

## **SUSTAINING EFFECTIVE PHYSICAL PROTECTION REGIME**

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Russian Federation is a party to the Convention on Physical Protection of Nuclear Material and Nuclear Facilities and has been actively contributing to its universalization. Russia was one of the first countries to ratify the Amendment to the Convention and fully supports one of its fundamental provisions: the responsibility for the establishment, implementation and maintenance of a physical protection regime within a state rests entirely with that state. No state or international organization has a right to set its requirements to physical protection regime of another country.

Fundamental principles stipulated by the amended Convention assist in development and sustaining effective physical protection of nuclear material and nuclear facilities for peaceful purposes internationally. We call upon the Secretariat to continue facilitating adherence to the Convention and the Amendment in the countries that have not joined it yet.

In the Russian Federation, appropriate and effective physical protection regime is established and maintained. In our country, all aspects of the national physical protection regime during usage, storage and transportation of nuclear material are elaborated. National physical protection regime in the Russian Federation is based on fundamental principles stipulated in the Amendment:

- Independent competent authority is established and provided with adequate authority, competence and resources - Federal Environmental, Industrial and Nuclear Supervision Service (Rostekhnadzor);
- Legislative and regulatory framework to govern physical protection is established: relevant laws and regulations are adopted, applicable physical protection requirements are developed;
- Coordination system between governmental institutions and nuclear facilities is organized what allows for fast and effective response to nuclear security events;
- It is stipulated by law that the prime responsibility for the implementation of physical protection of nuclear material or of nuclear facilities rests with the holders of the relevant licenses; licensing system is established;
- Nuclear security culture is maintained on a high level;
- Process of threat assessment for each nuclear facility is defined;
- Requirements for physical protection of different categories of nuclear materials are based on graded approach;
- Defence in depth is established at all nuclear facilities;
- Quality assurance programme and personnel training programme are established and implemented;
- Contingency (emergency) plans are developed and regularly updated;
- System of protection of the information confidentiality is developed and implemented.

Establishment of physical protection regimes in countries embarking on nuclear energy programmes requires special attention. We highlight that the IAEA plays a central role in coordination of international cooperation and providing technical support to its Member States, upon their requests, in building their national physical protection regimes.

Russian experts actively participate in the IAEA activities, including:

- Nuclear Security Guidance Committee (NSGC);
- Advisory Group on Nuclear Security (AdSec), International Nuclear Security Network (INSEN), International Network of Nuclear Security Support Centres (NSSC);
- The IAEA Missions (IPPAS, INSSP);
- Working groups, including working groups on development of the IAEA recommendation documents;
- Technical, consultancy and expert meetings, coordinated research projects;
- Conferences, workshops, training courses.

From the perspective of the State Corporation ROSATOM, key areas of international cooperation include:

- Improvement of the quality of training in the field of nuclear security;
- Assistance in the development of nuclear infrastructure to newcomer countries, including the field of nuclear security and physical protection;
- Provision of integrated proposal of nuclear facility construction including physical protection system to foreign partners.

As a responsible vendor of nuclear technologies for newcomer countries, the State Corporation ROSATOM offers organizational and methodological support in assessment and development of all elements of nuclear infrastructure in these countries, including the field of nuclear security and physical protection. The State Corporation ROSATOM provides assistance in the field of nuclear security to embarking countries upon their request through active participation of Russian experts in the IAEA activities, as well as through coordination of the project implementation financed by Russian voluntary contribution to the IAEA Nuclear Security Fund. The State Corporation ROSATOM has necessary experience and methodological approach in order to assist newcomer countries with assessment of their national physical protection regime, as well as development of the required legal and regulatory framework, personnel training and conducting other activities that are crucial for establishing and maintaining of physical protection regime.

The State Corporation ROSATOM possesses many years of experience in capacity building and professional training in the field of nuclear security and physical protection. Rosatom Technical Academy extensively cooperate with the IAEA on human resource development in the field of nuclear security and assistance to newcomer countries in terms of training courses and workshops.

Training programmes and training materials are based on a systematic approach to training, requirements of the Convention on the Physical Protection of Nuclear Material and its Amendment, the IAEA recommendations in the field of nuclear security and Russian extensive experience in the field. Advanced training base of Rosatom Technical Academy allows training on a wide range of topics in the field of physical protection of nuclear and other radioactive materials and associated facilities, ensuring information security in the nuclear industry and other nuclear security aspects. It is important that wide range of engineering and technical means of physical protection is presented at a special Training Complex; moreover, training is designed in order to explain and demonstrate various principles of the construction and functioning of physical protection systems elements in practice to the audience.

From 5 to 10 international and regional IAEA courses and seminars are held annually at the Rosatom Technical Academy; more than 1,100 participants from 67 countries have been trained in 2014-2019. These international and regional events have been developed and aimed at a wide and diverse audience: top management of government bodies and nuclear facilities, management and personnel of state regulatory bodies in the field of security, nuclear security experts and university students.

The State Corporation ROSATOM has distinctive skills, knowledge and resources for physical protection system development for nuclear facilities. In the Russian Federation, approach to development of physical protection system for foreign nuclear facility is elaborated and applied; the approach is based on the IAEA recommendations in the field of nuclear security and takes into consideration Russian vast experience in the field. Foreign partners can choose one of options of physical protection system as a feature to the integrated proposal of Nuclear Power Plant or Centers of Nuclear Science and Technology construction. In the process of physical protection system development, customer's national legislation is taken into consideration.

Moreover, the State Corporation ROSATOM is able to share unique experience in development of physical protection system for small modular reactors. From 25 August to 14 September 2019, we successfully transported floating power unit (FPU) Akademik Lomonosov with two KLT-40C reactor systems from Murmansk to Pevek. On 14 September, FPU Akademik Lomonosov successfully arrived at the port of its permanent location in Pevek, Chukotka, where it is being docked. Physical protection and security of nuclear material and nuclear installations of FPU was provided and ensured; cooperation with competent authorities and response forces was organized. Experience of physical protection and security provision during transportation of FPU will be used by the Russian Federation in future, including international practice.