

# Global Threat Reduction Initiative

## FACT SHEET

### Introduction:

- On May 26, 2004, U.S. Secretary of Energy Spencer Abraham announced the Global Threat Reduction Initiative at the International Atomic Energy Agency (IAEA) in Vienna, Austria.
- The Global Threat Reduction Initiative is intended to build international support for national programs to identify, secure, recover and/or facilitate the disposition of vulnerable, high-risk nuclear and other radioactive materials around the world– that pose a threat to the international community – *as quickly and expeditiously as possible*.
- To ensure success of the Global Threat Reduction Initiative, participating countries and the IAEA will work closely with each other on planning, implementation, and coordination.
- As we embark on this initiative, we need to ensure that the world continues to enjoy the peaceful uses of the atom – in energy, medicine, agriculture, industry, and basic research – while working diligently to minimize any dangers.
- The Global Threat Reduction Initiative builds on several existing, successful programs with our international partners.
  - The United States of America, the Russian Federation, and the International Atomic Energy Agency are already working together on several major programs that are important components of the Global Threat Reduction Initiative. They include the Russian Research Reactor Fuel Return Program, the Reduced Enrichment for Research and Test Reactors Program, and the Tripartite Initiative to secure high-risk nuclear and other radioactive materials.
  - The Global Threat Reduction Initiative is consistent with and reinforces the G-8 Global Partnership Initiative. Under the Global Partnership, several countries are cooperating with Russia and other former Soviet states on projects to secure high-risk nuclear and radioactive materials.
  - The Global Threat Reduction Initiative is also consistent with the revised IAEA Code of Conduct on the Safety and Security of Radioactive Sources, and the recently finalized IAEA Guidance on the Import and Export of Radioactive Sources, and supports the IAEA Model Project for upgrading radiation protection infrastructures.

- The Global Threat Reduction Initiative essentially consists of two main objectives:
  - One is global nuclear material threat reduction by minimizing and, where possible, eliminating the use of high enriched uranium in civil applications by converting research reactors to low enriched uranium and securing, returning or recovering vulnerable nuclear material.
  - The other is global radiological threat reduction by securing and/or removing at-risk radioactive sources.

### **Global Nuclear Material Threat Reduction**

- U.S. global nuclear material threat reduction programs under the Global Threat Reduction Initiative include the following:

#### *U.S. Foreign Research Reactor Spent Nuclear Fuel Acceptance Program*

- First, the U.S. Department of Energy will take the necessary steps to accelerate and complete the repatriation of U.S.-origin research reactor spent fuel under the U.S. Foreign Research Reactor Spent Nuclear Fuel Acceptance Program. This voluntary program has identified about 20 metric tons of U.S.-origin spent fuel in more than 40 countries that are eligible to be returned to the United States. These countries received U.S.-origin fuel under the “Atoms for Peace” program.

#### *Reduced Enrichment for Research and Test Reactors (RERTR) Program*

- Second, the U.S. Department of Energy will accelerate conversion of the cores of 105 civilian research reactors, where feasible, that use highly enriched uranium to low enriched uranium.
  - The U.S. has already converted or is in the process of converting 39 out of the 105 civilian research reactors located in the United States and 40 other countries.
  - The U.S. has a responsibility to convert its own domestic research reactors. To this end, 11 U.S. civilian research reactors have already been converted from the use of HEU to the use of LEU fuel. In addition, the U.S. has committed to complete the conversion of the remaining of its domestic civilian research reactors by 2013.
  - The U.S. intends to accelerate its efforts to convert research reactors both domestically and internationally. Specifically, it intends to convert another third of the 105 targeted reactors – those that can convert using currently available fuels – over the next 4-5 years.

- The Reduced Enrichment for Research and Test Reactors (RERTR) program supports the long-standing U.S. policy of reducing and, to the extent possible, eliminating the use of highly enriched uranium (HEU) in civilian research reactors.

#### Russian Research Reactor Fuel Return Program

- Third, the U.S. and the Russian Federation will continue to work closely with the International Atomic Energy Agency under the Russian Research Reactor Fuel Return program to accelerate repatriation of all fresh and spent Soviet / Russian-origin nuclear fuel that currently resides at more than 20 research reactors in 17 countries.
  - As part of these acceleration efforts, all Russian-origin fresh HEU fuel will be returned to Russia by the end of 2005 and all Russian-origin spent nuclear fuel will be repatriated to Russia by 2009.

#### Nuclear Material Not Currently Covered Under Existing Threat Reduction Efforts

- Fourth, at-risk nuclear and other radioactive materials that are not currently covered under existing threat reduction efforts – the so-called “gaps – will be addressed by working cooperatively with the international community.

### **Global Radiological Threat Reduction**

- U.S. radiological threat reduction programs that come under the Global Threat Reduction Initiative include the following:

#### U.S. Radiological Threat Reduction Program

- First, the U.S. focuses significant attention on securing sealed radioactive sources that are at risk within the United States. Under the U.S. Radiological Threat Reduction program – which is now a part of GTRI – the United States has recovered over 10,000 sealed radioactive sources within the US since 1997.
  - This program recently surpassed a Congressionally-mandated goal to recover 5,000 sources in the 18-month period from October 2002 to March 2004 by recovering 5,529 sealed radioactive sources.

### The Radiological Security Partnership

- Second, the U.S. is accelerating its efforts to implement the Radiological Security Partnership that involves the U.S., the IAEA, and countries outside of the former Soviet Union.
  - In March 2003, at the International Conference on the Security of Radioactive Sources held in Vienna, Austria, Secretary of Energy Abraham announced the Radiological Security Partnership (RSP) to address “the potential threats from under secured high-risk radioactive sources”.
  - The Radiological Security Partnership, in partnership with the IAEA, jointly engages with other countries throughout the world to mitigate the risk posed by radioactive materials that could be used as a radioactive dispersal device (RDD).
  - To date, the Radiological Security Partnership has engaged nearly 40 countries by assisting them with improving the security of their high-risk radioactive materials. These efforts are consistent with the revised IAEA Code of Conduct on the Safety and Security of Radioactive Sources and the recently finalized IAEA Guidance on the Import and Export of Radioactive Sources, and they support the IAEA Model Project for upgrading radiation protection infrastructures.

### Regional Radiological Security Partnerships

- Third, the U.S. will continue to establish Regional Radiological Security Partnerships. This program is implemented by working cooperatively, on a regional basis, with other countries in their efforts to reduce the proliferation and terrorist threat posed by radioactive material.

### The Tripartite Initiative

- Fourth, the U.S. will work closely with the Russian Federation and the International Atomic Energy Agency under the Tripartite Initiative to conclude our efforts recover and secure lost or under-secured sources including radioisotope thermoelectric generators (RTGs) in the states of the former Soviet Union.

## Recent Accomplishments

- Prior to the establishment of the Global Threat Reduction Initiative, by working with the IAEA, the Russian Government, and a number of partners under the Russian Research Reactor Fuel Return program, this program was successful in repatriating to Russia 48 kilograms of fresh HEU fuel from Serbia, 14 kilograms of fresh HEU from Romania, 17 kilograms of fresh HEU from Bulgaria, and nearly 17 kilograms of HEU from Libya's research reactor.
- Since the Global Threat Reduction Initiative was announced on May 26, 2004, efforts have been underway to further intensify programs with international partners.
- Regarding global nuclear material threat reduction, since the Global Threat Reduction Initiative was announced in May, we have accomplished the following:
  - On May 27, 2004, U.S. Secretary of Energy Abraham and Director of the Russian Federation Federal Atomic Energy Agency Rumyantsev signed a Government-to-Government Agreement on the Russian Research Reactor Fuel Return program.
    - Under this Agreement, more than a dozen countries are eligible to receive financial and technical assistance from the United States and others to ship their fresh and spent research reactor fuel to Russia for safe and secure management.
  - On June 14, the U.S. Department of Energy officially established the Office of Global Threat Reduction within the National Nuclear Security Administration to facilitate implementation of this initiative.
  - On July 19, the United States and Romania signed an implementing agreement to facilitate the return of Russian-origin spent HEU fuel to Russia.
  - On August 5, Germany returned U.S.-origin material from three research reactors to the U.S.
    - This shipment included 126 spent nuclear fuel assemblies of U.S.-origin composed of highly enriched uranium and low enriched uranium and took place in the framework of the existing U.S. Foreign Research Reactor Spent Nuclear Fuel Acceptance Program. This program, which supports the return of U.S.-origin spent nuclear fuel for foreign research reactors to the United States, has been integrated as a key element into the Global Threat Reduction Initiative.

- Regarding radiological threat reduction, since the Global Threat Reduction Initiative was announced in May, the following GTRI-related efforts have been accomplished:
  - The United States, under its domestic radiological threat reduction program, recovered over 90 high-risk sources from over 20 facilities. In addition, the program was expanded to address the recovery of cesium sources and two large cesium sources were recovered under this program.
  - In cooperation with the International Atomic Energy Agency and the Government of Greece, the U.S. provided radiation detection equipment to detect and deter illicit trafficking of nuclear and other radioactive materials through ports or across international borders and provided technical support to protect against the theft of large, high-risk radioactive materials located within Greece that could be used for terrorist purposes leading up to or during the Olympic Games.
    - Security enhancements were made at 16 sites that currently use high-activity sources.
    - All upgrades were completed in June 2004 and remain in place after the Olympic Games.
  - The U.S. worked with the Government of Lithuania to implement comprehensive security enhancements at five oncology clinics in Lithuania that consist of teletherapy units with Cobalt-60 sources.
    - In addition, a security and monitoring system was installed at an abandoned radioactive waste repository, and search and recovery efforts at 41 former Soviet military and industrial sites were completed.
  - In Estonia, the U.S. is working with the IAEA and Russia under the Tripartite Initiative to recover and transport high-risk sources within the former Soviet Union.
    - In June 2004, numerous high-activity sources were transported to a more secure location in Estonia.
  - In Moldova, the U.S. funded the construction of a new, national storage facility for high-risk radioactive sources that was completed in July. This facility now securely stores highly radioactive materials along with abandoned sources from throughout the country.
- These are just a few of the recent successful efforts that have already been implemented under the Global Threat Reduction Initiative. Numerous others are in the planning stages.

## **The GTRI International Partners' Conference**

- The Global Threat Reduction Initiative International Partners' Conference will be held in Vienna, Austria, on September 18-19, 2004.
- The dates and venue for the conference have been chosen to take advantage of attendance of senior officials at the IAEA Board of Governors meeting (September 13-17, 2004) and the 48<sup>th</sup> Annual IAEA General Conference (September 20-24, 2004)
- The International Partners' Conference is co-sponsored by the Government of the United States of America and the Government of the Russian Federation, and is supported by the International Atomic Energy Agency.
- The purpose of the GTRI International Partners' Conference is to:
  - Build international support for national efforts to identify, secure, recover, and/or facilitate the disposition of high-risk nuclear and other radioactive materials that pose a threat to the international community
  - Acknowledge that vulnerable, high-risk nuclear and radioactive materials pose a potential threat to our collective security and that all states share the objective to help reduce that threat,
  - Begin to build the framework for increased and closer cooperation with the IAEA and its Member States to further mitigate this mutual threat
  - Encourage all Member States to participate actively in this global threat reduction effort, through agreement to return, recover, remove or secure materials, through financial and/or technical contributions, or through in-kind assistance, on a voluntary basis or as circumstances and national resources permit.
- It is envisioned that Findings of the Conference would be issued at the conclusion of the conference.
- During the conference, keynote addresses will be delivered on Saturday, September 18 beginning at 4:00 p.m. by the United States (U.S. Secretary of Energy Abraham) and the Russian Federation (Director of the Russian Federation Federal Atomic Energy Agency Rumyantsev) as well as remarks by Dr. ElBaradei, Director General of the IAEA. The following morning, Sunday September 19, beginning at 10:00 a.m., there will be several presentations by international partners.
  - Romania, France, Australia, and Japan will each make a short presentation on their recent threat reduction activities.

**Conclusion:**

- With the urgent threat before us of vulnerable nuclear and other radioactive materials throughout the world, the responsibility falls on all of us to rise to the occasion and do our part.
- We all need to work together to take necessary action to do everything possible to prevent terrorists from acquiring nuclear and radioactive materials.

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