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The Evolution of the Kazakstan Export Control System: The Critical Role of Technical Expertise

by

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Introduction

The U.S. Department of Energy (DOE) Nuclear Transfer and Supplier Policy Division is sponsoring technical cooperative agreements between Kazakstani partners and U.S. National Laboratories. Those agreements allow Kazakstan to make both political and technical advances in their nuclear export control policy. Kazakstan has shown a very serious commitment to nonproliferation ever since its independence and the subsequent rapid closing of the Semipalatinsk test site in 1991. The experience Kazakstan had with the test site, which was one of the more active in the world, has largely shaped its strong commitment to global nonproliferation.

Kazakstan has taken seriously its responsibility for nuclear nonproliferation. Some of the many examples of that commitment are the complete disarmament of all inherited nuclear weapons, the 1994 signing of the Treaty on Nonproliferation of Nuclear Weapons, the completion of a full-scope safeguards agreement with the IAEA, and the transfer of 600 kg of highly enriched uranium to the United States through Project Sapphire. These actions all exhibit a strong Kazakstani devotion to nuclear nonproliferation. Moreover, there are a variety of programs dealing with the very sensitive and important topic of material protection, control, and accounting (MPC&A) for the many nuclear sites within Kazakstan.

Nuclear Export Control

One topic that originally received less attention than some of the above issues was control over the export of nuclear-related commodities and technologies, including International Atomic Energy Agency Trigger List and Dual-use items. This oversight was largely due to the nature of the changes going on inside the Kazakstani state structure. In the first years of independence, Kazakstan had much to deal with as a new state. It largely took its cues on some of the sensitive nuclear nonproliferation matters from foreign countries. States such as the Russian Federation, the United States, Japan, and many West European states provided assistance and also made clear their expectations that Kazakstan would cooperate in nuclear nonproliferation. Based on those promotional types of behaviors from many of the states with whom Kazakstan desired both good political and economic

relationships, Kazakstan made its commitment to nuclear nonproliferation as clear as it could after the internal policy choice had been made.

However, one item that had largely been overlooked in favor of broader nonproliferation goals was that of nuclear export control. Therefore, discussions opened between Los Alamos National Laboratory (LANL) and the Atomic Energy Agency of the Republic of Kazakstan (KAEA) to work cooperatively in those matters, thus opening the door for the technical cooperative agreements existing today. Technical cooperation with Kazakstan on nuclear export control began in earnest in June 1995, when DOE and LANL conducted a technical workshop in Almaty for government representatives and technical experts. Workshop discussion of technical cooperation on export controls led to technical cooperative agreements (also known as Lab-to-Lab programs) in April 1996 among LANL, Argonne National Laboratory, and the National Nuclear Center, Institute of Atomic Energy (NNC/IAE), the hub of Kazakstan's technical expertise. The primary objective of the technical cooperation agreements is to promote technical analysis within the Kazakstan export control system. Such technical exchanges foster scientific cooperation and facilitate communication between scientific institutions and government entities.

The discussions proved to be quite fruitful because of the tremendous concern shown by the KAEA, in cooperation with the NNC/IAE, to provide effective export control for the various nuclear-sensitive items in Kazakstan. The Kazakstani institutions felt the need to establish a long-term system that would effectively manage and guarantee the safe and responsible trade of nuclear-sensitive items for Kazakstani enterprises.

Largely at the behest of the KAEA and NNC/IAE, serious thought was given to what type of cooperative arrangement would best suit Kazakstan while meeting the goals of the U.S. DOE, which was interested in establishing systems of nuclear export control in many of the Newly Independent States of the Soviet Union. For Kazakstan, the goal of such an agreement could bring expertise, prestige, and the promise of long-term success for their commitment to nuclear export control.

Technical Cooperation

Until 1992, Kazakstan had never been forced to deal with the licensing of any goods, including nuclear ones. Having been a republic of the Soviet Union, Kazakstani enterprises merely worked within the structure of a controlled economy where all export decisions were made by central authorities in Moscow. Independence brought new responsibilities in that Kazakstan's enterprises would be forced to submit to export controls. A new challenge had thus arisen, and for nuclear goods, the choice was clear: Kazakstan wanted to ensure that goods were controlled for nonproliferation and national security purposes, with the only remaining question being how best to accomplish that goal.

Kazakstan saw the American experience and technical advice as critical to success. Because no one who would be working on such issues had ever been closely involved in the processes before, Kazakstan was interested in learning all it could from the United States. Most important was to set up a system that controlled nuclear items according to Western standards. That system would allow not only for solid controls but also for broadened export opportunities with states that are more free to trade liberally with countries that have relatively higher developed systems of export control.

It would be unrealistic to think that there are not opponents of a stronger export control system in Kazakstan. Many doubts abound in various ministries, as well as within the state firm responsible for nuclear products, KATEP. The KAEA and NNC/IAE see as one of their primary goals conversion of opponents to nuclear export control. The opponents are wary of export control for many reasons. They fear that it will serve to restrict trade by setting unnecessary limitations. They also fear that their markets will be limited by living up to Western standards in not trading with "pariah" states such as India and Pakistan, which are important trading partners for many Kazakstani enterprises. Such economic concerns can be expected. Therefore, a primary goal of the relationship is to convince export control opponents that eventually export control will improve trade relations with those states that are most active in the nuclear trade arena: members of the Nuclear Suppliers Group (NSG).

Another goal of the existing cooperative program is technical. One of the main weaknesses in the Kazakstani export control system is lack of technical input into the process. None of the organizations involved in nuclear licensing have previous experience necessary to fully analyze nuclear licenses. The organization that comes closest to having appropriate expertise is the KAEA, but often further technical consultations would be very beneficial to clarify the technical specifications of a given product, the intended end use, or some other detail.

The aforementioned cooperative agreements are working toward establishing a system of technical cooperation to facilitate technical review of license applications between KAEA and IAE. Involving technical expertise in a country's export control system is extremely important. Technical experts augment and complement national export control systems by reviewing technical aspects of nuclear export licenses; analyzing and assessing control lists to ensure that commodities and technologies are controlled or decontrolled properly; and providing specific information to policy makers on specific technologies. Moreover, technical experts can regularly brief government officials on nonproliferation matters, as is done by the U.S. scientific community. Such technical support not only improves the process itself but also shows trading partners that the process is technically sound and being run properly. Such information reduces some of the concerns that may exist in trading with a state without thorough export control procedures.

Role of Technical Bodies

Creating an effective link between scientific institutes and government entities responsible for issuing nuclear licenses is a key element in the licensing process. One point of reference that is useful is the export control system in the Russian Federation. Russia's export control system is better established as it possesses a legal and regulatory framework, a licensing system which involves the generally accepted relevant agencies, and Russia is a member of the NSG. MINATOM, the Ministry of Atomic Energy in Russia, has recently identified specific scientific institutes that will advise MINATOM officials on technologies and commodities on national and international control lists, perform technical review of nuclear-related export applications, and develop training courses and seminars to educate technical experts and governmental representatives on the role of technical expertise in export control.

Kazakstan does not have as developed a system of scientific institutes under its auspices as does MINATOM in Russia, although the extensive expertise in Kazakstan which can serve a role similar to the type of institutes identified in Russia. Because of the important role in the nuclear fuel cycle given to Kazakstan in the days of the Soviet Union in uranium production and enrichment, fuel pellet production, and nuclear testing, a very high quality of nuclear-relevant technical institutes continue to operate. One such example is the large nuclear complex in Kurchatov city, the location of the aforementioned nuclear test site facility.

A part of this complex, the National Nuclear Center, Institute of Atomic Energy (NNC/IAE) is working with Los Alamos National Laboratory and Argonne National Laboratory to support effective nuclear export controls in Kazakstan. In the past year, NNC/IAE has built a very strong relationship with the KAEA, one of the agencies that reviews nuclear licenses in Kazakstan. The close collaboration between these two entities has had very positive effects in that it has given each entity a chance to see the capabilities and knowledge of the other entity. The KAEA is now fully aware of the technical assistance and the specific technical experts who can provide support to them on nuclear-related commodities and technologies. The NNC/IAE is now aware of nuclear licensing regulations, laws, decrees and nuclear nonproliferation policy.

One of the most successful joint ventures between KAEA and NNC/IAE was a seminar in January 1997 titled "Export Controls and Nonproliferation." Intended for Kazakstani government officials and scientists, the seminar focused on issues such as the nuclear industry in Kazakstan, international nonproliferation, principles of nuclear export control, enforcement of export controls, and nuclear export licensing. The scope of the task included the design, development, implementation, and evaluation of training materials and the delivery of the training materials at the seminar. The seminar proved to be especially successful in showing other relevant government bodies the relationship forged between the KAEA and the NNC/IAE, as well as in promoting the new concept of technical involvement in the licensing process. In addition, the Kazakstanis have developed a list of

indigenous firms, companies, industries, and institutions that produce and/or export NSG-controlled commodities; prepared a study detailing proliferation potential of Kazakstani exports; written a report on Kazakstan's export control process, including a proposed plan to integrate NNC/IAE technical expertise into the export control process by cooperating jointly with the KAEA; and identified a core NNC/IAE technical team able to support KAEA and other governmental agencies on nuclear export control matters.

Conclusion

Kazakstan is quickly developing an effective export control system. Although the development has been fast, more impressive is the cadre of people from the government and scientific institutes who are inclined to continue the rapid pace.

In the future, the technical cooperative agreements will continue to bring about success for the U.S., Kazakstan, and the international nonproliferation community as a whole. Continued seminar development and workshops on technical issues of export control, continued collection of data for informational computer databases to assist licensers in Kazakstan, and full implementation of the plan to integrate the NNC/IAE into the KAEA nuclear export control licensing procedures are some of the many ways that the cooperation building between U.S. national laboratories and the NNC/IAE and KAEA are helping Kazakstan to build a more solid system of controlling nuclear-related exports. Eventually that control will help achieve the worthy goals of economic development and nuclear nonproliferation for Kazakstan.