



**INTEGRATED
REGULATORY
REVIEW SERVICE (IRRS)
MISSION**

TO

The Russian Federation

Moscow

16 to 27 November 2009

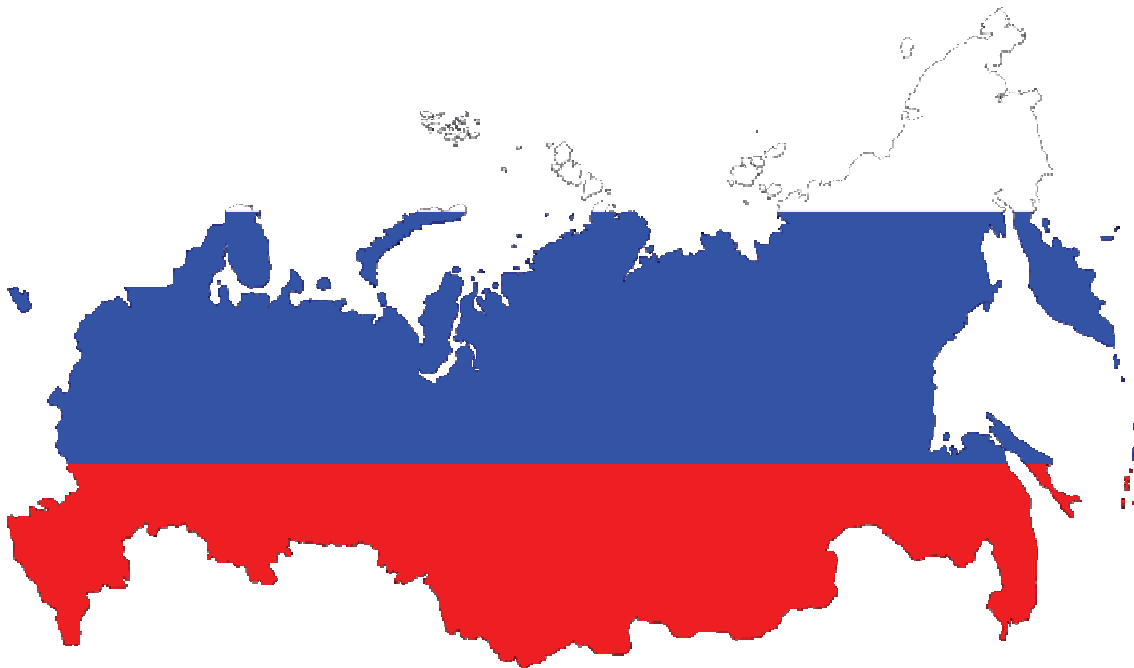
DEPARTMENT OF NUCLEAR SAFETY AND SECURITY





INTEGRATED REGULATORY REVIEW SERVICE (IRRS)
REPORT TO
THE GOVERNMENT OF THE RUSSIAN FEDERATION

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REPORT TO

THE GOVERNMENT OF THE RUSSIAN FEDERATION

Mission date: *16 to 27 November 2009*

Regulatory body: *Rostekhnadzor and the Ministry of Natural Resources and Environment*

Location: *Moscow, Russian Federation*

Regulated facilities and practices: *Nuclear power plants, research reactors, fuel cycle facilities, medical industrial and research facilities, waste facilities, decommissioning and remediation.*

Organized by: *International Atomic Energy Agency (IAEA)*

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IAEA-2009

EXECUTIVE SUMMARY

At the request of the Government of the Russian Federation, an international team of twenty two experts in nuclear, radiation, radioactive waste and transport safety visited the Ministry of Natural Resources and Environment (hereafter referred to as MNRE) from 16 to 27 November 2009 to conduct an Integrated Regulatory Review Service (IRRS) mission.

The purpose of this IRRS mission was to review the framework for regulating safety of all nuclear facilities and activities and radioactive sources in the Russian Federation and the effectiveness of regulatory functions implemented by MNRE and by the Federal Environmental, Industrial and Nuclear Supervision Service of Russia (hereafter referred to as Rostekhnadzor). The review was carried out by comparison against IAEA safety standards and the Code of Conduct on the Safety and Security of Radioactive Sources as the international benchmark for safety. The mission was also used to exchange information and experience between the IRRS Review Team and the Russian counterparts in the areas covered by IRRS.

The IRRS Review Team consisted of 18 senior regulatory experts from 15 Member States, four staff members from the IAEA and an IAEA administrative assistant. The IRRS Review Team carried out the review in all relevant areas: responsibilities and functions of the Government, nuclear safety regime; responsibilities and functions of the regulatory body; the management system of the regulatory body, the activities of the regulatory body including the authorization, review and assessment, inspection and enforcement processes, and the development of regulations and guides.

The IRRS review addressed regulation of nuclear power plants, research reactors, waste management facilities, fuel cycle facilities, industrial and medical sources, and research facilities and activities. The review also addressed selected aspects of the Code of Conduct on the Safety and Security of Radioactive Sources and the transport of radioactive material. Recognizing the importance of the forthcoming law on Radioactive Waste Management for the Russian Federation, the IRRS Review Team did not review in detail the existing regulatory framework concerning the legacy radioactive waste management facilities and activities.

The mission included observations of regulatory activities and a series of interviews and discussions with key MNRE and Rostekhnadzor personnel. In order to help assess the effectiveness of the regulatory inspection system, the IRRS Review Team also interviewed staff of other organizations on visits to the Kalinin NPP, the Mayak plant, the MEPHI research reactor, the Moscow radon waste management facility, the Nuklon facility, and Rostekhnadzor's technical support organization Scientific and Engineering Center for Nuclear and Radiation Safety (SEC NRS).

MNRE and Rostekhnadzor provided the IRRS Review Team with substantial documentation as advance reference material and results of an extensive self-assessment, including a report with conclusions and an action plan with measures to improve its regulatory effectiveness. The IRRS Review Team recognizes the importance of the action plan and supports its full implementation in a timely manner.

Throughout the mission, the IRRS Review Team was extended full cooperation in technical regulatory and policy discussions with MNRE and Rostekhnadzor management and staff. The IRRS Review Team identified a number of good practices and made recommendations and suggestions that indicate where improvements are necessary or desirable to continue enhancing the effectiveness of regulatory functions.

The IRRS Review Team noted that a comprehensive nuclear regulatory framework including regulatory organizations is in place in the Russian Federation. As part of implementing the State policy in nuclear and radiation safety assurance, a new organizational structure was established on 29 May 2008, putting Rostekhnadzor under the jurisdiction of the Ministry of Natural Resources and Environment (MNRE). The IRRS Review Team expects that the Ministry will provide strong support within the Government to

Rostekhnadzor in stabilizing the regulatory structure and making nuclear and radiation safety regulation in the Russian Federation more effective.

The good practices of this system as identified by the IRRS Review Team are:

- The extensive use of the IAEA Safety Standards in developing the nuclear and radiation safety regulations and guides of the Russian Federation.
- The periodic certification of Rostekhnadzor supervisors and managers by an internal council.
- Rostekhnadzor's approach to assess the competence of managers and upper level technical staff of nuclear power plants.
- Provision of good record keeping of the radioactive sources inside the Regulatory Authority Information System which is based on the corresponding IAEA system.
- A comprehensive and detailed set of records describing the current situation at the nuclear facilities.

The IRRS Review Team identified some priority issues in need of improvement and believes that consideration of these items would enhance the overall performance of the regulatory system:

- Legislation on nuclear and radiation safety requires enhancement to provide for effective and sustainable regulation for the use of nuclear energy in the Russian Federation. Several legislative actions are already underway, and the importance of these actions is emphasized by MNRE and Rostekhnadzor in their joint action plan. Among the various actions of the joint action plan, special attention should be paid to: the removal of restrictions in performing inspections, implementing the law on radioactive waste management and developing regulations for decommissioning.
- A policy issue that requires special attention is the need to provide additional resources to Rostekhnadzor, especially in view of the ongoing programme for construction of new nuclear power plants and the necessity that continued strong regulatory oversight of existing nuclear and radiation facilities not be undermined.
- Sustainable solutions are needed in legislation to confirm adequate financing of the independent safety review and assessment of licence applications, and to provide a means for recruiting and maintaining adequate competent staff in Rostekhnadzor. In addition, Rostekhnadzor should develop a programme for ensuring the continued objective and fully independent assessment of nuclear facilities safety performance by site inspectors.
- Improved coordination of MNRE and Rostekhnadzor with other involved regulatory authorities needs to be ensured especially for optimization of radiation protection, regulation of radioactive discharges and releases to the environment, and fire protection.

The IRRS Review Team findings are summarized in Appendix V.

An IAEA press release was issued at the end of the mission.