

# International Nuclear Export Control Program

*Office of Export Control Policy and Cooperation  
National Nuclear Security Administration*



## ORGANIZATIONAL CONTEXT

*The U.S. Department of Energy's National Nuclear Security Administration (NNSA) works with the U.S. Departments of State, Commerce, and Defense, the intelligence community, and others to advance U.S. nonproliferation objectives.*

*The NNSA is the lead technical organization in the U.S. system of nuclear export controls. The NNSA's Office of Export Control Policy and Cooperation consists of three teams. The Licensing Team reviews U.S. export licenses for proliferation concerns and regulates U.S. nuclear technology transfers under the Atomic Energy Act. The Multilateral Team supports U.S. export control diplomacy and participation in multilateral nuclear export control regimes. The Export Control Assistance Team manages the International Nuclear Export Control Program (INECP) described in the following pages.*



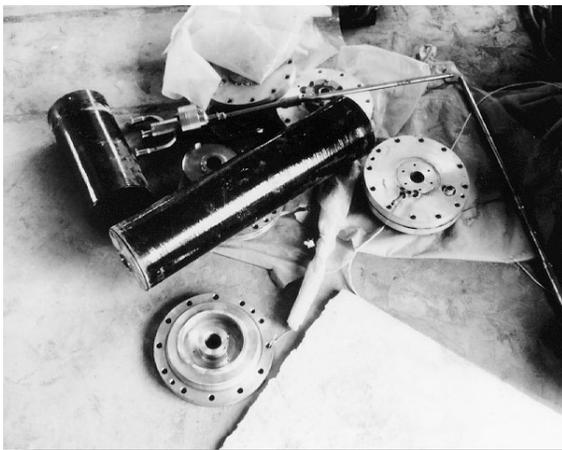
*U.S. national laboratories are a national resource on nuclear issues. Their combined talents and qualifications are embedded in the U.S. export control system and are an important asset to the INECP.*

# THE CHALLENGE

## *Preventing Nuclear Proliferation*



*Nuclear export controls must meet the challenge posed by the unprecedented availability of proliferation-sensitive materials, equipment, and technology, together with intense demand for them by proliferators.*



*These gas centrifuge components found in Iraq are used for uranium enrichment, a process that separates weapons-usable uranium from natural uranium. Effective nuclear export control systems cover components such as these and other equipment, materials, and technologies that can be used to develop nuclear weapons.*

Preventing the spread of nuclear weapons is an urgent global challenge. Underdeveloped controls in Soviet successor states, the globalization of high-tech industries, and the determined pursuit of nuclear capabilities by Iraq, Iran, and possibly terrorist groups intensify the threat.

Export controls are a cornerstone of the international nuclear nonproliferation effort. For decades, the United States and the international community have championed "rules-of-the-road" to regulate the use and supply of materials, equipment, and technology that could contribute to the proliferation of nuclear weapons capabilities and nuclear materials, including highly enriched uranium (HEU) and plutonium (Pu).

Strengthening export control practices worldwide is a U.S. government priority. Within the U.S. Department of Energy's National Nuclear Security Administration (NNSA), the Office of Export Control Policy and Cooperation administers the International Nuclear Export Control Program (INECP). INECP is one element of a larger set of U.S.-sponsored export control and border security assistance activities supported by the U.S. Departments of State, Commerce, Defense, the U.S. Customs Service, and others.

## MISSION

Prevent proliferation by working with governments worldwide to develop effective national systems of nuclear export control

Drawing on the expertise resident in NNSA and the U.S. Department of Energy's national laboratories, the INECP establishes partnerships with former Soviet and other foreign governments to develop the infrastructure needed to control proliferation-sensitive commerce without unduly restricting legitimate nuclear-related trade. The underlying goal is to minimize the risk of significant export control failures involving nuclear and nuclear-related equipment, materials, and technologies.

The partnerships between NNSA and its counterparts in the technical agencies, institutes, and organizations of cooperating governments advance the mission by promoting transparency and indigenous nuclear

export-control competencies. Through these partnerships, the INECP is helping to advance broader adherence to nonproliferation export control norms and strengthening multilateral export control regimes.

Sustainability is critical to the mission. In the face of a continually shifting international environment and emerging threats, this is as important for states with underdeveloped export controls as it is for advanced industrial states having decades of nonproliferation experience.



*Meeting of the Technical Experts Working Group (TEWG). The TEWG brings together technical experts in nuclear export control from Russia, Ukraine, Kazakhstan, and the United States to collaborate, share lessons learned, and address common challenges.*



# GOALS

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Effective systems of nuclear export control consist of three distinct but mutually reinforcing elements — licensing procedures and practices, industry compliance, and enforcement.

## GOAL 1

**Improve Licensing Procedures and Practices**

Effective export controls require a transparent and standardized national licensing system and competent technical review of proposed transfers of nuclear-related materials, equipment, and technologies. These reviews must take into account national laws, international obligations, and proliferation risks associated with the item or technology involved, as well as the reliability of the end-user and intermediate consignees.

## GOAL 2

**Promote Industry Compliance**

Industry awareness and compliance are prerequisites for the success of any nation's system of nuclear export control. Promoting government-industry communication and establishing procedures for industry to regulate the export of controlled commodities are, therefore, key INECP goals. The INECP, in coordination with the outreach activities of the U.S. Department of Commerce, promotes industry use of internal compliance programs and other tools-of-the-trade to reinforce export control "best practices" at facilities that produce nuclear-related commodities.

## GOAL 3

**Strengthen Enforcement Capabilities**

The last line of defense in export controls is a government's ability to prevent illicit shipments while facilitating legitimate commerce. Weaknesses in this area are a leading proliferation risk today. This risk is particularly acute for states engaging in significant transshipment trade. In collaboration with other U.S. agencies, NNSA, through the INECP, provides tools that enable customs personnel, border guards, and other officials in partnering countries to enforce their national nuclear export control requirements.

The strategies needed to achieve the INECP's three goals fall into the nine strategic working areas shown below and vary according to such factors as a country's industrial base and export capability, trading partners and patterns, and geostrategic location. As a result, INECP develops plans adjusted to match the specific capabilities and requirements of each particular country.

## GOAL 1

Improve Licensing Procedures and Practices

### REGULATIONS AND CONTROL LISTS

- Assist in establishing organizational structures and procedures in partner countries to implement nuclear export control laws and regulations.

### REVIEW PROCESS AND TOOLS

- Promote routine referral of nuclear and nuclear-related license applications to appropriate experts for assessment of end-uses and end-users.
- Support communications, license-related data processing, commodity identification, and consistent decision making with computer-based information systems and technical guides.

### MULTILATERAL REGIMES

- Train industry and government officials on nuclear export practices and multilateral regime requirements, including appropriate controls on tangible and "intangible" technology.<sup>1</sup>
- Conduct joint technical studies and promote regular exchanges among experts.

## GOAL 2

Promote Industry Compliance

### GOVERNMENT OUTREACH PROGRAMS

- Assist national agencies in establishing dedicated industry outreach programs to inform nuclear suppliers of national export control laws, policies, and regulations.

### NUCLEAR SUPPLIER ASSISTANCE

- Identify all potential nuclear suppliers in country.<sup>2</sup>
- Support translation and dissemination of nuclear export control lists, guides, and other technical documentation to nuclear suppliers.

### INTERNAL COMPLIANCE PROGRAMS

- Work with national agencies in establishing and tailoring internal compliance programs in nuclear suppliers to promote adherence to export control laws and regulations.<sup>3</sup>
- Assist in the implementation of internal compliance programs by nuclear suppliers.

## GOAL 3

Strengthen Enforcement Capabilities

### TRAINING

- Promote nuclear nonproliferation and export control awareness within customs and border guard organizations.

### RESOURCES AND TOOLS

- Develop curricula, technical guides, electronic libraries, and related technical tools to assist enforcement officials in identifying nuclear and nuclear-related materials, equipment, and technologies.
- Create nuclear commodity identification inspection teams capable of supporting and training inspectors and interfacing with technical experts.

### PROCEDURES

- Encourage the integration of technical, legal, and regulatory entities into inspection procedures conducted by front-line customs and border guard officials.
- Establish regional partnerships to promote information sharing and cooperation.

<sup>1</sup> "Intangible" technology transfers present some of the most serious proliferation challenges, involving know-how (or "know-why") rather than tangible goods. Moreover, technology can be exported easily via intangible means, such as fax, internet, e-mail, conferences, foreign visits to domestic companies or facilities, or foreign travel by domestic experts.

<sup>2</sup> Nuclear suppliers are defined as entities that supply nuclear and nuclear-related materials, equipment, and technologies.

<sup>3</sup> An internal compliance program is a set of formalized policies and procedures implemented by enterprises to ensure their adherence to export control laws and regulations.

# EXPERIENCE AND MEASURES

INECP assistance progresses along a series of incremental and mutually reinforcing steps. Program evaluation is critical to this process. The INECP uses a methodology to assess work accomplished against the nine strategic working areas. These evaluations indicate effectiveness and reveal areas requiring increased attention.

## Assessment and Examples of Progress toward Effective Systems of Nuclear Export Control in Selected Countries

<p style="text-align: center;"><b>RUSSIA</b></p> <p>The radar chart for Russia shows progress in nine strategic working areas: Industry Compliance (government outreach programs, nuclear supplier assistance, internal compliance programs), Licensing (regulations and control lists, review process and tools, multilateral regimes), and Enforcement (enforcement resources and tools, training programs, enforcement procedures). The chart is mostly yellow, indicating partial progress.</p>	<ul style="list-style-type: none"> <li>• Conducted 13 regional and four site-specific workshops for nuclear enterprises and government representatives.</li> <li>• Developed and held three training courses for RF Customs Academy students and officers.</li> <li>• Carried out eight technical and policy exchanges.</li> <li>• Completed two joint technical studies on Russia's control lists and proliferation indicators.</li> <li>• Developed numerous reference and outreach tools, such as an <i>Exporters Handbook</i> and an <i>Electronic Directory of Exporters</i>.</li> </ul>
<p style="text-align: center;"><b>UKRAINE</b></p> <p>The radar chart for Ukraine shows progress in nine strategic working areas: Industry Compliance (government outreach programs, nuclear supplier assistance, internal compliance programs), Licensing (regulations and control lists, review process and tools, multilateral regimes), and Enforcement (enforcement resources and tools, training programs, enforcement procedures). The chart is mostly yellow, indicating partial progress.</p>	<ul style="list-style-type: none"> <li>• Provided a dedicated computer-based communication system linking technical experts to the licensing authorities.</li> <li>• Conducted two major conferences and two workshops for nuclear suppliers.</li> <li>• Completed studies and held workshops to increase awareness of nuclear technology transfers from Ukrainian nuclear institutes.</li> <li>• Launched a program to train and equip customs inspectors to identify nuclear-related commodities.</li> <li>• Established a web site at a Ukrainian NGO to provide export control information to Ukrainian exporters.</li> </ul>
<p style="text-align: center;"><b>KAZAKHSTAN</b></p> <p>The radar chart for Kazakhstan shows progress in nine strategic working areas: Industry Compliance (government outreach programs, nuclear supplier assistance, internal compliance programs), Licensing (regulations and control lists, review process and tools, multilateral regimes), and Enforcement (enforcement resources and tools, training programs, enforcement procedures). The chart is mostly yellow, indicating partial progress.</p>	<ul style="list-style-type: none"> <li>• Carried out six training seminars for government officials, nuclear experts, and nuclear suppliers.</li> <li>• Initiated a regional workshop for Central Asian States.</li> <li>• Developed a dedicated computer-based communication system that links the technical experts with licensing authorities.</li> <li>• Reviewed Kazakhstan's export control lists relative to multilateral norms, supporting their efforts to join the Nuclear Suppliers Group.</li> <li>• Analyzed the proliferation potential of Kazakhstan's nuclear-related exports.</li> </ul>

■ Degree of accomplishment

These plots depict progress toward fulfillment of the success measures in each country. When the entire figure for a country is green, all of the strategies will have been accomplished, and the nuclear export control system will be effective and sustainable.

# STRATEGIC DIRECTIONS

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*“INECP is designed to meet a changing international environment and new nonproliferation requirements. Given the vast nuclear infrastructure in Russia and the Newly Independent States, intensifying our cooperation and attaining effective and sustainable export controls in these countries is an early priority. But as the terrorist attacks on September 11, 2001, make clear, dangers once thought abstract — nuclear terrorism or runaway proliferation — are increasingly real. To address these dangers, INECP will use its experience and expertise to build new partnerships and improve export control practices in emerging nuclear suppliers and states engaging in significant transshipment trade.”*

*Adam M. Scheinman/Director  
Office of Export Control Policy and Cooperation*

For more information, contact:  
Todd Perry/INECP Team Leader  
Office of Export Control Policy and Cooperation  
National Nuclear Security Administration  
1000 Independence Avenue  
Washington, D.C. 20585