



NUCLEAR SECURITY SUMMIT 2014

NATIONAL PROGRESS REPORT

KAZAKHSTAN

Kazakhstan fully supports and shares the aims of the Nuclear Security Summits and exerts all efforts at national and international levels for effective implementation of the decisions of the Washington and Seoul Summits. For the last four years, the Republic of Kazakhstan has been actively engaged in their implementation and achieved substantial progress in this course.

Since 2010, the Commission on Non-Proliferation of Weapons of Mass Destruction under the President of the Republic of Kazakhstan is functioning and oversees all issues related to nuclear security. The focus of its work is to maintain control over nuclear materials and raw uranium and strengthen the system of export, customs and border control.

LEGAL BASIS

Kazakhstan considers it essential to develop and strengthen the international legal basis of nuclear security and has a strong record in this area. We acceded practically to all Conventions pertaining to nuclear security. In 2011, Kazakhstan ratified the Amendments to the Convention on the Physical Protection of Nuclear Materials. We call upon all countries to take urgent measures for their ratification in order for the Amendments to come into force as soon as possible.

On the national level, Kazakhstan is working on the new edition of the Law of the Republic of Kazakhstan “On the Use of Nuclear Energy”, which contains a definition of nuclear security. One of subordinate legal acts will be the adoption of the new edition of “The Rules of Physical Protection of Nuclear Materials and Nuclear Facilities”, which complies with provisions of the International Atomic Energy Agency’s (IAEA) document INFCIRC/225/Rev.5 and other IAEA documents on nuclear security.

The Republic of Kazakhstan officially confirmed its acceptance of The Code of Conduct on the Safety and Security of Radioactive Sources and has created a national register of ionizing radiation sources. Our export legislation complies with recommendations of the IAEA on the control of exports and imports of radioactive sources. The revised Law “On the Use of Nuclear Energy” will strengthen the state control system over nuclear materials and other sources of ionizing radiation. Kazakhstan has been working on developing the concept of handling orphaned radioactive sources and on elaborating the draft “Law on Radioactive Wastes”, which will take into account the recommendations of the IAEA and the experience of other countries.

INTERNATIONAL ATOMIC ENERGY AGENCY

Kazakhstan has a strong belief in the benefits of international cooperation. In this context, we acknowledge the IAEA’s leading role in ensuring global nuclear security and supporting international initiatives in regard to nuclear security. Kazakhstan took an active part in the International Conference on Nuclear Security, organized by the IAEA in Vienna in 2013.

We support the IAEA activities to strengthen nuclear security in the member states of the Agency, including through voluntary contributions to the IAEA Nuclear Security Fund. The IAEA conducted a mission to assess the system of physical protection of nuclear materials and facilities (IPPAS) at the Ulba Metallurgical Plant. We continue to work on the implementation of its recommendations at the enterprise and the national level.



PROVIDING SECURITY OF NUCLEAR MATERIALS

In November 2010, in cooperation with the Russian Federation, the United States, the United Kingdom and the IAEA, Kazakhstan conducted a unique operation for the transportation and safe storage of spent nuclear fuel from the world's first fast breeder reactor BN-350. The implementation of this one-year project, unprecedented in scale, ensured the security of nuclear material, which could have been sufficient for the production of hundreds of nuclear bombs, thus a significant contribution to international security and nuclear non-proliferation has been made.

Spent nuclear fuel of the fast breeder reactor BN-350 has been placed in long-term safe storage and its reliable physical security is ensured.

HEU-LEU

Kazakhstan removed spent nuclear fuel from the research reactor VVR – K, which contained HEU. The remaining fresh fuel with HEU left at the closed reactor BN-350 and stored in the Nuclear Physics Institute in a bulk form was processed into LEU-containing material at the Ulba Metallurgical Plant.

A project to convert the research reactor VVR-K of the Nuclear Physics Institute from HEU to LEU is underway. New fuel assemblies with LEU have been developed and tested. The critical experiments facility of the Nuclear Physics Institute (zero power reactor) have been fully converted to operate with the new LEU fuel. Work has been initiated to explore the possible conversion of two research reactors at the Institute of Atomic Energy to operate with LEU. We have conducted theoretical research and calculations and created experimental samples of the new fuel for the reactors.

ACCOUNTING AND CONTROL OF RAW URANIUM

Kazakhstan is the largest producer of uranium in the world. A reliable system of accounting and controlling raw uranium is vital to strengthen all levels of nuclear security. The National Atomic Company "Kazatomprom", with the support of the IAEA and the U.S. Department of Energy, is implementing a pilot project to introduce such system, and we are ready to share the results of our joint efforts.

EMERGENCY PREPAREDNESS

A national plan to respond to nuclear accidents, which takes into account issues of nuclear safety and security, has been adopted. Similarly, the safe management of spent nuclear fuel and radioactive waste is reflected in the draft Law of the Republic of Kazakhstan "On Radioactive Wastes".

TRANSPORTATION SECURITY

An IAEA mission was conducted to assess the safety of transportation of nuclear and other radioactive materials. We are working on an Action Plan to implement its recommendations. New rules for the transportation of nuclear and other radioactive materials are being developed, which will incorporate provisions of the IAEA documents. Provisions of these documents, as well as the Code of Conduct on the Safety and Security of Radioactive Sources, are observed during international shipments of nuclear and other radioactive materials.

PREVENTION OF ILLICIT TRAFFICKING OF NUCLEAR MATERIALS

Kazakhstan participates in the IAEA Database on illicit trafficking. With the support of the U.S. Government, the Second Line Defense Program is being implemented. Within this program, checkpoints at the borders of Kazakhstan have been equipped with radioactive materials control systems.

Kazakhstan law enforcement authorities cooperate with international organizations such as Interpol, Europol and others to prevent illicit trafficking of nuclear and other radioactive materials.

Work on the development of nuclear forensics is underway. The National Atomic Company "Kazatomprom" and Nuclear Physics Institute are working on the establishment of a database on the characteristics and methods for defining the origins of nuclear materials.



INFORMATION SECURITY

Kazakhstan puts considerable effort into enhancing the protection of sensitive information pertaining to use of nuclear energy. We observe the provisions of the documents of various international organizations, including the Resolution of the General Conference of the IAEA on Nuclear Security (GC (55) Res/10) and Resolution 174 of the International Telecommunications Union.

NUCLEAR SECURITY CULTURE AND PROFESSIONAL TRAINING

Kazakhstan is working to strengthen the development of a nuclear security culture. Seminars and training courses on nuclear security have been conducted and the staffs of nuclear enterprises participate in international seminars and courses.

Professional training of personnel is among the primary factors in establishing a culture of nuclear security. In cooperation with the U.S. Department of Energy, a project to establish the Kazakhstan Nuclear Security Training Center has been launched. In addition to courses in accounting, control and physical protection, and the application of international safeguards, the program will include the issues of combating illicit trafficking of nuclear material, as well as strengthening the nuclear non-proliferation regime.

EXPORT CONTROL

As a member of the Nuclear Suppliers Group and Zangger Committee, Kazakhstan improves the efficiency of the export control system to prevent the transfer of illegal nuclear materials and technologies and acts of nuclear smuggling. At the legislative level, we have introduced requirements for enterprises operating in the nuclear fuel cycle to establish internal compliance systems.

A project to establish an Identification Center on nuclear materials has been launched.

INTERNATIONAL COOPERATION

Committed to the principle of equal access to peaceful nuclear energy, Kazakhstan supported the idea of establishing the IAEA LEU Bank.

Kazakhstan is currently conducting negotiations with the IAEA on the Host Country Agreement. The establishment of the bank will be an important contribution to the peaceful use of nuclear energy, nuclear security and strengthening the non-proliferation regime.

In cooperation with the UN Security Council Committee, a seminar entitled "Contribution of Resolution 1540 (2004) to regional and global disarmament and non-proliferation process: dedicated to the 10th Anniversary of Resolution 1540" was held in Astana, Kazakhstan on 11-12 March 2014.

Together with the Russian Federation and the United States, the work to improve nuclear security in the territory of the former Semipalatinsk nuclear test site is underway. The major part of the project on eliminating the test infrastructure has been completed. The work on strengthening physical barriers and the system of physical protection of sensitive areas of the site is under completion.

Under the agreement between Kazakhstan and Japan, the project on strengthening nuclear security at the Ulba Metallurgical Plant and the Nuclear Physics Institute is being implemented. The project will strengthen the physical protection of Kazakhstan's nuclear facilities and thus contribute to global nuclear security.

REGIONAL COOPERATION

In order to strengthen regional security Kazakhstan proposed, within the framework of the Treaty on a Nuclear-Weapon-Free Zone in Central Asia (signed in 2006 in Semipalatinsk), to elaborate a multilateral Treaty on strengthening nuclear security, preventing illicit trafficking of nuclear materials and combating nuclear terrorism.



KAZAKHSTAN'S PROPOSAL

We encourage the implementation of mechanisms to promote the shift in the commercial nuclear sector to non-HEU technologies. These mechanisms primarily relate to a system of economic incentives that would promote the ideas of the Summit with regard to minimizing the use of HEU in the civilian sector.

In developing these systems, it is important to carefully examine the possible impact on the market of key isotopes and other consequences in order not to put the current situation at risk. We believe that it is impossible to convince the commercial sector to use non-HEU technologies just by common proclamations and it is important for governments to take practical steps to achieve this goal.