfer in a number of ways, including a longer time allowed for license review. The SARS coronavirus was also automatically added onto Part II of the control list.

Finally, the revised list also added clarifications on controls for freeze-drying and cross-flow filtration-related equipment.

Previously the provisions on freeze-drying equipment controlled pieces of equipment with condensing capabilities that were greater than 10 kilograms but less than 1,000 kilograms of ice in 24 hours. This has been further clarified to stipulate equipment with condensing capabilities equal to or greater than 10 kilograms but less than 1,000 kilograms of ice in 24 hours. The cross-filtration equipment-related clarification stipulates that equipment with a total filtration area of 1 square meter shall be controlled. Previously the restrictions were on equipment with a filtration equal to or greater than 5 square meters. Freeze drying equipment is a dual-use item that can be used to increase cultures' shelf life. Cross-filtration equipment can be used for the containment, isolation, and production of biological agents. Both cross-filtration equipment and freeze-drying equipment are on the AG Common Control Lists.[7,8,9]

Sources: [1] "Foreign Ministry Spokesman Liu Jianchao's Remarks on China's Renewed Control List of Regulations on Control of Dual-Use Biological Agents and Related Equipment and Technologies," Ministry of Foreign Affairs of the People's Republic of China, August 1, 2006, <[www.fmprc.gov.cn/eng/xwfw/s2510/2535/t265668.htm](http://www.fmprc.gov.cn/eng/xwfw/s2510/2535/t265668.htm)>. [2] "Regulations of the People's Republic of China on Export Control of Dual-Use Biological Agents and Related Equipment and Technologies," available on the website of the Embassy of the People's Republic of China in Sweden, October 14, 2002, <<http://www.chinaembassy.se/eng/xwdt/t101538.htm>>. [3] "China to Further Control of Biological Exports, FM Spokesman," Xinhua Economic Newswire, July 28, 2006; in Lexis-Nexis Academic Universe <[www.lexis-nexis.com](http://www.lexis-nexis.com)>. [4] "Summary of Probable SARS Cases with Onset of Illness from 1 November 2002 to 31 July 2003," World Health Organization, December 2003, <[http://www.who.int/csr/sars/country/table2004\\_04\\_21/en/index.html](http://www.who.int/csr/sars/country/table2004_04_21/en/index.html)>. [5] "Singapore Man Has SARS," BBC News, September 9, 2003, <<http://news.bbc.co.uk/1/hi/world/asia-pacific/3092220.stm>>. [6] "Taiwan Announces New SARS Case," BBC News, December 17, 2003, <<http://news.bbc.co.uk/1/hi/world/asia-pacific/3326377.stm>>. [7] China's Ministry of Commerce "Chanye si fuzeren jie du xiuding hou de 'Shengwu liang yong pin ji xiangguan shebei he jishu chukou guanzhi qingdan' [Interpreting the revisions to the 'Dual-Use Biological Agents and Related Equipment and Technologies Export Control List']," August 10, 2006, Ministry of Commerce website, <<http://exportcontrol.mofcom.gov.cn/aarticle/ar/200607/20060702758613.html>>. [8] "MOC Issues Revised List of Export Control of Dual-Use Biological Products and Affiliated Equipment and Technologies," Xinhua Economic News Service, August 1, 2006; in Lexis-Nexis Academic Universe, <[www.lexis-nexis.com](http://www.lexis-nexis.com)>. [9] "The Military Critical Technologies List Part II: Weapons of Mass Destruction Technologies," U.S. Department of Defense, II-3-15, <<http://www.fas.org/irp/threat/mct198-2/p2sec03.pdf>>.

## **Illicit Trafficking**

### **Mitutoyo Managers Indicted for Exporting Nuclear Equipment to Iran**

On September 14, 2006, the Tokyo District Public Prosecutors Office indicted four former executives of Japan's Mitutoyo Corporation for allegedly exporting three-dimensional precision measuring devices to Malaysia in October and November 2001 in violation of Japanese export control regulations. The four men were former company president Kazusaku Tezuka, former vice chairman Norio Takatsuji, former managing director Hideyo Chikugo, and former board

member Tetsuo Kimura.[1] If convicted, each of the accused face up to five years in prison.[2]

*Editor's Note: Three-dimensional precision measuring devices are important for development of gas centrifuges for uranium enrichment.[3] Mitutoyo controls 30 percent of the global market share of these highly sophisticated precision measuring devices.[4]*

As previously reported in the *Observer*, suspicions about Mitutoyo's activities were first raised when one of its three-dimensional precision measuring devices was discovered in Libya during IAEA inspections between December 2003 and January 2004. This device had been exported to Mitutoyo's subsidiary in Singapore, transferred to Scomi Precision Engineering (SCOPE) in Malaysia—which was affiliated with the A.Q. Khan nuclear network—then retransferred by Khan operatives to Libya via Dubai between December 2001 and December 2002.[3,5] The discovery of the equipment prompted an intense investigation by Japanese authorities, including a series of raids on the company in February 2006. *[Editor's Note: For earlier Observer stories on the discovery of Mitutoyo instruments in Libya and the subsequent investigation that led to the recent indictments, see "Japanese Instruments Discovered in Libyan Nuclear Facility," Asian Export Control Observer, October/November 2004 pp. 8-9, and "Japanese Export Controls under Scrutiny as Revelations of Illicit Transfers Continue," International Export Control Observer, March 2006, pp. 9-10, <<http://cns.miis.edu/pubs/observer/index.htm>>. For more on SCOPE and its involvement in the A.Q. Khan 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/index.htm>>.]*

According to information made public by investigators following the indictments, Mitutoyo executives made the decision to evade Japanese export control regulations in the early 1990s in order to bolster sagging profits during a domestic economic downturn.[3] Norio Takatsuji and Hideyo Chikugo, who were both involved with the company's foreign sales division at the time, oversaw the creation of a software program that allowed the company to disguise the true precision level of measuring devices when making customs and licensing declarations in order to bypass export control regulations. *[Editor's Note: The software developed was code named 'COCOM' by Mitutoyo personnel, after the international suppliers regime of the same name.]* This practice appears to have been widespread within the company and approximately 10,000 instruments were exported without the necessary licenses due to the erroneous information provided to Japanese authorities.[3,6,7]

Japanese authorities also suspect that Mitutoyo exported at least nine precision measuring devices to Iran between 1984

and 2002.[8] Equipment sent to Iran appears to have gone through the Tokyo-based trading company Seian, which was also recently raided by Japanese law enforcement. Seian is thought to have ties to entities involved in Iran's nuclear program, including companies on Japan's "entities list".[3] Tehran has officially denied these allegations. Iranian Foreign Ministry spokesman Hamid Reza Assefi asserted publicly that Iran and Japan have not conducted any transactions on nuclear development.[9]

Japanese authorities are still investigating Mitutoyo's potential links to North Korea. On September 5, 2006, Japan's Fuji Television showed footage from a North Korean news broadcast that inadvertently revealed a device bearing the Mitutoyo logo. The device appeared to be a thermogravimetry apparatus that is utilized in the manufacturing of ultrahigh-strength steel. It is unclear how the equipment—which would have required an export license to be shipped from Japan—reached North Korea and whether Mitutoyo executives were aware of the transfer. Tokyo Police are reportedly investigating the matter.[10]

Partly in response to the Mitutoyo case, as well as other recent violations by high profile companies, the Japanese government is now strengthening export control regulations in order to remove existing loopholes. Under current Japanese export control regulations, domestic companies must apply for a license to export controlled dual-use items valued at more than 50,000 yen (about US\$420) to countries of proliferation concern such as Iran and North Korea. Tokyo is now considering requiring a license for all controlled items to these countries irrespective of the value. [*Editor's Note: The Japanese government is also expected to soon lower restrictions on exports to Libya and remove the country from the list of proliferator countries in recognition of Tripoli's renouncement of its WMD programs in 2003.*][6]

On a related note, Tokyo has been steadily increasing restrictions on exports to North Korea during the last few months. The first series of restrictions, announced in September 2006, was in direct reaction to the DPRK missile tests in July 2006. These new rules ban the transfer of funds to 16 North Korean entities (15 companies and one individual) suspected of being involved with the DPRK's WMD programs. The Japanese government also barred the entry to Japanese territory of any North Korean goods, persons, or ships.[11,12,13] In compliance with the UN Security Council resolution passed in October 2006 in the wake of the North Korean nuclear test, the Japanese government is also planning to ban exports of luxury items, such as cars, liquors, and tobaccos into North Korea.[14]

Sources: [1] "4 Ex-Mitutoyo Executives Indicted for Illegal Nuke-Linked Exports," Jiji Press, September 14, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com/>>. [2] "Kabushiki Gaisha Mitutoyo no Gaitame Ho Ihan ni Kakawaru Kokuhatsu ni tsuite [Indictment of Mitutoyo Co. Violating the Foreign Exchange and Foreign Trade Control Law]," Press Release, Japan's Ministry of Economy, Trade and Industry (METI) website,

September 8, 2006, <<http://www.meti.go.jp/>>. [3] Peter Crail, "Evading Export Controls: Mitutoyo Corporation as a Case Study in Determined Proliferation," *WMD Insights* online edition, October 2006, <[http://www.wmdinsights.com/19/19\\_EA1\\_EvadingExport.htm](http://www.wmdinsights.com/19/19_EA1_EvadingExport.htm)>. [4] "Editorial: Illegal High-Tech Exports Threaten Global Security," *Yomiuri Shimbun*, August 26, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com/>>. [5] "Japanese Export Controls under Scrutiny as Revelations of Illicit Transfers Continue," *International Export Control Observer*, March 2006, pp. 9-10, <<http://cns.miiis.edu/pubs/observer/index.htm>>. [6] Associated Press, "Japan Mulling Overhaul of Export Control Laws to Curb Weapons-Related Trade," *International Herald Tribune* online edition, September 13, 2006, <<http://www.iht.com/>>. [7] "Mitutoyo Schemes Systematic, Executives Aware of Illegality of Exporting Sensitive Devices," *Yomiuri Shimbun* online edition, August 28, 2006, <<http://www.yomiuri.co.jp/dy/>>. [8] "84 Nen, Iraku tono Sensochu Iran ni Sokuteiki Yushutsu Mitutoyo, Gokei de 9 Dai [In 1984, While Iran-Iraq War, Mitutoyo Exported Total 9 Measuring Devices]," *Sankei Shimbun*, via Goo News, September 29, 2006, <<http://news.goo.ne.jp/>>. [9] "Husei Yushutsu, Iran Seifu ha Torihiki Hitei [Illicit Exports, Iranian Government Denied the Transactions]," Tokyo Broadcasting System, August 28, 2006, <<http://news.tbs.co.jp/index-j.htm>>. [10] "Japan: DPRK Film Shows Steel Mill Using Mitutoyo's Illegally-Exported Device," Tokyo Fuji Television, September 5, 2006; in OSC Document JPP20060907004001. [11] "Japan to Tighten Export Controls, Raise Awareness of Export Controls among Japanese High-Tech Exporters," *International Export Control Observer*, April 2006, pp. 4-5, <<http://cns.miiis.edu/pubs/observer/index.htm>>. [12] "Gaikoku Kawase oyobi Gaikoku Boeki Ho ni motodoku Kita Chosen kara no Yunyu Kinshi Sochi To ni tsuite [Bans of Imports from North Korea Based on Foreign Exchange and Foreign Trade Control Law]," Press Release, METI website, October 13, 2006, <<http://www.meti.go.jp/>>; "Gaikoku Kawase oyobi Gaikoku Boeki Ho ni motodoku Kita Chosen no Misairu mataha Tairyu Hakai Heiki Keikaku ni Kanren suru Shikin no Iten wo Boshi suru Sochi ni tsuite [Bans of Money Transfers over North Korean Missile and WMD Developments Based on Foreign Exchange and Foreign Trade Control Law]," Press Release, METI website, September 19, 2006, <<http://www.meti.go.jp/>>. [13] "Kita Chosen Heno Fusei Yushutsu Tekihatsu Kyoka [Efforts to Uncover Illicit Exports to North Korea]," NHK, October 12, 2006, <<http://www3.nhk.or.jp/>>. [14] "Sanctions to Include Luxury Items," *Yomiuri Shimbun* online edition, October 18, 2006, <<http://www.yomiuri.co.jp/dy/>>.

### South Korea Stops Illegal Transfers—Export Control Implementation Still Lax

The South Korean government has increased efforts to investigate and stop illegal exports of controlled items as part of its larger strategy to strengthen export control regulations. Seoul's recent efforts follow repeated international calls to improve its system. The United States, in particular, has expressed concerns regarding what it views as lenient treatment by Seoul of domestic companies involved in unauthorized exports and has threatened sanctions against offending firms. [*Editor's Note: For details see "Special Report: South Korean Export Control Awareness on Rise but Compliance Lacking," International Export Control Observer, November 2005, pp. 18-19, <<http://cns.miiis.edu/pubs/observer/index.htm>>.*] However, the South Korean government seems to be unable or unwilling to implement the strict measures introduced by its Ministry of Commerce, Industry and Energy (MOCIE) to strengthen export controls, as suggested by the incidents described below.

On October 1, 2006, South Korean National Assembly member Kim Ki-hy n of the opposition Grand National Party

(GNP) or *Hannaradang* revealed that R.O.K. government authorities prevented two South Korean companies from exporting military-related materials to North Korea. Assemblyman Kim, a member of the legislature's Commerce, Industry and Energy Committee, was citing an official report submitted by MOCIE.[1,2,3,4] According to Kim, a South Korean firm referred to only as "Company H," had signed a sales contract with a North Korean firm in August 2005 for four air compressor machines, which are dual-use equipment that can be used in the cutting and fabrication of missile warheads. South Korea's National Intelligence Service (NIS) learned of the intended sales and confronted the company on September 15, 2006, before the intended export could take place.[1,3] In a similar case, authorities reportedly prevented another South Korean company—referred to as "Company K"—from undertaking an unlicensed export to North Korea. The intercepted export was of centrifuge-related equipment that could be used in the uranium enrichment process.[1,2,3]

Since the strategic goods were not actually exported, both cases were dismissed without punitive measures after the authorities received commitments from both companies to strictly adhere to export control regulations in the future.[1,3] South Korean reports do not indicate whether the two companies intentionally hid their activities and knowingly attempted to export strategic items without a license, or whether their actions were the result of "innocent negligence." Nevertheless, the absence of punitive measures contradicts part of the new measures introduced by MOCIE's plan drafted in August 2005, which shifts the burden of accountability to the companies and eliminates such "inadvertent" violations.[5,6]

Other recent cases further highlight weaknesses in South Korea's export control implementation. In December 2005, a South Korean exporter, identified only as "45-year-old Lee," attempted but failed to export 25 tons of potassium bifluoride to an undisclosed country in the Middle East. Lee avoided punishment at the time, claiming that he had been unaware of the export restrictions on the substance. However, on October 12, 2006, Lee was arrested and indicted for illegally exporting another 15 tons of potassium bifluoride to the same recipient in May 2006. [Editor's Note: According to South Korean press reports, authorities did not reveal the name of the intended recipient country for diplomatic reasons but only indicated that it was located in the Middle East.][7,8,9,10]

Potassium bifluoride is a dual-use chemical included in the Australia Group Control List. It can be used as a chemical weapons precursor. The chemical is also used in extracting fissile material from spent nuclear fuel. As a member of the Australia Group, South Korea controls the export of potassium bifluoride. Lee reportedly misrepresented the contents a shipment on official export documents in May 2006, stating that the content was a wood preservative, but failing to specify the actual chemical make-up of the item being shipped.[11]

Lee, who received US\$27,500 for the sale, now faces up to five years in prison and triple the amount of the May 2006 sale in fines.[7,8]

Sources: [1] Ch'oe Mun-sŏn, "Haengmujang'e chŏnyong kanŭnghan changbi kungnaegiŏp'i pukhan'e such'ulhal bbŏn [Domestic Firm Almost Exported Equipment for Use in Nuclear Weapons to NK]," *Hankook Ilbo*, October 1, 2006; in KINDS, <<http://www.kinds.or.kr/>>. [2] "Two S. Korean Firms Tried to Export Military Material According to N. Korean Lawmaker," Yonhap News Agency, October 1, 2006; in Lexis-Nexis Academic Universe, <<http://web.lexis-nexis.com>>. [3] Kim Chae-jung, "Kungnaeŏpch'e 2kot, pukhan'e misail, uranyum kwallyŏn chep'um suchulharyŏda chŏkpal [Two Domestic Companies Exposed in Attempt to Export Missile, Uranium Related Goods to NK]," *Kukmin Ilbo*, October 1, 2006; in KINDS, <<http://www.kinds.or.kr/>>. [4] "Chŏllyakmulcha wibŏp such'ulhaedo pyŏltarŭn ch'ŏbŏlŏpsŏ sashilsang myŏnjoebu puyŏ [No Particular Punishment for Illegal Export of Strategic Goods; Pardon Granted]," *Podojaryo*, October 2, 2006, Assemblyman Kim Ki-hyŏn website, <<http://www.eut.co.kr/>>. [5] Yonhap News Agency, "S. Korea to Tighten Grip on Strategic Exports," August 16, 2005; in OSC Document KPP20050816000033. [6] Choe Chŏng-uk, "Chŏllyakmulcha Kwalli Kanghwa Wihae Taewoemyŏkŏpŏp Kaechŏng Ch'ujin [Foreign Trade Reforms Submitted for Strategic Goods Administration]," *Kukmin Ilbo*, August 16, 2005; in KINDS, <<http://www.kinds.or.kr/>>. [7] "Korean Held for Export of Strategic Nuclear Goods," *Chosun Ilbo* online edition, October 13, 2006, <<http://english.chosun.com/w21data/html/news/200610/200610130011.html>>. [8] Annie I. Bang, "Trader Nabbed for Smuggling Nuke Material," *Korea Herald*, October 13, 2006; in Lexis-Nexis Academic Universe, <<http://web.lexis-nexis.com>>. [9] Yi Pyŏng-kwan, "Haengmulchil 15t'on chungdong milbanch'ul [15 Tons of Nuclear Material Smuggled Out to Middle East]," *Sŏul Kyŏngje Sinmun*, October 12, 2006; in KINDS, <<http://www.kinds.or.kr/>>. [10] Kang Kye-man, "Haekchŏllyangmulcha chungdong'e milbanch'ul [Nuclear Strategic Goods Smuggled Out to Middle East]," *Maeil Kyŏngje Sinmun*, October 13, 2006; in KINDS, <<http://www.kinds.or.kr/>>. [11] *Chemical Weapons: What's What*, United Nations Office of Drugs and Crime (UNODC) website, <[http://www.unodc.org/unodc/terrorism\\_weapons\\_mass\\_destruction\\_page004.html](http://www.unodc.org/unodc/terrorism_weapons_mass_destruction_page004.html)>.

### Suspect North Korean Cargo Bound for Syria Intercepted in Cyprus

On September 5, 2006, the *Gregorio I*, a Panama-flagged ship originating in North Korea and bound for Syria was detained and its content temporarily seized in the Cypriot port of Limassol on suspicion of arms smuggling. The Cypriot action came after a tip-off from U.S. authorities and Interpol asserting that the ship might be carrying North Korean weapon systems. U.S. intelligence and Interpol had been tracking the *Gregorio I* since it left North Korea several months earlier.[1,2,3,4]

The *Gregorio I* has reportedly changed names and flags five times over the past five years.[3] The ship is currently managed by the Greek-based Transatlantic Maritime. For the voyage in question, China Ocean Shipping Co. (COSCO) reportedly chartered the ship from Transatlantic Maritime.[5] After setting off from North Korea, the *Gregorio I* stopped first in China and then in Port Said, Egypt. The ship's manifest cited Latakia, Syria, as its final destination. On the final leg of its journey to Syria, it stopped in Cyprus to refuel where it was detained by Cypriot police. The police questioned the 15-member Russian and Ukrainian crew.[2,3]

The seizure of the ship's contents occurred after the UN Security Council adopted Resolution 1695 on July 16, 2006, banning countries from trading missile-related products with North Korea. Although the ship's manifest described the cargo as weather-observation equipment, authorities apparently suspected that the ship was transporting missile-related items from North Korea to Syria in violation of the UN Security Council resolution. An inspection of the ship by Cypriot customs officials discovered 18 truck-mounted mobile radar systems—later identified as air defense systems—and three command vehicles. The ship was also transporting steel pipes that were at first suspected of being intended for use in missile launchers. However, it was later determined that the pipes were for irrigation purposes, and not related to North Korea's missile program. The ship's managers said that the pipes were loaded in China, while Cypriot authorities determined that the truck-mounted radar systems were loaded in North Korea.[5] *[Editor's Note: Although military-related, the air defense equipment in the Syrian bound ship was not under any international trade restriction since UNSCR 1695 only bans missile and WMD-related trade with North Korea. Therefore the cargo in the ship could be traded freely between North Korea and Syria. For more on this issue see "North Korean Nuclear Test Results in UN Resolution, Sanctions, and Seizures," in this issue of the Observer.]*

Upon the determination that the ship's cargo was not missile-related, the Syrian government lodged a complaint for Cypriot authorities to release the ship. The Cyprus government contended, however, that they would hold the ship in custody based on the fact that the manifest misrepresented the ship's contents; furthermore, cargo forwarders or exporters are required to inform Cypriot authorities of any military hardware transiting Cyprus.[1,5] To obtain the ship's release, the Syrian government formally requested the required transshipment license and provided an end-user certificate. After a review of the license request by an advisory committee, which included representatives from the Cyprus attorney general's office, the foreign and defense ministries, and domestic law enforcement agencies, a license was ultimately granted by Cypriot customs. The ship and its cargo was released from custody on September 27, 2006.[1]

Sources: [1] "Cyprus Releases Syria-bound Weapons Ship," Associated Press, September 27, 2006, <<http://www.ynetnews.com/articles/0,7340,L-3308901,00.html>>. [2] "Cypriot Authorities Impound Greek-Owned Ship Sailing from North Korea to Syria," *Eleftherotipia* (Athens), September 7, 2006; in FBIS Document EUP20060912143003. [3] "Cyprus Finds Air Defense Systems on Syria-Bound Ship," Reuters, September 11, 2006, <<http://www.haaretz.com/hasen/spages/761360.html>>. [4] "Cyprus Seizes N. Korean System for Syria," Middle East Newline (MENL), September 12, 2006. [5] "Syria-bound Ship Free to Go But Not Defence Cargo," Reuters, September 21, 2006, <<http://www.khaleejtimes.com>>. [6] "Cypriot Police Quiz 'Syria Arms' Ship," *Financial Times*, September 8, 2006; in Lexis-Nexis Academic Universe, <<http://web.lexis-nexis.com>>. [7] "Ship's Cargo Reportedly is Air Defense System," *Los Angeles Times*, September 12, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>.

## WMD-Related Chemical Discovered in Hong Kong Flowerpot

On August 18, 2006, the Hong Kong daily newspaper *Ming Pao* reported that a package containing a highly sensitive controlled chemical was found in a flowerpot near a parking lot in the Kai Yip Housing Estate in Hong Kong's Kowloon Bay area. According to the report, a cleaning woman discovered the unopened package and turned it over to security personnel from the housing complex. The security personnel noticed that the package had a peculiar smell. The Hong Kong police were called and discovered two bags of white powder and two bottles of liquid inside the package. Labels on the bags of powder read "KHF<sub>2</sub>," the chemical symbol for potassium bifluoride. The bottles of liquid were unmarked. The shipping invoice indicated that the package originated in Shenzhen, China and had been en route to Iran, scheduled to arrive in December 2005. It remains unclear how the item ended up outside the Hong Kong apartment building.[1,2] However, one analyst familiar with Hong Kong's export control system speculated that the package was likely abandoned in the flowerpot when an intermediary responsible for shipping the item realized that local customs controls would make it very difficult to transport the item to Iran.[2]

Potassium bifluoride is an extremely hazardous substance that is both corrosive and toxic. It is a precursor for various chemical weapons agents, including the nerve agent sarin, and is also used in the extraction of plutonium from spent reactor fuel in the production of fissile materials.[2] Potassium bifluoride also has a number of commercial uses, including in the manufacture of wood preservatives and for etching of special optical glass. Due to its dual-use nature, the export and transshipment of potassium bifluoride is controlled in Hong Kong under the region's *Precursor Chemicals of Toxic Chemical Agents Regulations*. *[Editor's Note: Potassium bifluoride is a controlled substance under the Australia Group (AG); however it is not a scheduled chemical under the Chemical Weapons Convention (CWC). On October 12, 2006, a South Korean man was arrested and indicted for exporting several tons of potassium bifluoride from South Korea to an unspecified Middle Eastern country. For more information on this incident, see the article, "South Korea Stops Illegal Transfers—Export Control Implementation Still Lax," in this issue of the Observer.]*

The Hong Kong flowerpot incident highlights continued concern about possible assistance being given to Iran's suspected WMD programs by Chinese entities. The U.S. government has imposed numerous sanctions on Chinese companies for suspected WMD-related transfers to Iran. Since 2002, China has strengthened its efforts to control the transfer of WMD-related items. For instance, the Chinese government published CW-related control lists in October 2002 that included AG controlled chemicals such as potassium

bifluoride. However, China's chemical industry is expansive and consists of countless small to medium sized companies; both Chinese export control authorities and foreign experts have pointed to the ever expanding number of these smaller firms as a major challenge to the infrastructure and capacity of China's nascent export control system.[3]

Sources: [1] "WMD Material Found in Hong Kong Flower Container," Global Security Newswire, August 21, 2006, Nuclear Threat Initiative (NTI) website, <[http://www.nti.org/d\\_newswire/issues/2006\\_8\\_21.html#638A6852](http://www.nti.org/d_newswire/issues/2006_8_21.html#638A6852)>.

[2] "HK Finds Iran-Bound Substance for Making Chemical Weapons, Extracting Plutonium," BBC Monitoring International Reports, August 18, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>.

[3] "China and Chemical and Biological Weapons (CBW) Nonproliferation," NTI website, <<http://www.nti.org/db/China/cbwpos.htm>>.

## International Developments

### Operation "Leading Edge" Takes PSI to Persian Gulf

Operation "Leading Edge", the first exercise of the U.S.-led Proliferation Security Initiative (PSI) held in the Persian Gulf, took place at the end of October 2006 in Bahrain—the first Arab League nation to actively participate in a PSI exercise. The maritime portion of the exercise was held about 20 miles away from the territorial waters of Iran—a country seen by many as a target of PSI activities. Apart from host country Bahrain, the two-phase exercise included forces from Australia, France, Italy, the United Kingdom, and the United States.[1] Four other countries from the gulf region—Kuwait, Iraq, Qatar, and the United Arab Emirates—sent observers to the exercise. Fourteen other countries—Canada, Denmark, Germany, Greece, Japan, the Netherlands, New Zealand, Norway, Pakistan, Poland, Russia, Singapore, Spain, and South Korea—were also reported to have sent military or law enforcement officials to observe the mock maritime operations.[1,2,3,4,5,6]

While the main naval exercise took place on October 30, 2006, the first phase of "Leading Edge" began in the week of October 23, with training in intelligence cooperation and command and control operations between the six countries participating in the operation.[1,7] The naval exercise phase, which included a mock vessel boarding at sea, aimed to train teams from the participating countries in boarding techniques.[7] As part of the operation, Italian and Bahraini naval personnel boarded a British "oil tanker" at sea in the Persian Gulf. The team searched the ship for approximately two hours, finding a simulated nuclear detonator.[1] Apart from the British naval ship that played the role of a commercial vessel, three Bahraini ships participated, as did one ship each from Australia, France, Italy, and the United States.[7]

Although "Leading Edge" had been in the planning phase since January 2006, it coincidentally occurred only days after

Iran announced that it was moving forward with its enrichment program by activating a second set of centrifuges despite UN Security Council (UNSC) demands for Tehran to halt these activities.[1,8] Iran reacted angrily to the holding of the exercise in the Gulf region, especially so close to its territorial waters. Iran's Foreign Ministry spokesperson said the operation was not appropriate and characterized it as U.S. "adventurism." [1,2] In response to the multinational PSI operation, Iran's Revolutionary Guards began a series of "war games" on November 2, 2006. These military maneuvers included tests of Iran's Shahab ballistic missile.[9]

"Leading Edge" was the first PSI exercise since the North Korean nuclear test and the subsequent sanctioning of Pyongyang by the UNSC. North Korea, like Iran, has been seen as a target for PSI and the October exercise involved operations that would be useful for countries trying to enforce UNSC sanctions against Pyongyang. South Korea sent three observers, including coast guard officials, to the "Leading Edge" exercise. However, South Korean Foreign Minister Yu Myung-hwan reiterated in a statement to parliament on October 27, 2006, Seoul's reluctance to become an active participant in PSI. According to Yu, Seoul remained concerned over the use of PSI measures in the Korean Peninsula area. Another well-placed South Korean official, presidential advisor Soong Min-soon, noted at the same parliamentary meeting that the R.O.K. government did not want to take any measure that would lead to a sea blockade of North Korea.[2,10]

*Editor's Note: PSI was announced by the Bush administration in May 2003 and is a multinational partnership of states designed to interdict illicit shipments of WMD-related materials and missile-related equipment and technology while in transit via air, land, and sea. According to U.S. government estimates, over 70 countries have expressed support for PSI and the initiative's Statement of Interdiction Principles. Since its start, PSI has slowly gained support in both the Middle East and Asia Pacific region, although a number of countries remain concerned about the legal ramifications of PSI's interdiction activities. For more details on the history and operations of PSI see "Proliferation Security Initiative," Inventory of International Nonproliferation Organizations & Regimes, available at <<http://www.cns.miis.edu/pubs/inven/pdfs/psi.pdf>>.*

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[2] Associated Press, "Iran Criticizes US-Led Nuclear Interception Naval Exercise in the Persian Gulf," *International Herald Tribune* online edition, October 20, 2006, <<http://www.iht.com>>. [3] Mohammed Abbas, "U.S., Allies Hold Anti-WMD Drill at Iran's Doorstep," Reuters, October 30, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>. [4] "U.S.-led Multi-national Security Exercise to Counter Trafficking of Weapons of Mass Destruction Involves NZ," IRN News via Thomson Dialog NewsEdge, October 30, 2006, <<http://www.tmcnet.com>>. [5] Mazen Mahdi, "Training Exercise Off Bahrain Targets Illicit Weapons Transport," Deutsche Presse-Agentur, October 30, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>. [6] Ralph Dannheisser, "Twenty-Five Nations to Join in Nonproliferation Exercise," WashingtonFile (U.S. State Department

News Service), October 28, 2006, <<http://usinfo.state.gov>>. [7] "Naval Forces Conduct Exercise Leading Edge," Press Release, Naval Forces Central Command, U.S. 5th Fleet, Public Affairs Office, October 30, 2006, <<http://www.cusnc.navy.mil/articles/2006/193.html>>. [8] "Iran 'Steps Up Nuclear Programme'," BBC News, October 27, 2006, <<http://news.bbc.co.uk>>. [9] Nazila Fathi, "Iran Revolutionary Guards Hold War Games After U.S. Exercise," *New York Times*, November 3, 2006, p. 12. [10] "South Korea Sends Delegates to Observer PSI Exercise," BBC Monitoring International Reports, October 29, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>.

## North Korean Nuclear Test Results in UN Resolution, Sanctions, and Seizures

On October 9, 2006, North Korea conducted its first test of a nuclear device in an underground testing site near Mount Mant'ap and P'unggye-ri, Kilchu-kun, North Hamgyŏng Province, in the northeastern part of the country.[1] The test resulted in immediate international condemnation and a UN Security Council resolution that imposed trade and financial sanctions on Pyongyang. North Korea had already been the subject of unilateral sanctions by a number of countries prior to the UN action, as well as an earlier UN Security Council resolution passed after the North Korean missile exercises in July 2006.

UN Security Council Resolution 1718 (UNSCR 1718) passed unanimously on October 14, 2006, and called on North Korea to not proceed with any further nuclear or ballistic missile tests and to suspend its activities in these programs.[2] UNSCR 1718 expanded the restrictions that were already in place in response to the July 2006 missile exercise. UN Security Council Resolution 1695 (UNSCR 1695) was unanimously adopted on July 15, 2006, ten days after North Korea tested a number of different missile systems, including a long-range ballistic missile. UNSCR 1695 aimed to "prevent the transfer of missile and missile-related items, materials, goods and technology" to and from North Korea by banning such transactions for all UN member states.[3]

The provisions of UNSCR 1718: (1) allow member states to stop and inspect cargo going to and from North Korea if it is suspected that weapons of mass destruction (WMD)-related items or technology are present; (2) ban the import and export of military equipment and related parts; (3) ban the export of luxury goods to North Korea; (4) require UN member states to freeze assets of any entity involved with North Korea's WMD programs; and (5) place a travel ban on individuals involved with North Korea's WMD programs.[2] The Security Council also established a committee to identify individuals involved in the North Korean nuclear program.[4] On November 1, 2006, the final version of three annexes to UNSCR 1718 were approved by the Security Council, providing a comprehensive list of WMD-related dual-use items that were prohibited from being exported to North Korea. These lists mirror control lists of the Nuclear Suppliers Group (NSG), Missile Technology Control Regime (MTCR), and the Australia Group (AG).[5,6,7]

Since the passage of UNSCR 1695 and 1718, a number of countries, particularly North Korea's neighbors, have taken action to implement the resolutions, and in some cases expanded upon the restrictions passed by the Security Council. Japan slowly increased its domestic sanctions on North Korea since the July 2006 missile exercises. Since the nuclear test Japanese authorities have imposed a full-scale trade embargo and travel ban on Pyongyang. Tokyo has banned all North Korean ships from Japanese ports and is now preparing to increase the frequency of patrols in its territorial waters in order to interdict ships carrying items banned under UNSCR 1718 to or from North Korea. Tokyo also imposed sanctions that restrict the transactions by financial institutions and one individual suspected of having links with Pyongyang's weapons programs.[8,9]

While remaining reluctant to interdict North Korean flagged ships, China has quietly taken a number of other steps to pressure North Korea. Beijing increased its inspection activity at the North Korean border since the missile exercises and some media reports indicate that there has been a slowdown in the flow of trade at Chinese-North Korean land borders.[10] One report by a Seoul-based NGO critical of the Pyongyang regime claimed that Beijing has been quietly warning Chinese businessmen involved in North Korean ventures that their investments should not exceed US\$300,000.[11] Chinese state-run banks have also reportedly suspended loans related to North Korean investments and slowed down other transactions such as wire transfers going in and out of North Korea.[12,13] According to China's most recent trade statistics released in late October, Beijing provided no crude oil to Pyongyang in the month of September 2006. As China is one of North Korea's key energy suppliers this cut in supply would have placed a significant burden on the regime in Pyongyang. There was no official announcement by Beijing over the reason for the drop in sales of crude oil, but analysts speculate it was likely Beijing's way of placing significant pressure on its neighbor to return to the Six-Party Talks and to end its belligerent activities.[14]

In late October 2006, Hong Kong's maritime authorities detained two North Korea-flagged ships, the *Kang Nam I* and its sister ship the *Kang Nam V* citing safety violations. [Editor's Note: On matters of maritime security and customs enforcement, the Hong Kong Special Administrative Region (SAR) is relatively autonomous from mainland China.] The *JoongAng Ilbo*, a South Korean daily, reported that the detention of the *Kang Nam I* was a result of information delivered by U.S. officials to Hong Kong authorities and that Washington requested that the ship be searched. However, this claim has not been independently verified and neither U.S. nor Hong Kong officials have commented substantively on the detention of either ship. Diplomatic sources have hinted that the seizure of North Korean vessels is being used to pressure

Pyongyang. At press time, both ships remained in Hong Kong pending safety improvements.[15]

South Korea's government has been reticent to implement tough sanctions against the North, fearing repercussions and instability. However, on October 26, 2006, Seoul announced that it would be implementing a travel ban on North Korean officials as well as controls on financial transactions that could be linked to Pyongyang's WMD programs.[16] The South Korean government also announced plans to expand its participation in the Proliferation Security Initiative (PSI), although presidential advisor Song Min-sun noted that the enhanced involvement would never involve measures "leading to a sea blockade of North Korea." [17]

Sources: [1] "NTI Website Resources on North Korea," Updated October 26, 2006, Nuclear Threat Initiative (NTI) website, <[http://www.nti.org/e\\_research/e3\\_special\\_northkorea.html](http://www.nti.org/e_research/e3_special_northkorea.html)>. [2] UN Security Council Resolution 1718, October 14, 2006, <<http://daccessdds.un.org/doc/UNDOC/GEN/N06/572/07/PDF/N0657207.pdf?>>. [3] "Security Council Condemns Democratic People's Republic of Korea's Missile Launches, Unanimously Adopting Resolution 1695 (2006)," UN Department of Public Information, July 15, 2006, <<http://www.un.org/News/Press/docs/2006/sc8778.doc.htm>>. [4] Bloomberg News, "U.N. Blocks Items from N. Korea," *Philadelphia Inquirer*, November 2, 2006, <<http://www.philly.com>>. [5] "Letter dated 13 October 2006 from the Permanent Representative of France to the United Nations addressed to the President of the Security Council," UN Security Council Document, S/2006/814, October 13, 2006. This document had as an attachment the NSG guidelines published as International Atomic Energy Agency document INFCIRC/254/Rev.8/Part I (dated March 20, 2006). [6] "Letter dated 13 October 2006 from the Permanent Representative of France to the United Nations addressed to the President of the Security Council," UN Security Council Document, S/2006/815, October 13, 2006.

This document has as its annex the MTCR "Equipment, Software and Technology Annex". [7] "Letter dated 1 November 2006 from the Chairman of the Security Council Committee established pursuant to resolution 1718 (2006) concerning the Democratic People's Republic of Korea (DPRK) addressed to the President of the Security Council," UN Security Council Document, S/2006/853, November 1, 2006. This document superseded document S/2006/816 which is mentioned in UNSCR 1718. The attachment to S/2006/853 includes a list of "other WMD" relevant items, namely chemical and biological related items control by the Australia Group. [8] "Japan Decides on New Sanctions against N. Korea," Jiji Press Ticker Service, October 11, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>. [9] "Japan Won't Halt Sanctions against North Korea," Deutsche Presse-Agentur, November 1, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>. [10] "China Quietly Applies Pressure to Cut Off DPRK Military's Financial Resources," Sing Tao Huan Chiu Wang (Hong Kong-based Internet News Service), October 18, 2006; in OSC Document KPP20061025032002. [11] Yang Jung A, "Less Than \$300,000, NK Investment in China," *The Daily NK* (online news service of North Korean Democracy Network), October 26, 2006, <<http://www.dailynk.com/english>>. [12] "Suspension of Loans for DPRK Investment: Moves of Freezing Funds Spreading: China's Major Bank Branch," Jiji Web, October 25, 2006; in OSC Document JPP20061026038001. [13] "Aeroflot Office in N. Korea Fails to Transfer Money via Chinese Bank," ITAR-TASS, October 25, 2006, <<http://www.tass.ru/eng>>. [14] Joseph Kahn, "China May Be Using Oil to Press North Korea," *New York Times* online edition, October 31, 2006, <<http://www.nytimes.com>>. [15] Greg Torode, "The Tide of Affairs," *South China Morning Post*, October 28, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>. [16] Tanalee Smith, "South Korea Announces Sanctions against North, Despite Warning from Communists," Associated Press, October 27, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>. [17] Yonhap News Agency, "South Korea Sends Delegates to Observe PSI Exercise," BBC Worldwide Monitoring, October 29, 2006; in Lexis-Nexis Academic Universe, <<http://www.lexis-nexis.com>>.



## Special Report

### After More Than A Year, High Seas Safety Convention Amendments to Ban WMD Shipments Await Ratification

By Leah Kuchinsky, Research Assistant, Center for Nonproliferation Studies

More than a year ago, on October 14, 2005, the International Maritime Organization (IMO), the specialized maritime agency of the UN Security Council, adopted a number of U.S.-backed proposals amending the 1988 *Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation* (hereafter, “2005 SUA Amendments”).[1] According to their proponents, once the 2005 SUA Amendments are in force, they will significantly expand the international legal basis for combating weapons of mass destruction (WMD) proliferation by restricting transportation of WMD commodities and by criminalizing WMD terrorism occurring at sea. Specifically, the amendments broaden the list of offenses set forth under the 1988 SUA Convention and establish a new enforcement mechanism in the form of an expanded regime authorizing the boarding of ships engaged in terrorist acts involving WMD, or carrying WMD cargoes or related commodities. Although the new rules will be legally binding only on states that choose to ratify the 2005 SUA Amendments, as the number of adherents grows, an increasing proportion of global shipping will be subject to the new restrictions. This could narrow transport options for states like North Korea and Iran, who often use the commercial vessels of other states for transporting WMD-related commodities.

Currently, 142 states are party to the underlying 1988 SUA Convention. The 2005 amendments to the convention will go into effect once 12 member countries have ratified them.[1] To date, ten countries have signed the amendments—Australia, Austria, Bulgaria, France, Finland, Norway, Portugal, Sweden, Turkey, and the United States—but none have ratified.[2] Thus, the new 2005 rules have yet to enter into force.

#### Background

The SUA Convention was originally drafted in 1988 in response to the 1985 *Achille Lauro* hijacking, which demonstrated inadequacy in the international legal system with regards to acts of terrorism carried out on commercial vessels on the high seas. [Editor’s Note: *The Achille Lauro incident occurred in October 1985 when members of the Palestine Liberation Front hijacked an Italian cruise ship, killed a Jewish-American citizen on board, and sailed the ship to an Egyptian port after the promise of safe passage to Tunisia. The hijackers were ultimately intercepted by U.S. military planes en route to Tunisia and forced to land at a NATO airbase in Italy, but the Italian government refused to secure their custody or extradite them.*][3] The 1988 SUA Convention outlawed “the seizure of ships by force; acts of violence against persons on board ships; or the placing of

devices on board a ship which are likely to damage or destroy it.” The convention contains explicit “prosecute or extradite” provisions, which seek to avoid international disputes over how incidents involving alleged terrorism at sea are handled.[4] The 1988 SUA Convention did not however prohibit acts of terrorism committed from ships—such as the release of biological, chemical, or radiological substances—that did not directly endanger safe navigation; nor did it restrict the transport of WMD, WMD delivery systems, or related commodities.[3]

#### New Amendments

After the September 2001 terrorist attacks in New York and Washington, D.C., the UN Security Council encouraged the IMO to review the safety of international shipping.[5] In November 2001, IMO member states agreed that a better mechanism was needed to ensure the security of ships at sea. The United States took the lead in proposing fresh legal and technical measures.[6]

At an October 2005 IMO meeting, member states voted to amend the original SUA Convention in order to expand the list of offenses it proscribed. With regard to unconventional weapons, the 2005 amendments make it an “offense” for any person to use against a ship, on a ship, or discharge from a ship any radioactive material or biological, chemical, or nuclear weapon, for the purpose of intimidating a population or to compel a government or an international organization to do or abstain from doing any act. The amendments additionally outlaw the transport aboard ships of:

- Any radioactive material, knowing that it is intended to be used to cause death or serious damage for the purpose of intimidating a population or to compel a government or an international organization to do or abstain from doing any act;
- Any biological, chemical, or nuclear weapon;
- Nuclear materials and nuclear-specific equipment controlled under the Guidelines of the 45-member Nuclear Suppliers Group, knowing that the commodity is going to be used for nuclear explosives or in any other activity not under inspection by the International Atomic Energy Agency (IAEA); or
- Any equipment, materials, software, or related technology that significantly contributes to the design, manufacture, or delivery of a biological, chemical or nuclear weapon, with the intention that it will be used for this purpose.[7]

The amendments also provide that parties “shall cooperate to the fullest extent possible to prevent and suppress” these and other unlawful acts listed in the amendments.[8]

In order to enforce the new prohibitions, the 2005 amendments assert that when “law enforcement or other authorized officials of a State Party” (the requesting state) encounter a ship flying the flag of another State Party (the flag state) and the requesting state has reasonable grounds to suspect that the ship or a person on board the ship is involved in an offense, then the requesting state may ask the flag state for permission to board the vessel. If permission is granted, the requesting state can then board the ship, search it, and question those on board as to whether an offense has been committed. If an offense has been committed, the requesting state can then ask the flag state for permission to “detain the ship, cargo, and persons on board pending receipt of instructions from the flag state.”[9]

The requirement for the flag state to grant permission before a requesting state may board a vessel reflects the effort by the drafters of the 2005 SUA Amendments to ensure that the new provisions of the convention remained consistent with the basic rules of the UN Convention on the Law of the Sea, which protect the sovereignty of flag state vessels on the high seas. Under the amendments, however, state parties can voluntarily consent to allow the boarding of their ships by a requesting state to proceed automatically if there is no response from the flag state within four hours.[10]

Similarly, other provisions of the 2005 SUA Amendments declare that nothing in them shall alter the rights, obligations, and responsibilities of parties to the nuclear Nonproliferation Treaty (NPT), the Chemical Weapons Convention (CWC), or the Biological and Toxin Weapons Convention (BTWC).[11] It is, therefore, not an offense under the 2005 SUA Amendments for NPT-recognized Nuclear Weapon States (China, France, Russia, the United Kingdom, and the United States) to transport nuclear weapons or related commodities on commercial vessels. The NPT also allows for the transfers of nuclear materials and nuclear-specific equipment, provided that the commodities are placed under IAEA inspection in the recipient state. Consequently, the transfer of such commodities under these conditions is not considered an offense under the 2005 amendments. The CWC prohibits parties from exporting chemical weapons and regulates exports of precursor chemicals, banning exports of some to countries that are not party to the Convention. The transport of precursor chemicals whose export is permitted under the CWC would not be an offense under the 2005 SUA Amendments. The BTWC similarly bans the transfer of biological weapons, but allows transfers of biological agents for peaceful purposes. Thus, transport of the latter would not be an offense under the amendments.

The 2005 amendments complement the U.S.-led Proliferation Security Initiative (PSI), which seeks to interdict WMD-related transfers transported by land, air, or sea.[12] The PSI is an informal arrangement which, according to U.S. estimates, is supported by over 70 nations. Interdictions of WMD-related cargoes coordinated among PSI participating states utilize respective national legal authorities of partner nations and relevant international law and frameworks.[13] With respect to their geographic area of jurisdiction—the high seas—the 2005 SUA Amendments go beyond the PSI by creating a new legal code, including an expanded set of international offenses and a mechanism for preventing and/or punishing such offenses. In contrast, existing legal authorities, such as national export control laws or shipping regulations, provide the basis for interdictions only under the PSI.

#### Limitations and Criticisms

As noted earlier, since the 2005 SUA Convention amendments are binding only on states that have ratified the underlying 1988 convention and protocol and the 2005 modifications, nations that have not signed these instruments—such as Iran and North Korea—are not bound by them. Although these limitations raise questions about the ultimate efficacy of the amended SUA Convention, supporters argue that having known proliferators remain outside the strengthened regime does not negate the effectiveness of the new amendments. Citing North Korea as an example, the head of the U.S. delegation to the October 2005 IMO negotiations noted that Pyongyang has a small, inferior, commercial shipping fleet and must therefore rely on ships flagged to other countries to transfer military-related materials. This may allow authorities to gain access to ships carrying WMD-related commodities for a proliferating country by obtaining permission of the flag state to board under the new SUA rules.[14] Other experts have also argued that the amended SUA Convention is a useful political tool for establishing a universally accepted code of conduct that can be used to pressure hold-outs to conform to international maritime security norms.[15]

Partly in reaction to the treatment of the NPT in the 2005 SUA Amendments, India and Pakistan, both signatories to the original SUA Convention and Protocol, have refused to sign on to the 2005 amendments. Although both of these countries possess nuclear weapons, neither is recognized as a Nuclear Weapon State under the NPT because their first nuclear detonations occurred after January 1, 1967. Because they are not NPT-recognized Nuclear Weapon States, the sea transport to India and Pakistan of nuclear weapons and of nuclear commodities that will not be placed under IAEA safeguards is an offense under the 2005 SUA Amendments. India and Pakistan have therefore asserted that the revised agreement gives the five NPT-recognized Nuclear Weapon States “privileged status.”[16] Although the amended convention was written so as to “protect nuclear commerce between non-NPT states (e.g., India and Pakistan) and NPT parties (e.g., the United States or Germany) so long as the nuclear material, if

destined for a non-NPT party, will be under IAEA safeguards in that country,” if India and Pakistan signed the amended version, they could find their strategic nuclear programs to be potential targets of the new SUA interdiction rules.[17]

Critics of the 2005 SUA Amendments also point out that the ship-boarding regime is completely dependent upon the flag state consenting to a boarding request—consent that may not necessarily be granted. As noted above, states can voluntarily provide “automatic” boarding privileges. However, capacity issues and sovereignty concerns are likely to limit the number of states that will take this voluntary measure. Furthermore, while the amendments criminalize the transport of items intended for WMD programs, the nature of dual-use items often make it difficult (if not impossible) to conclusively prove intent.[18] An even more fundamental challenge is the need for requesting states to obtain timely and credible information as to the existence of a suspect cargo, which it can use as the basis for a boarding request.

#### Current Status and Outlook

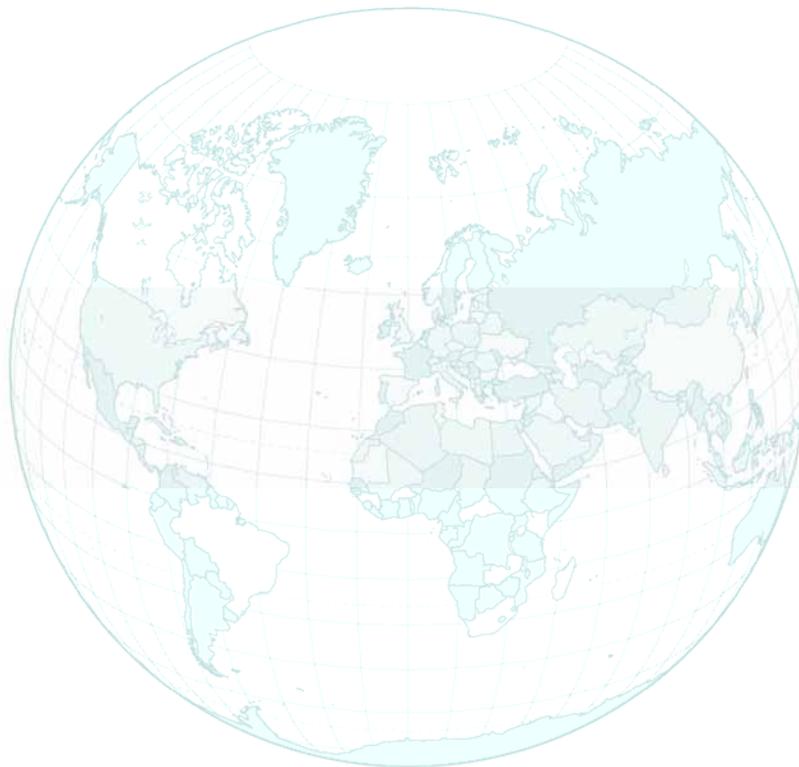
142 states are party to the 1988 Convention, representing 92 percent of world shipping tonnage, and 132 states are party to the 1988 Protocol, representing almost 88 percent of world offshore platform capacity. Given that there are 166 IMO member states, these figures represent a majority of the IMO membership and relatively universal participation in these agreements when compared to many other maritime conventions. [Editor’s Note: For a list of the current state parties the 1988 SUA Convention and SUA Protocol, see <[http://www.imo.org/Conventions/mainframe.asp?topic\\_id=248](http://www.imo.org/Conventions/mainframe.asp?topic_id=248)>.] While these figures are encouraging, it remains to be seen if the 2005 amendments will be as popular as the original convention and protocol. As noted above, only ten states have signed the amended SUA Convention and Protocol since the agreements were opened for signature in February 2006, and none have ratified. The amendments are far from the entry-into-force requirement of 12 ratifications. The requirement for individual state parties to criminalize the expanded list of offenses may also spell more delays in implementing the new amendments. [Editor’s Note: It is worth noting that under the original SUA Convention, there was only one known case in which the treaty provided the basis for a ship boarding at sea that resulted in a successful prosecution. According to U.S. Coast Guard Lieutenant Commander Brad Kieserman, in March 2002, the U.S. Coast Guard intercepted a Seychelles-flagged ship staffed by Chinese citizens off the coast of Hawaii and subsequently discovered the murder of two of the crew members by the vessel’s cook.][3]

Supporters of the amendment argue, however, that the 2005 SUA Amendments have been open for signature for only 10 months and many expect that additional states will sign the amendments in the near future. U.S. officials claim that the necessary ratifications to bring the amendments into force will be forthcoming within the next two years. In the meantime,

supporters argue, relevant progress is being made in interdicting suspected WMD-related materials through PSI, whose membership and potential effectiveness continues to grow rapidly.

Sources: [1] *Protocol of 2005 to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation*, IMO document LEG/CONF.15.21, November 1, 2005. For a review of the underlying SUA Convention, see, “Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, 1988,” International Maritime Organization website, <[http://www.imo.org/Conventions/mainframe.asp?topic\\_id=259&doc\\_id=686](http://www.imo.org/Conventions/mainframe.asp?topic_id=259&doc_id=686)>. The protocol adopted at the same time as the 1988 Convention and incorporated into it, extends the Convention to offshore oil and gas platforms. [2] Author’s e-mail correspondence with Chris Young, Senior Legal Officer in the IMO Sub-division for Legal Affairs, December 2006. [3] Brad Kieserman, “Preventing and Defeating Terrorism at Sea: Practical Considerations for Implementation of the Draft Protocol to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA),” *Recent Developments in the Law of the Sea and China*, in John Norton Moore, et al., eds. (Martinus Nijhoff Publishers: Leiden, The Netherlands, 2006). As noted by Kieserman, the SUA Convention does not extend to “warships, ships owned or operated by a state when being used as a naval auxiliary or for customs or police purposes or ships that have been withdrawn from navigation or laid up.” [4] Catherine Zara Raymond, “Governments Meet to Strengthen Maritime Security Legal Measures,” Institute of Defence and Strategic Studies (Singapore) website, October 27, 2005, <<http://www.ntu.edu.sg/idss/publications/Perspective/IDSS752005.pdf>>. [5] “International Conference on the Revision of the SUA Treaties,” Opening Statement by Efthimios Mitropoulos, Secretary-General of the International Maritime Organization (IMO), October 10, 2005, IMO website, <[http://www.imo.org/Circulars/mainframe.asp?topic\\_id=1042&doc\\_id=5302](http://www.imo.org/Circulars/mainframe.asp?topic_id=1042&doc_id=5302)>. [6] Richard Shaw, “Terrorism and Wrecks Dominate Talks: The Latest Session of the IMO Legal Committee, which looked at anti-terrorism clauses, wreck removal and the detaining of innocent crew,” *Lloyd’s List*, May 18, 2005; in Lexis-Nexis Academic Universe <<http://www.lexisnexis.com>>. [7] Paraphrase of Amended SUA Convention, Article 3 bis. The 2005 SUA Amendments modify and add text to the original 1988 SUA Convention. For convenience, references to the amendments are numbered as they would appear in the amended version of the convention. These references will begin with “Amended SUA Convention.” [8] Amended SUA Convention, Article 8 bis, paragraph 2. [9] Amended SUA Convention, Article 8 bis, paragraph (5)(b). [10] Amended SUA Convention, Article 8 bis, paragraph (5)(d). [11] Amended SUA Convention, Article 2 bis, paragraph (3). The portion of Article 2 bis, paragraph (3) referring to the NPT and Article 3 bis, paragraph (2), which also refers to the NPT, are together informally known as the “NPT savings clause.” See also, “Ship-boarding: An Effective Measure Against Terrorism and WMD Proliferation?” A Summary of the Discussion of the International Laws Discussion Group at Chatham House, November 24, 2005, <<http://www.chathamhouse.org.uk/pdf/research/il/LP241105.doc>>. [12] “Proliferation Security Initiative,” U.S. Department of State, <<http://www.state.gov/t/np/c10390.htm>>; “Statement of Interdiction Principles,” U.S. Department of State, September 4, 2003, <<http://www.state.gov/t/isn/rls/fs/23764.htm>>. [13] “The Proliferation Security Initiative (PSI): A Record of Success, testimony by Stephen G. Rademaker, Assistant Secretary of State for Arms Control,” U.S. House of Representatives, Committee on International Relations, Subcommittee on International Terrorism and Nonproliferation, June 9, 2005, <<http://www.state.gov/t/ac/rls/rm/47715.htm>>. [14] Linda Jacobson, Assistant Legal Advisor in Office of Diplomatic Law and Litigation at the U.S. State Department, July 12, 2006, telephone interview with author. [15] Lt. Commander Brad Kieserman, U.S. Coast Guard, Legal Operations Group, July 14, 2006, telephone interview with author. [16] Andreas Persbo and Ian Davis, “Sailing Into Unchartered Waters,” BASIC website, June 2004, <<http://www.basicint.org/pubs/Research/04PSIsum.pdf>>. [17] “Protocols to the UN Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation and A Draft Protocol to the Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf: Comments on Counter-terrorism, Non-proliferation and Boarding Provisions,” International Conference on the Revision of the SUA Treaties, Agenda item 6.1 (LEG/CONF.15/14), September 22, 2005,

<<http://www.state.gov/t/isn/trty/58319.htm>>. [19] Wade Boese, "Treaty Amended to Outlaw WMD at Sea," Arms Control Today, December 2005, <[http://www.armscontrol.org/act/2005\\_12/Dec-WMDsea.asp](http://www.armscontrol.org/act/2005_12/Dec-WMDsea.asp)>.



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