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OVERVIEW

Stopping the smuggling and illegal transfer of nuclear materials, technology, and equipment continued to be the major challenge for the international nonproliferation regime from November 1995 through January 1996.

Reported incidents of nuclear materials theft in the former Soviet Union were particularly plentiful during this period; however, many of the cases involved substances not directly usable in nuclear weapons or as nuclear fuel (i.e., cesium, thorium, osmium, and strontium). None of the reported incidents involved HEU or plutonium. Also significant was the fact that, in at least two cases, the smuggled materials originated from mining facilities in Russia and Kazakhstan, rather than from facilities that have been recipients of material protection, control, and accounting (MPC&A) assistance under U.S. Cooperative Threat Reduction and lab-to-lab initiatives.

Other attempted smuggling cases—two of which involved the seizure of kilogram quantities of uranium—included the arrest of a South Korean citizen in Russia and the apprehension of a customs inspector in Kazakhstan. In one reported case, the smuggled uranium appears to have originated in Lithuania. In other cases and reports, Austria, Central Asia, the Czech Republic, Italy, Poland, Switzerland, and Turkey were identified or implicated as transit routes for smuggled nuclear materials.

The need for continued efforts to improve MPC&A in the former Soviet Union was underscored when IAEA investigators determined that approximately 75 kg (instead of the registered amount of 15 kg) of HEU was in storage at the Kharkiv Physics & Technology Institute in Ukraine. The discovery of a small quantity of cesium, which had been concealed in Moscow’s Izmailovsky Park by Chechen separatists, also demonstrated the poor state of nuclear waste storage facilities in Russia; a nuclear waste site in Grozny has been implicated in the incident. The Izmailovsky Park incident also raised concerns over possible future terrorist acts involving radioactive substances.

UNSCOM analysis of documents released by Baghdad in 8/95 revealed that Iraq acquired classified blueprints and components for the powerful TC-11 gas centrifuge from German technician Karl-Heinz Schaab. The centrifuges, stolen from Urenco affiliate MAN Technologie, were to be installed in a cascade at the Rashdiya Engineering Design Center.
Revelations that the Japanese cult Aum Shinrikyo sought nuclear technology and material from Russia, nuclear-related equipment from the United States, and natural uranium from Australia provided further causes for concern.

Fearing that Iran is trying to acquire illicit nuclear materials or technology clandestinely, the United States continued its opposition to the Russian-Iranian agreement to complete the Bushehr nuclear power plant. Furthermore, opponents of the recently signed U.S.-Euratom nuclear cooperation treaty claim that by granting “long-term advanced consent” on the transfer of U.S.-origin nuclear material to Euratom members, the United States weakened its ability to influence the trade of nuclear fuel for nonproliferation purposes substantially. The proposed sale of Russian HEU to members of the European Union only highlights this concern. Other nuclear materials trade during this period included uranium transfers from Kazakhstan to Belgium and from Russia to Lithuania. Russia continued its cooperation with France on the development of a fast-reactor to burn high plutonium-content fuels, and with the United States on the development of a gas turbine-modular helium reactor (GT-MHR) that would be used for the same purpose.

In other developments, a sodium coolant leak at Japan’s Monju fast breeder reactor threatened to derail Japan’s nuclear recycling program. Bowing to popular anti-nuclear pressures, the Japanese Science and Technology Agency has reconsidered its plutonium usage policy and changed the design plans for the Rokkasho-mura reprocessing plant.

In November, China released its “White Paper on Arms Control and Disarmament,” in which it denied ever having sold weapons of mass destruction to other countries and chided the other nuclear weapon states for practicing discriminatory arms control policies. In the meantime, Iranian officials said that their deal with China to purchase two 300 MW reactors was still alive, but Chinese officials denied this. The Chinese did, however, say they intended to continue cooperating with Iran on nuclear energy development.

The close of the year marked an important milestone in the North Korea-KEDO (Korean Peninsula Energy Development Organization) negotiations. In mid-December, after prolonged debate over issues such as auxiliary facilities, a contract for the supply of two light water reactors was signed. Immediately upon signing the deal, however, both sides issued warnings about potential problems in its implementation. One ongoing obstacle is funding for the transfer of heavy oil to North Korea. The United States has begun to cast about for financing from, among others, the European Union and the Middle East. Negotiations on this and other issues continue.

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NOTE:
A date marked with an “*” indicates that an event was reported on that date; a date without an “*” is the date when an event actually occurred.

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