

Assistance in the Development of the Nuclear Security Infrastructure in Newcomer Countries

The development of nuclear infrastructure in the States embarking on the nuclear power or nuclear research programme is associated with objective difficulties due to the limited national capabilities and competencies. Being responsible vendor of nuclear material and technologies for a number of new overseas nuclear facilities, including nuclear power plants and nuclear science and technology centers, we recognize importance of establishing sustainable national nuclear security regimes in the States. Assistance to States in establishing and maintaining of highly professional, qualified and experienced human resources is one of our priorities.

IAEA is a technical and professional organization that is playing a central role in coordination of international cooperation and providing technical support to its Member States, upon their requests, in building their national nuclear security regimes. In this regard, since 2017, Russian Federation has been providing on annual basis voluntary contributions, in kind and funding, for implementation of TC projects related to nuclear infrastructure establishment. These funds, according to the IAEA-Russian Federation agreement, are being used for training and development of human resources in States that are constructing or planning to construct NPPs. We also assist our partners in building their national capacities through direct, bilateral cooperation. Our bilateral work in establishing of nuclear science and technology centers is an example of our direct assistance to the States. Frequently, such bilateral interactions are considered as more productive, since discussions of issues related to physical protection systems establishment often involve exchange with confidential information.

Within such direct interactions with a foreigner customer, the State Corporation for the Atomic Energy "Rosatom" and Rosatom Technical Academy provide organizational and methodological support in the development of all 19 elements of nuclear infrastructure in newcomer States, including in the field of nuclear security.

In the State embarking on the development of a nuclear security infrastructure, various state authorities and organizations with nuclear security functions are acting or are being created, between which clear coordination mechanisms should be established and their strategic and current tasks and work plans should be defined, taking into account the recommendations and approaches of the IAEA.

Based on our experience of cooperation with some countries, for example, Bolivia, Zambia, CIS countries and other countries, we have developed and offer a model of the nuclear infrastructure of a newcomer country, including in the field of nuclear security. The purpose of the model is to assist decision makers at the national level to plan and implement a national nuclear power programme or a national nuclear research programme, including the creation and development of an effective nuclear security regime, especially at the initial stage of its development. The model is a description of the target status of the State's nuclear security regime, which should ensure the safe and secure creation and development of a national nuclear power programme in the country. In particular, the model presents approaches to the development of a legal and regulatory framework, the creation of technical and human resources with development over time.

In close cooperation with the State - recipient of Russian nuclear technologies, a roadmap is developed containing recommendations for the development of a national legal and regulatory framework, a set of nuclear security organizational and technical measures and systems; it also identifies the organizations responsible for their implementation and the timing for the implementation of the proposed measures and systems according to the IAEA Milestone Approach. Based on the educational and training needs analysis of newcomer countries for the development of staff competencies of various government authorities and organizations with nuclear security functions, Rosatom Technical Academy developed and conducts a number of training courses on nuclear security issues that may be included in the roadmap activities, for example, on the design, operation and inspection of physical protection systems, physical protection of critical facilities, etc.

Key words: nuclear infrastructure, nuclear security, Milestone approach.

Gender

Female

State

Russian Federation

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