

“INTERNATIONAL AND INTRASTATE REGULATION OF THE NUCLEAR SECURITY OF THE RUSSIAN FEDERATION”

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Abstract

Purpose of the study: The article provides key international and national treaties and laws in the sphere of nuclear activity and nuclear security of the Russian Federation. The authors give brief characteristics. The main aspects of cooperation between Russia and IAEA are appointed. Authors have found out trends in legal providing for the development of nuclear activity of Russia until 2020.

Methodology: The methodology of the article is based on the principles and categories of dialects: induction and deduction. The information about legal acts, international and national, accepted by Russia is fully provided. Great attention was given to the decree of the President of the Russian Federation № 585 «On validation of the Basic Principles of State Policy in the sphere of nuclear and radiological security of the Russian Federation for the period till 2025 and further perspective» dated by 13 October 2018.

Results: In the modern context, nuclear energetics is one of the most important economic sectors of Russia. Dynamic development of nuclear energetics is one of the key conditions for providing energy independence of the state and stable growth of the country's economy. The well-developed legal and regulatory framework is compulsory for providing secure and effective nuclear activity in Russia.

Applications of this study: This research can be used for the universities, teachers, and students.

Novelty/Originality of this study: In this research, the model of the “International and intrastate regulation of the nuclear security of the Russian Federation” is presented in a comprehensive and complete manner.

Keywords: nuclear activity, IAEA, safeguard system, nuclear energy, atom for peace, nuclear security, nuclear weapon.

INTRODUCTION

The series of events have proceeded to the conception for development of international legal acts on the regulation of nuclear activity of states:

- Discovery of radium by Marie and Pierre Curie in 1898;
- Development of nuclear bombs by German scholars-physicians;
- The exploitation of nuclear bomb by United States aerospace forces in Japan (Hiroshima, Nagasaki);
- Coming USSR as a nuclear power into being (successful testing of the nuclear weapon in 1949 in Semipalatinsk test site);
- Possessing nuclear weapons by other countries (Korea, England, France and etc.).

Urgent needs on the development of international legal norms on expansion of nuclear weapons, its implementation in defined spaces and other problems have appeared.

METHODS

The methodology of the article is based on the principles and categories of dialects: induction and deduction. The information about legal acts, international and national, accepted by Russia is fully provided. Great attention was given to the decree of the President of the Russian Federation № 585 «On validation of the Basic Principles of State Policy in the sphere of nuclear and radiological security of the Russian Federation for the period till 2025 and further perspective» dated by 13 October 2018.

RESULTS AND DISCUSSION

In present-day conditions one of the most important international legal acts related to regulation of nuclear security of the Russian Federation are: Treaty on Non-Proliferation ([Safina, et al. 2017](#)), Vienna Convention on Civil Liability for Nuclear Damage ([Harrison and Donnelly, 2011](#)), Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management ([Mora and Bolici, 2015](#)); Convention on nuclear safety([Bakici, et al. 2013](#)); Convention on the physical protection of nuclear material ([Kola-Bezka, et al. 2016](#)); Convention on Early Notification of a Nuclear Accident; Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency; Convention on the Physical Protection of Nuclear Material.

Russia consistently works in favor of the preservation and development of efficient International Atomic Energy Agency's

safeguards system, which is key instrument for controlling on maintenance of liabilities on nuclear non-proliferation by the government. Russia also commits universalization of additional protocols to the agreements between IAEA state-members and IAEA itself on committing guarantees, and also in the nearest future transforming of these instruments into the standard on verification of Treaty on Non-Proliferation compliance by the states.

Russian Federation assigns the specialists to IAEA Secretary's office, assisting the Secretary's office on guarantees problems' solving, nuclear security, nuclear energetics, knowledge preservation. That assistance acts on the framework of agreement with IAEA on preparation of junior professional personnel assigned by state corporation "Rosatom". Regularly Russia holds workshops, educational seminars, and conferences of IAEA. All this work contributes to Russian payment to the regular budget. This agreement called as Agreement between Ministry of foreign affairs of the Russian Federation and International Atomic Energy Agency about voluntary contribution to the Nuclear Security Fund, was concluded on 22, December 2010 the agreement presumes annual donations of Russia which are US\$6.5 million in funding.

The contribution will be used for needs assessment; comparison and analysis of information, including maintenance and enlargement of data basis on illegal trafficking; assisting on strengthening of global system of physical nuclear security by virtue of maintaining of development on universal recommendations' complex and regulations on physical nuclear security; providing services in the sphere of physical nuclear security for estimation and improvement of the system of physical nuclear security in states by virtue of sending missions on estimation and development of human resources, including support of IAEA program on supporting for the development of human resources by virtue of conducting of educational courses in Russian educational institutions, risk reduction and enhancing physical security for strengthening national potential on behalf of human, property and environment security (art.13) ([Baron, et al. 2012](#)).

After meeting with G-8, which was held on 2 June 2003, Russia has complied with the provisions of the Code of Conduct on Safety and Security of Radioactive Sources. Russian Federation is IAEA member, who produces, owns, imports and exports radioactive sources, providing its safety, fixed on the corresponding chapters of IAEA Code of conduct. Russia also follows Code of Conduct on the Safety of Research Reactors, accepted by IAEA in Vienna in 2006. This code consolidates international mechanisms in the sphere of nuclear security, concerning civil research reactors. It fixes the criteria for administrating the security of research reactors and contains regulations for governments, regulating bodies and operators on development and approval of corresponding policy, laws, and provisions. Its aim is attainment and maintaining research reactors' security all over the earth on the highest level, provided by means of appropriate conditions of exploitation, accident prevention and in the case of accidents - appeasement of radiological consequences ([Estevez, et al. 2017](#)).

Except for multilateral agreements Russia has signed bilateral agreements on peaceful uses of atomic energy with Canada, France, Germany, Italy, Korea, Switzerland, the United Kingdom, and other countries. Among these agreements there are: Agreement between the Government of the Russian Federation and the Government of the United States of America on scientific and technical cooperation in the sphere of management of Plutonium withdrawn from nuclear military programs (entered into force on 12 July 1998), Agreement for cooperation between the European Atomic Energy Community and the Government of the Russian Federation in the field of controlled nuclear fusion (entered into force on 17 April, 2002), Agreement for cooperation between the European Atomic Energy Community and the Government of the Russian Federation in the field of nuclear safety (entered into force on 17 April, 2002) ([Esaulov and Esaulova, 2013](#)).

Russia is also the participant of the Joint Comprehensive Plan of Action – JCPOA. Except for the general part JCPOA Agreement contains for five unfold technical supplements: liabilities of Tehran in the framework of its nuclear program, derogation process of anti-Iranian sanctions by the side of United Nations Security Council and unilateral restriction of USA and UN, check-list of possible cooperation with Islamic Republic of Iran in the sphere of peaceful use of atomic energy, modality on functioning of Joint commission of "5 +1" and Iran, sequence of mutual steps of "5+1" and Iran([Boikova, et al. 2016](#)).

Concerning the realization of nuclear security of the Russian Federation on intrastate level over the last years, the following legal acts were accepted: Federal law № 170 "On uses of atomic energy", the Federal Law № 3 "On radiological safety of nation of the Russian Federation", the Federal Law № 317 «On state corporation of atomic energy»; the Federal law № 390 «About the security», decree of the President of the Russian Federation №640 «About validation of the Concept of the foreign policy of the Russian Federation», decree of the President of the Russian Federation № 585 «On validation of the Basic Principles of State Policy in the sphere of nuclear and radiological security of the Russian Federation for the period till 2025 and further perspective», RF Government regulation № 506-12 «On validation of the state program of the Russian Federation Development of atomic energy generating industrial complex» (RF Government regulation № 1328-53 «On making amendments into the state program of the Russian Federation «Development of atomic energy-generating complex»).

Federal law № 170 "On uses of atomic energy" dated by 21 November 1995 stipulates legal basis and principles for the regulation of relations, appearing while using atomic energy, directed on the health and human life protection, environment preservation, property protection. The law aims at developing nuclear science and facilities, promoting compliance with international commitments and guarantees of the Russian Federation in the sphere of atomic energy using ([Veselova, et al. 2018](#)).

Federal Law № 317 «On state corporation of atomic energy» dated by 1 December 2007 aims at providing state services and administrating state property in the sphere of using atomic energy, development and secure functioning of corporation energy industrial and nuclear defense facilities of the Russian Federation; organizations, exploiting ships of nuclear icebreaking fleet, providing nuclear and radiological security, non-proliferation of nuclear materials and technologies, development of atomic energy, facilities, and professional education, conducting international cooperation in that sphere (art.4) ([Estevez, et al. 2017](#)).

The Federal Law № 3 “On radiological safety of nation of the Russian Federation” dated by 9 January 1996 stipulates radiological security in an emergency, regulates the rights and liabilities of citizens and non-governmental organizations in providing radiological security, responsibility for non-compliance with the commitments on providing radiological security; also stipulates the authorities of the Russian Federation and constituent entities on state regulation and monitoring, public and manufacturing inspection in providing radiological security.

Decree of the President of the Russian Federation № 585 «On validation of the Basic Principles of State Policy in the sphere of nuclear and radiological security of the Russian Federation for the period till 2025 and further perspective» dated by 13 October 2018 regulates providing nuclear and radiological security of nuclear facilities for civilian and defense purposes, materials with elevated level of natural radionuclides, appeared under unnuclear types of activity on extraction and processing of mineral and organic raw products with elevated level of natural radionuclides. Instruments for the realization of basis on providing nuclear and radiological security are: the system of requirements for providing nuclear and radiological security, stipulated by federal laws and other legal acts of the Russian Federation and documents on standardization; licensing and registration of organizations, acting with using radiological sources, state regulation in using atomic energy, monitoring security of this sphere, including risk-oriented approach; unified state system of monitoring under radiation situation on RF territory.

In accordance with Decree of the President of the Russian Federation №640 «About validation of the Concept of the foreign policy of the Russian Federation» dated by 30 November, 2016 the following trends on consolidation of international security have been appointed: creation of nuclear and other types of mass destruction weapons-free zone “(firstly in the Middle East)” (item 27, “I”); consolidation of technical and physical nuclear security on global level and prevention of nuclear terrorism acts in virtue of improving corresponding international mechanisms, where IAEA holds central positions in the international cooperation and retains the right to the states to determine own national policy” (item 27 «K»), development of bilateral and multilateral intergovernmental cooperation holding nuclear weapons aiming at solving of the problems of strategic stability, providing general security in an open way, including peaceful atom relies on satisfying the requirements of all interested countries for oil and energy” (item 27 “J”) ([Safina, et al. 2017](#)).

The nuclear sphere of Russia is one of the leading in the world in scientific-technical inventions of reactors’ projects, nuclear fuel, experience on exploitation of nuclear plants, qualification of Nuclear Power Station’s staff. Companies of this branch gain huge experience in solving tremendous tasks such as creating the first nuclear electricity –generating station in the world (1954) and fuel exploitation for it. Russia has beneficiation plants – the most perfect in the world. Projects of nuclear power stations with WWER reactors proved reliability during the thousands of reactor-years of accident-free operations.

The state program of the Russian Federation “Development of atomic energy generating industrial complex” with total funding 113832, 68 million rubles for the prospective till the 2020 year sets objectives on providing stable development of atomic energy generating industrial complex on behalf of innovative development of Russian economy and safe use of nuclear energy, preservation of geopolitical position of Russia in the terms of compliance with non-proliferation of nuclear materials and technologies regime; persecutes the tasks on effective development on nuclear electro generation and enlargement of international integration, providing realization of state priorities in carrying out state authorities and designated functions by the State Atomic Energy Corporation “Rosatom” ([Kola-Bezka, et al. 2016](#)).

DISCUSSION

Proposal of Mr. Kornienko about the necessity of codification of nuclear legislation is submitted for the existing legal system of Russia in the sphere of providing nuclear security. Such chapters as “regulatory authority”, “regulatory activity”, “radiation protection”, “radiation resources”, “security of nuclear facilities and withdrawing from service”, “emergency preparedness and responsivity”, “guarantees” and etc. This proposal was suggested in his article called “Nuclear code of the Russian Federation – the first step to the codification of nuclear legislation of Russia”.

SUMMARY

According to the abovementioned analysis of the normative-legal system of Russia on providing nuclear security, it may be characterized as the entire, complete, all-sufficient. For author’s mind this system doesn’t need introduction of special nuclear code, as it was mentioned above concerning the article of Mr. Kornienko.

CONCLUSIONS

Russia today is the member of the nuclear club, arguably considered as one of the leading nuclear power states, possessing highly developed legal ground, one of the most powerful bases on peaceful atom relies on.

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