ANNUAL PUBLIC REPORT

STATE ATOMIC ENERGY CORPORATION ROSATOM

2010

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KEY RESULTS

Nuclear electricity generation

170.1 bln kWh

Proceeds from sales of goods, products, works and services

498.0 bln RUB

Five-year export order portfolio (exclusive of HEU Deal)

22.4 bln US$

Labor efficiency in organizations and subordinate enterprises (in comparable prices)

2.8 mln RUB/man

Indicator*	2008	2009	**2010**	2010/2009, %**
Nuclear electricity generation, bln kWh***	162.3	163.3	**170.1**	104.2
Capacity factor of NPPs, %	79.5	80.2	**81.3**	101.4
Uranium output, thnd. t	3.7	4.6	**5.2**	113.0
Uranium feed base, thnd. t	578	662	**727**	109.8
Proceeds from sales of goods, products, works and services, bln RUB	361.5	458.2	**498.0**	108.7
including export proceeds (exclusive of HEU Deal), bln US$	3.5	3.65	**4.57**	125.2
EBITDA, bln RUB	–	136.0	**181.0**	133.1
Net profit of the Corporation, its organizations and subordinate enterprises, bln RUB	15.2	37.7	**44.3**	117.5
Net assets of organizations and subordinate enterprises of the Corporation, bln RUB	782	1,055	**1,210**	114.7
Five-year export order portfolio (exclusive of HEU Deal), bln US$	14.6	18.7	**22.4**	119.8
Share of production costs in proceeds, %	–	23.2	**19.1**	82.3
Share of managerial costs in proceeds, %	–	4.1	**3.5**	85.4
Labor efficiency in organizations and subordinate enterprises, mln RUB/man (in comparable prices)	–	2.3	**2.8**	121.7
Personnel as per Staff Schedule, thnd. persons	–	275	**272**	98.9
Specialists under 35 years of age, %	25.2	26.5	**27.2**	102.6
Average salary of nuclear employees, RUB/month	28.2	32.4	**35.4**	109.3
Events rated above INES Level 2, number		0	**0**	–
Fulfillment of the Governmental Defense Order by the NWC, %	100	100	**100**	100.0
Fulfillment of governmental orders, %	100	100	**100**	100.0

* The financial indicators are given in current prices; some indicators for 2008-2010 cannot be compared due to changes in the consolidation perimeter and scope of reporting.

** In this and subsequent tables of this Annual Report, the 2009 data are taken equal 100% in calculation of the "2010/2009, %" column

*** Key performance indicators of ROSATOM set by the Supervisory Board for 2010 are highlighted with color.

CARDINAL EVENTS

JANUARY

The Government of the Russian Federation approved the Federal Target program "Nuclear Power Technologies of the New Generation in 2010-2015 and until 2020"

The State Duma of the Russian Federation after the first reading adopted the draft Federal Law "On Radioactive Waste Management"

FEBRUARY

Baltic NPP construction started: the cornerstone with a memorial capsule was laid on the construction site 1

Atomenergomash closed the acquisition deal on Petrozavodskmash

MARCH

First teraflop-class mini supercomputer (10^{12} operations per second) handed over to Sukhoi Company; 21 supercomputers made during the year

Rostov-2 connected to the National Power Grid of the Russian Federation

The Government of the Russian Federation and the Government of the Republic of India signed an agreement concerning cooperation in the peaceful uses of atomic energy (Roadmap of series build of nuclear power plants of Russian design in India)


1


2


3

APRIL

Last weapons-grade plutonium production reactor shut down (Zheleznogorsk, Krasnoyarsk Territory) 2

The Russian Federation and the United States of America signed the Strategic Offensive Arms Reduction Treaty (START III)

MAY

The Russian Federation and the Republic of Turkey signed an agreement on construction of Akkuyu NPP, the first in Turkey

JUNE

The hull of the world's first floating nuclear power plant, Akademik Lomonosov, launched 3

ROSATOM and the Ministry of Fuel and Energy of Ukraine signed a cooperation agreement to build Khmelnitsky-3,4 reactors

The Severny Polyus-37 drifting polar station successfully evacuated by the Rossija nuclear icebreaker

JULY

The CEFR experimental fast neutron reactor (People's Republic of China) completed the first criticality program; the facility was built with the assistance of ROSATOM

Representatives of ROSATOM's Technical Commission and JSC TVEL signed a record of decommissioning (green lawn) for the nuclear installation for production of ceramic low-enriched uranium dioxide powder at the Chemical and Metallurgical Plant (Krasnoyarsk Territory)

AUGUST

The Bushehr NPP (Islamic Republic of Iran) completed the first criticality program 4

The supertanker Baltika steered by nuclear icebreakers Rossija, Taimyr and 50 Let Pobedy made a record (23 days) transit trip via the Northern Sea Route from Murmansk to Ningbo

The International Center for Training and Retraining of Specialists (a branch of the National Nuclear Research University MEPHI) inaugurated in Obninsk, Kaluga Region

The Government of the Russian Federation and the Government of the Republic of Armenia signed a cooperation agreement concerning construction of new nuclear power units in Armenia

Atomstroyexport and Slovenské elektrárne signed a contract to complete the nuclear island of Mohovce NPP (Slovak Republic)

SEPTEMBER

Atomstroyexport and Jiangsu Nuclear Power Corporation (People's Republic of China) signed a contract to produce a detailed design for Tianwan NPP Phase Two

The Russian Federation and the State of Kuwait signed a memorandum of cooperation in the peaceful use of atomic energy


4


5


6

OCTOBER

The Russian Federation signed the Convention Concerning the Construction and Operation of the Facility for Antiproton and Ion Research in Europe (FAIR)

ROSATOM and Vietnam Electricity signed an agreement concerning construction of the first NPP in the Republic of Vietnam 5

JSC TVEL and the State Concern Nuclear Fuel (Ukraine) signed an agreement concerning implementation of a project to build a nuclear fuel fabrication plant in Ukraine

NOVEMBER

The world's first guaranteed reserve of low enriched uranium under IAEA safeguards established in Angarsk, Irkutsk Region 6

The first public report of ROSATOM (2009) presented to the State Duma and the Federation Council of the Russian Federation

Standard & Poor's confirmed the BBB- long-term rating and ruAAA rating by the national scale earlier assigned to Atomenergoprom

DECEMBER

Rostov-2 was put in commercial operation

Atomredmetzoloto closed the consolidation deal on the controlling block of stock of the uranium miner Uranium One Inc. (Canada)

Atomenergomash closed the consolidation deal on the controlling block of stock of EMSS Holdings Limited, which owns 92.68% of shares of Energomashspetsstal Works (Ukraine)

Phase One of the molybdenum-99 production line started up

The U.S. Congress ratified the 123 Agreement between the Russian Federation and the United States of America concerning cooperation in the peaceful uses of atomic energy

ABOUT THIS REPORT

This Report is the second public report voluntarily produced by the State Atomic Energy Corporation ROSATOM (hereinafter ROSATOM, Corporation). It is intended for a broad range of stakeholders.

This Annual Report has been produced in line with the Public Reporting Policy of the State Atomic Energy Corporation ROSATOM and the Annual Public Reporting Standard of the State Atomic Energy Corporation ROSATOM. These documents take account of Russian and international corporate reporting requirements, i.e., the G3 Guidelines of the GRI Sustainability Reporting Framework (Global Reporting Initiative), AA1000 standards of the Institute of Social and Ethical Accountability and RSPP Recommendations for the use in management and corporate non-financial reporting practices, including methodologies for calculation of performance indicators.

The corporate documents establish a yearly reporting cycle; the previous report was published in 2010.

The Annual Report is an integrated document that reflects the main financial, economic and production results of ROSATOM activities in 2010, as well as results of sustainable development activities. In addition, the Annual Report provides an outline of the managerial approaches that make it possible to achieve targets and higher effectiveness set in the strategic goals of the Corporation.

The Annual Report contains mid- and long-term plans and intentions. These are projections, i.e., their feasibility depends, among other things, on economic, political and legal factors beyond the control of the Corporation (global financial, economic and political situations, market trends, changes in taxation, customs and environmental legislation, etc.). Therefore, actual results may differ from announced projections.

The priority topics of the Annual Report are the ROSATOM action strategy and the activities of the Corporation in the area of sustainable development.

To improve transparency and accountability, the Annual Report generation process included four dialogues with the stakeholders regarding disclosure of information on a number of activities of public significance, as well as discussion of the report concept and draft report with stakeholder representatives (Section 5 "Stakeholder Engagement in Drafting the Report"). The Annual Report takes account of the main interests stakeholder representatives expressed during those dialogues.

The scope of the Annual Report extends to activities of the Corporation and its organizations in the Russian Federation and other countries. Information on current activities of the nuclear weapons complex is not disclosed due to the type of activity of the Corporation and national security interests. The Annual Report employs two consolidation perimeters. Performance indicators are disclosed for all organizations of the Corporation. Key financial results and performance indicators are given for organizations within the perimeter of consolidated financial reporting of ROSATOM, except for organizations for which financial reports are not subject to disclosure (a list of organizations is given in Appendix 7). Some indicators of 2008-2010 are not comparable due to changes in the consolidation perimeter that took place in 2010 (such cases are provided with specific comments in the Annual Report), and because of changes in the scope of this Report (as compared to the 2009 Annual Report).

While drafting the "Nuclear and Radiation Safety" and "Environmental Safety" sections, consideration was given to the fact that the Corporation issues "The Safety Report" annually and its organizations and enterprises have published environmental reports on a large scale since 2009. These reports provide much specialized information and describe operations in the host regions (as regards nuclear and radiation safety and environmental impact). This Annual Report contains references to the said information.

The Table of GRI standard disclosures and performance indicators is given in Appendix 1.

The internationally adopted public reporting indicators do not allow features of ROSATOM operations to be reflected comprehensively. Therefore, the Corporation is faced with the task of developing a system of indicators for nuclear sector companies. A list of indicators used in this Annual Report is given in Appendix 2.

The Annual Report passed an external audit (as regards non-financial information) by ZAO PricewaterhouseCoopers Audit as per AA1000AS (an auditors' statement regarding the non-financial reporting of the Corporation for 2010 is in Appendix 6) and ISAE 3000 standards and passed the public assurance procedure as per AA1000SES standard.

The Corporation considers this Annual Report to be at the B+ level of the GRI Guidelines.

Annual Report Information

		C	C+	B	B+	A	A+
Mandatory	Self-declared				V		
Optional	Third party checked				V		
	GRI checked						

ADDRESS BY THE CHAIRMAN OF THE SUPERVISORY BOARD

DEAR READERS,

2010 marks an anniversary for the nuclear industry. For 65 years, Russian nuclear specialists have maintained the reliability of Russia's nuclear shield and nuclear deterrence policy. Russian nuclear power plants and those designed in Russia and built in other countries play a substantial part in meeting the energy needs of the Russian and global economies. The scientific and technical complex develops technologies that are used in nuclear and other industries.

Yearly publication of an integrated report intended for a broad public is evidence of ROSATOM's openness and transparency, as well as a ready way of providing comprehensive information to all stakeholders about the activities of the Corporation.

Assessing ROSATOM's work in 2010 with consideration of the events at Fukushima and the conclusions reached by the world community after Fukushima, I can confidently state that the report offered for your attention shows systemic work on safety assurance in the Russian nuclear industry. The rich store of knowledge accumulated over 65 years has enabled the Corporation management to clearly formulate changes that need to be introduced in the international nuclear industry regulatory system and industry-wide safety standards.

Russian standards, which are currently among the most rigorous in the world, should be a basis for these new global nuclear power safety standards in many respects.

In the reporting year, the Russian nuclear industry developed amid growing demand for nuclear power services. The Corporation's engineering companies were building 14 nuclear power units in parallel, five of which were abroad. ROSATOM holds 9% of total world uranium production, 45% of the enrichment market and 17% of the nuclear fuel market.

The advancement of Russian nuclear products on external markets has resulted in an increase in total export volume to US$4.57bln (exclusive the HEU Deal), that is, 25%. In the reporting year, the five-year export orders portfolio grew by 20%.

In December 2010, the U.S. Congress ratified the 123 Agreement concerning cooperation in the peaceful uses of atomic energy, which opens up new development opportunities for relations between companies of the two largest nuclear powers.

As Chairman of the ROSATOM Supervisory Board, I can state that all key performance indicators set for the Corporation for 2010 were met.

The state authorities continue supporting ROSATOM and making it possible for it to set up representation offices overseas. A decision by Russian President Dmitry Medvedev on strengthening operations in foreign markets and the involvement of ROSATOM employees in the activities of Russian diplomatic missions to key host countries where the Corporation operates has been of key significance in this respect.

In 2010, the Russian Federation Government paid special attention to the development of nuclear weapons and the industry's nuclear science and technology complexes. A decision was made to provide additional funding to them through federal target programs. Implementation of the Federal Target Program "Nuclear Power Technologies of New Generation in 2010-2015 and until 2020" will allow for the transition of nuclear power to a new technological platform employing fast neutron reactors and closing the nuclear fuel cycle, which will substantially enhance the environmental safety and economic efficiency of NPPs.

I am confident that the stable growth of all indicators: financial, economic, production and social, that has been shown by ROSATOM in recent years is sustainable and has a sound base for further development while overcoming the consequences of the world financial and economic crisis.

Igor Shuvalov

First Deputy Chairman of the Government of the Russian Federation, chairman of the Supervisory Board of the State Atomic Energy Corporation ROSATOM

ADDRESS BY THE DIRECTOR GENERAL

DEAR COLLEAGUES AND PARTNERS,

You are looking through a report on the 2010 activity of the State Atomic Energy Corporation ROSATOM. The Corporation is voluntarily continuing to implement the public reporting system in the nuclear industry. We believe that, after the long period when the industry work was closed and secret, the transparency of our activities and openness of our plans and intentions are necessary conditions for achieving a public consensus on nuclear power development issues.

The first report of the Corporation, published last year, enjoyed the intense interest of a broad range of stakeholders: it was read by officials and entrepreneurs, the Corporation's business partners and nongovernmental organizations. In the second report, we tried to highlight the issues of greatest interest. It is extremely important for society to know what is going on in such a technologically complex domain as the nuclear power industry. The topicality and importance of public information was made manifest in particular during the accident at Fukushima Daiichi after the devastating earthquake in Japan. I am sure that this report will provide you with comprehensive information on the safety of Russian nuclear facilities.

In 2010, ROSATOM continued to implement consistently a corporate strategy aimed at strengthening global technological leadership in the world nuclear sector.

In the reporting year, we achieved good production and financial results. Nuclear electricity generation grew by 4.2% to 170.1bln kWh. Labor efficiency in the industry as a whole increased by 21.7%. Proceeds of the Corporation and its entities increased by 8.7% as compared to 2009 and approached 498 bln rubles. The Corporation's net profit over the year grew by 17.5% to 44.3bln rubles.

For ROSATOM, 2010 marked a year full of striking events that will be part of Russian and global nuclear power development history. Among them are the creation of the world's first guaranteed reserve of nuclear fuel in Angarsk, Irkutsk Region; completion of the first power program at Rostov-3, which is the first power unit built under the new nuclear build program; and the start by the Corporation's companies of uranium mining in the United States. Successful implementation of these projects substantially strengthens Russia's prestige as a leader of the world nuclear industry.

The reporting year was also marked by the signing of a number of unique commercial agreements: the Corporation inked agreements on the construction of the first nuclear power plants in Turkey and Vietnam, sizably expanded the portfolio of nuclear build orders on the Indian market, which is a key market for us, and concluded a long-term contract for Russian nuclear fuel supplies to Ukraine. All these create a sustainable demand for our enterprises' services for many years to come.

ROSATOM's enterprises showed the first tangible results from working with the Presidential Commission for Technological Development of Russia's Economy: series production of small-size supercomputers has started and the first batches of molybdenum-99 isotope, which is widely used in nuclear medicine, went for export to save hundreds of thousands of lives.

However, we recall 2010 not only for its successes but also the serious difficulties we encountered. Natural disasters in the late summer of 2010 forced workers at the Russian Federal Nuclear Center in Sarov literally to defend their facility against wildfires along a front that extended over many kilometers.

These people committed a heroic deed and got much-deserved awards from the government.

We continue solving environmental problems accumulated over decades of the Soviet defense program. Some of the problems have already been solved. However, I would like to emphasize that development of an acceptable scientific and technological solution means more than just solving "nuclear legacy" problems. Decommissioning radiation-hazardous facilities and bringing them to a "green lawn" state is a boomingly developing business across the world. We also have good prospects for exporting these technologies.

In 2011, ROSATOM will continue its advancement in accordance with preset targets. With that, an absolute priority was and will remain the safe and reliable functioning of nuclear power facilities. Since the events at Fukushima Daiichi, we have conducted more than one hundred additional checks, including those where we invited representatives of the World Association of Nuclear Operators for a peer review. The checks confirmed that Russia's nuclear power plants are fully compliant with existing Russian and international safety guidelines.

In the jubilee year, we achieved serious successes, as is confirmed by the results of our key activities and sustainable development efforts. These prominent achievements are backed by the efforts of a hundred thousand workers in our organizations and I would like to extend my sincere gratitude to them for their devoted labor.

Sergey Kirienko

Director General, State Atomic Energy Corporation ROSATOM

ADDRESS BY THE IAEA DEPUTY DIRECTOR GENERAL

DEAR COLLEAGUES AND PARTNERS,

I am pleased to greet you on behalf of the International Atomic Energy Agency. Mankind has been using atomic energy for peaceful purposes for more than half a century. Around the world, there are more than 440 reactors in operation, contributing to energy supplies that support the world's economic growth. Over the years, nuclear power has proved its efficiency and has become an intrinsic part of the global energy mix.

2010 was marked by significant events for world nuclear power development, including the building up of a sustainable international infrastructure of nuclear power. Initiatives launched by the Russian Federation and ROSATOM made a substantial contribution to this effort, which was a new undertaking for the IAEA Member States.

Last year, the International Uranium Enrichment Center (IUEC), established under the aegis of the IAEA in the city of Angarsk in 2007, undertook new efforts to develop a mechanism of guaranteed supplies. The Agreement between the Government of the Russian Federation and the IAEA Regarding the Establishment on the Territory of the Russian Federation of a Physical Reserve of Low Enriched Uranium and Supply of Low Enriched Uranium Therefrom to the IAEA for its Member States, concluded in 2010, has become a striking example of successful implementation of initiatives launched by the IAEA Director General and the President of the Russian Federation associated with guaranteed supplies and the creation of a global infrastructure of nuclear power. The guaranteed reserve of uranium was placed in full and ahead of schedule in the IUEC storage facility in Angarsk in November 2010, and in December 2010, after the first verification by IAEA inspectors, the Center was formally inaugurated. The said agreement came in force on February 3, 2011, to make the guaranteed low enriched uranium reserve available to IAEA Member States.

On the whole, cooperation between Russia and the IAEA last year entered a new level. In October 2010, IAEA Director General Yukiya Amano paid his first official visit to Moscow. This visit laid a sound foundation for implementation of new joint projects. I consider the agreement on the training of young specialists signed between the Government of the Russian Federation and the IAEA during that visit a landmark event. The task of training new staff for the nuclear industry is acquiring ever growing significance for IAEA Member States.

In addition, last year the IAEA celebrated the 10th anniversary of the Russia-initiated International Project for Innovative Nuclear Reactors and Fuel Cycles (INPRO), implemented as part of the Agency's program and with substantial financial, human resource and expert support of ROSATOM. Today, against the background of a comprehensive analysis of the accident at Fukushima Daiichi in Japan, this work, aimed at building up safe and reliable nuclear power for the future, is acquiring ever more topicality.

The Agency welcomes ROSATOM's initiative to establish a public reporting system, since higher transparency and accountability of nuclear industry companies create the necessary conditions for the general public to accept nuclear power as a reliable, safe and affordable energy source that facilitates achievement of sustainable development goals.

I am confident that the scientific and production potential of ROSATOM will not only facilitate the successful implementation of joint projects already started but also serve as a foundation for cooperation in other fields of nuclear activities, especially enhancement of the international nuclear power safety assurance system.

Alexander Bychkov

Deputy Director General, IAEA

1 GENERAL

Sales profit

89.6 bln rubles

Funding of Federal target program "Nuclear power technologies of new generation in 2010-2015 and up to 2020)" made

4.5 bln rubles

In the reporting year

13 inter-governmental agreements

were signed including five agreements on new NPP construction in Turkey, Venezuela, Vietnam and the Ukraine

State Corporation Rosatom manages over

400 organizations

including the ones of administration-business area and auxiliary infrastructure as well as non-profile assets

1.1.

GENERAL INFORMATION ABOUT ROSATOM

ROSATOM organizational structure by key activities

STATE ATOMIC ENERGY CORPORATION ROSATOM				
Nuclear weapons complex	**Nuclear power complex***	**Science and technology complex**	**Nuclear and radiation safety complex**	**Nuclear icebreaker and support complex**
Key activities				
Support of the nuclear deterrence policy Fulfillment of the Government Defense Order	Uranium mining and processing Fabrication of nuclear fuel Design and construction of nuclear power plants Electricity generation at NPPs Production of equipment for construction of NPPs and other facilities	Basic and applied research Scientific and engineering support of the nuclear power and industry development program Innovative developments, including those in related industries	Accident-free operations of nuclear and radiation-hazardous nuclear power and other facilities Management of spent nuclear fuel and radioactive waste Solutions to the problem of the "nuclear legacy" of past activities Decommissioning of nuclear facilities	Arctic navigation along the Northern Sea Route Emergency rescue operations in ice fields
Composition**				
20 federal state unitary enterprises 4 open joint stock companies 2 limited liability companies 1 closed joint stock company	4 federal state unitary enterprises 91 open joint-stock companies 67 limited liability companies 48 closed joint-stock companies 3 non-governmental educational institutions 1 limited liability partnership	10 federal state unitary enterprises 4 open joint-stock companies 2 joint ventures	9 federal state unitary enterprises 3 open joint-stock companies	1 federal state unitary enterprise

* The nuclear power and research and engineering complexes include also 14 foreign companies in different legal forms of associations.
** The list of main organizations see Attachment № 7.

The State Atomic Energy Corporation ROSATOM was established by the Russian Federation as a publicly-owned corporation on 18.12.2007. The status, goals of its establishment and activities, as well as functions and authorities, of the State Atomic Energy Corporation ROSATOM are stipulated in the Federal Law "On the State Atomic Energy Corporation ROSATOM" No. 317- FZ as of 01.12.2007.

The State Atomic Energy Corporation ROSATOM is authorized, on behalf of the Russian Federation, to fulfill Russia's international commitments in the field of the peaceful uses of atomic energy and nuclear nonproliferation observance. The State Atomic Energy Corporation ROSATOM is responsible for implementing federal policy in the field of the use of atomic energy, and represents a universal company that owns assets in all links of the nuclear power and industry chain from uranium exploration and mining to design and construction of nuclear power plants, machine engineering, generation of heat and electricity, uranium product enrichment and conversion, nuclear fuel fabrication through decommissioning of nuclear facilities and management of spent nuclear fuel and radioactive waste.

The Corporation includes a nuclear weapons complex, a nuclear power complex, a science and technology complex, a nuclear and radiation safety complex and a nuclear icebreaker and support complex.

As of December 31, 2010, the Corporation encompassed 44 federal state unitary enterprises and 14 economic entities shares (shares in equity capital) are owned by ROSATOM. Considering all organizations (including entities whose shares are owned by the Corporation; affiliates and subsidiaries of the Corporation; entities established by the Corporation or transferred to it, with property being owned by the Corporation; as well as joint stock companies where ROSATOM is a shareholder on behalf of the Russian Federation), the Corporation manages more than 400 organizations, including administrative entities and support infrastructure, as well as non-related assets.

The geography of the Corporation's operations extends to all key regional segments of the world market. In the reporting year, the Uranium Holding Atomredmetzoloto's (ARMZ's) portfolio included projects in nine countries (Russia, Kazakhstan, Armenia, Namibia, Tanzania, Mongolia, the United States, Republic of South Africa and Australia). Nuclear fuel fabricated by JSC TVEL is used in 15 countries worldwide. In 2010, JSC Atomstroyexport fulfilled contractual obligations in Iran, China, India and Bulgaria. Uranium products by JSC Techsnabexport are supplied to 16 countries. On the whole, legal bases for nuclear cooperation are available with regard to 54 countries.

The Corporation's full name in Russian: Государственная корпорация по атомной энергии «Росатом»; the short name in Russian: Госкорпорация «Росатом».

The Corporation's full name in English: the State Atomic Energy Corporation "Rosatom"; the short name in English: ROSATOM.

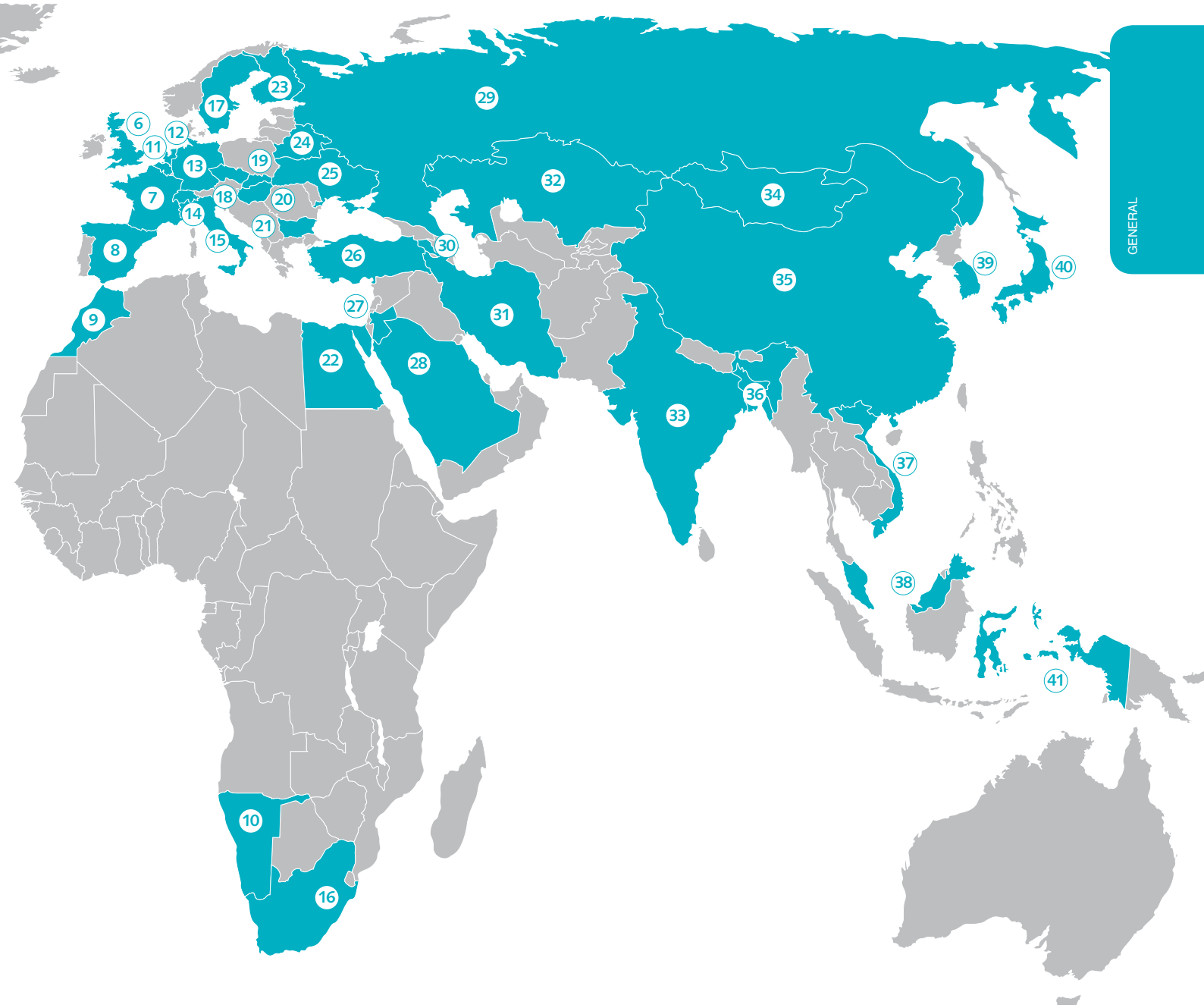
The Corporation is located at: 24 Bolshaya Ordynka St., Moscow, Russian Federation.

The Corporation's Auditor: LLC Nexia Pacioli, located at 2 Malaya Polyanka St., Moscow, Russian Federation.

ROSATOM GLOBAL PRESENCE

COUNTRY	Canada	USA	Mexico	Brazil	Argentina
	1	2	3	4	5
Uranium mining	○	●			
Supply of low enriched uranium and enrichment services	○	●	●		
Supply of nuclear fuel and its components		○			
Construction of NPPs				○	○

● Ongoing projects ○ Future projects



	Great Britain	France	Spain	Morocco	Namibia	Belgium	Netherlands	Germany	Switzerland	Italy	South Africa	Sweden	Czech Republic	Slovakia	Hungary	Bulgaria	Egypt	Finland	Belarus	Ukraine	Turkey	Jordan	Saudi Arabia	Russia	Armenia	Iran	Kazakhstan	India	Mongolia	China	Bangladesh	Vietnam	Malaysia	South Korea	Japan	Indonesia
	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
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										○	○		○	○	○	●	○	○	○	○	○	○	○	●	○	●	○	●		○	○	○	○				○

The Nuclear Power and Scientific and Technical Complexes also incorporate 14 foreign companies of different legal forms.
The List of the main companies see Attachment 7.

1.2.

DEVELOPMENT STRATEGY

1.2.1. STRATEGIC GOALS AND INITIATIVES

Key documents:

– Energy Strategy of Russia until 2030 (approved by Directive of the Government of the Russian Federation No. 1715-r as of 13 November 2009);
– General Scheme of Deployment of Electricity Generators (approved by Directive of the Government of the Russian Federation as of 22 February 2008);
– ROSATOM Long-Term Activity Program (2009–2015) (approved by Directive of the Government of the Russian Federation No. 705 as of 20 September 2008). The Program brings together adopted budget commitments, the Corporation's responsibilities to the Government, and measures under related Federal Target Programs including "Development of the Nuclear Power and Energy Complex in 2007–2010 and until 2015", "Development of the Nuclear Weapons Complex of the Russian Federation in 2007–2010 and until 2015", "Nuclear and Radiation Safety in 2008 and until 2015."
– "The Activity Strategy of the State Atomic Energy Corporation ROSATOM until 2020 (approved in April 2008 by the Supervisory Board).

The Corporation strives for global technological leadership in the nuclear industry.

Strategic goals:

– nuclear and radiation safety of nuclear facilities, personnel, the general public and the environment;

– secured supplies of nuclear electricity, as well as products and services provided by the nuclear power and industry complex, to the country's economy;

– the advancement of Russian companies to leading positions in the world nuclear technology and service market;

– development of innovative nuclear technologies and their use in a variety of branches of the economy;

– maintaining the nuclear arsenal at a level that ensures the nuclear deterrence policy;

– ensuring public acceptance of nuclear power development;

– enhancement of the efficiency of the Corporation's activity.

For details of ROSATOM's strategic goals, please refer to the 2009 Annual Report*.

In 2010, the Corporation worked out a special managerial approach, or strategic initiative: a set of interconnected project-like measures that substantially affect changes in the Corporation's market position and competitiveness on the whole and require the interrelation of several business areas.

From special analysis and screening have emerged eight strategic initiatives for priority implementation.

Retaining global nuclear fuel cycle front-end leadership.
The initiative is aimed at:

– increasing the Corporation's share in NFC front-end markets through a transition from the format of national-scale producer and exporter to that of global company;

– developing NFC technologies and raising internal operational effectiveness to ensure technological and price competitiveness;

– diversifying resources and raising the share of feed featuring low mining cost of uranium;

– secured natural uranium feed supplies to the Russian nuclear industry and power.

Closing NFC using fast neutron reactors. The initiative is aimed at greater electricity generation with a parallel reduction of SNF share per unit power; accelerated development and reproduction of the scientific and technical potential of Russia's nuclear power (including involvement of young specialists), as well as creation of conditions for producing competitive science-intensive nuclear products of world class. The initiative frames the FTP "Nuclear Power and Industry Technologies of New Generation in 2010–2015 and until 2020."

Global leadership in NFC back-end.
The initiative will make it possible to expand the Corporation's presence on the world market of back-end of nuclear facilities (especially SNF and radioactive waste management, as well as decommissioning) and reduce governmental costs of solving "nuclear

*http://www.rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/investor/presentations/0409a100429bcf2084abbcb6dba50abd

legacy" problems through consolidation and competence development in this business. In addition, this initiative is aimed at building up a system and infrastructure of SNF and radwaste management, and decommissioning as well as developing a related legislative basis.

The initiative is assumed to implement through the building of new nuclear power units abroad using both the traditional scheme of EPC contracts and the Build-Own-Operate scheme or through the financial participation of the Corporation, as well as through direct acquisition of interest in existing generating assets of NPPs in operation.

The expansion of the VVER technology provides additional orders to organizations of the Corporation (front-end and back-end of the nuclear fuel cycle, machine engineering) and creates a basis for commercialization of new-generation reactors.

Building up a nuclear generation share in the Russian Federation energy mix.
The initiative is to commission new generating capacities, extend service lives of existing NPPs, increase release of electricity to the grid per unit of installed capacity and enhance economic efficiency of Russian NPPs.

To this end, the following is to be achieved within the initiative:

- series build of NPP at an average rate of two units per year;
- pre-set capacity factor, given growth in a share of new generation capacities;
- reduction in construction costs of a two-reactor NPP;
- reduction in semi-fixed costs;
- generation of a NPP site land register.

Building up a sustainable power machine engineering company of an appropriate scale.
Implementation of this strategic initiative is aimed at expansion of supplies of equipment that can be produced using technologically versatile production capacities, and of services for heat generation and the gas and petrochemical industry, while unconditionally meeting industry-wide targets of supply of equipment and services for construction of NPPs in Russia and abroad that makes possible maximum output from the existing synergy of products and technologies (the use of allied heat exchange technologies and a common production base), as well as compensating impacts from production process cycles.

Enhancement of electricity sales.
The initiative is necessitated by the fact that the wholesale electricity market is becoming less profitable and the basic electricity sales margin is falling with grid and sales companies. To ensure stable electricity sales markets and larger electricity sales profits of Rosenergoatom Concern JSC, it is necessary to enter the marginal retail segment through acquisition of sales companies along with further enlargement of sales in the retail market that would stabilize (hedge) Rosenergoatom cash flows, reduce risks of failures to pay for supplied electricity, and secure an uninterruptible power supply to nuclear facilities.

Management of the strategic initiatives portfolio is the most important element of the Corporation's strategy implementation.

Project "Development Concept and Long-Term Indicators System of ROSATOM Strategy Implementation through 2030"

Project goal: development of a system of mid- and long-term indicators of the ROSATOM Strategy for the period from 2010 until 2030 interlinked with strategies and long-term plans of the Corporation's divisions.

Main results of the Project in 2010:
- a priority rating methodology and a plan for realization of initiatives;
- calculation of parameters of separate initiatives and a strategic initiative portfolio based on financial and economic model of strategy implementation until 2030;
- requirements for transformation of the Corporation and its divisions' management system; a target management system model;
- key elements of the strategic management process (strategic marketing, generation of KPI, monitoring of the Strategy implementation and update).

Forming the third business core of the Corporation in the field of radiation control. The initiative is to build an innovative business in the sphere of radiation control aiming at taking leadership in the markets of nuclear medicine, processing of solid household and medical waste, water treatment, and setting up irradiation and safety system centers.

Global expansion of the VVER technological platform.
The initiative is aimed at the strengthening of market positions of the Corporation in the global market of nuclear technologies through the maximum use of market opportunities and building up of VVER installed base load abroad, along with greater supplies of the Corporation's products and services over the entire NPP life cycle.

1.2.2. MANAGEMENT OF INNOVATIVE DEVELOPMENT

In its 65 years, the Russian nuclear industry has achieved serious results in technology. Today's task is to strengthen leadership through active development of innovative technologies.

In 2010, in furtherance of the Directive of the Government of the Russian Federation given to state corporations in regard to implementation of measures aimed at acceleration of technological modernization and innovative development, and of the Decision by the Governmental Commission on High Technologies and Innovations, ROSATOM drafted a Concept of the Program for Innovative Development and Technological Modernization until 2020. The Ministry of the Russian Federation for Economic Development gives the Concept first place in the rating of programs of companies with state participation. For more information on innovative activities, please refer to Section 3.3 "Scientific and Technical Complex."

1.2.3. ROSATOM SUSTAINABLE DEVELOPMENT AGENDA

Sustainable development of nuclear industry organizations is a priority of the Corporation because of the high public significance of nuclear industry activities. Strengthening of the Corporation's leadership is, in many respects, due to activities in the field of enhancement of safety and economic efficiency, environmental protection, and developments for allied industries. An approach to sustainable development is based on the traditional sustainable development concept used by the international community as well as on a number of basics specific to nuclear industry activities.

The sustainable development agenda:

- Nuclear and radiation safety and reliability of nuclear and radiation-hazardous facilities (presence of multilevel safety and monitoring systems).
- Development of RW and SNF management technologies (development of an infrastructure and new technologies for RW and SNF management including those for multiple reuse of SNF).
- Solving "nuclear legacy" problems (solutions to problems of the past economic and defense activities of the nuclear industry).
- Nonproliferation of nuclear weapons, nuclear materials and critical nuclear technologies (the use of atomic energy exclusively for peaceful purposes).
- Energy security (development of energy-generating technologies producing limited impact on the environment and capable of meeting the growing energy needs of mankind: fast neutron reactors and transition to the closed nuclear fuel cycle, nuclear fusion developments).
- NPP lifecycle management (full complex of services in the area of design, construction, operation and decommissioning of NPPs).
- Use of nuclear technologies in industries that are vital to living standards and the life expectancy of the general public (medicine, agriculture, transport, safety and security systems, etc.).
- Control over economic and social impacts (fair distribution of economic benefits among countries (territories) that develop nuclear power, local businesses, companies within nuclear and allied industries; contribution to host region economies; creation of new jobs; worthy remuneration of employees; charity programs, etc.).
- Minimization of impact on the environment, including climate (minimization of environmental impact and preservation of natural ecosystems; transition to renewables economy).
- Safety and rights of employees (labor protection, including monitoring radioecological risks for personnel, social programs, etc.).
- Improvement of resources consumption (financial, production, intellectual, human, etc.).
- Public acceptance of nuclear power development (achievement of a public consensus on nuclear power development in Russia and worldwide that ensures long-term and stable growth of standards of living of the general public).

The process of implementation of the strategic goals, strategic initiatives and sustainable development agenda in 2010 is described in respective sections of this Report.

1.3.

FINANCIAL AND ECONOMIC RESULTS

NIKOLAY SOLOMON

Deputy Director General for Economy and Finance

"Operational and financial efficiency is a necessary condition for the success of a modern corporation that is at the frontline of technological development. ROSATOM is striving to be among the most efficient global companies."

1.3.1. KEY FINANCIAL RESULTS

A positive dynamics of financial and economic results of ROSATOM in 2009-2010 is conditioned by additional profits gained by Rosenergoatom Concern through electricity sales growth against the background of market liberalization and the tomorrow electricity and power market price growth along with measures to suppress costs in organizations of the Corporation.

A positive dynamics of proceeds (growth by 9%) is mainly owing to:

- growth in sales of electricity generated by Rosenergoatom Concern and growth of the tomorrow electricity and power market;
- growth in supplies by Techsnabexport and JSC TVEL;
- growth in sales of products by other divisions.

In the reporting year, there was a drop in proceeds of Atomstroyexport (as a result of some overseas nuclear construction projects entering the commissioning stage) and INTER RAO UES (due to take-out of INTER RAO UES indicators from the Corporation's consolidated financial statements for Q4 2010 because of a reduction of interest to 44.14% from 59.92% (as of 31 December 2010) resulting from an additional issue of INTER RAO UES shares).

Key financial results of ROSATOM, bln RUB**

Indicator*	2009	2010	2010 / 2009, %
Proceeds from sales of goods, products, works and services	458.2	498.0	108.7
Prime cost of goods, products, works and services sold	261.1	257.5	98.6
Gross profit	197.2	240.5	122.0
Managerial and selling costs	123.2	150.9	122.5
Sales profit	73.9	89.6	121.2
EBITDA	136.0	181.0	133.1
Profit tax	19.0	24.6	129.5
Net operational profit after taxes (NOPAT)	54.4	62.9	115.6
Net profit	37.7	44.3	117.5
Essential cash from the Government (EC4)	642.6 (including a federal budget subsidy of RUB 192.6 bln, property contribution by the Russian Federation (shares) – RUB 450.0 bln)	76.4 (including a federal budget subsidy of RUB 76.0 bln, property contribution by the Russian Federation – RUB 0.4 bln)	11.9

* Section 1.3 provides consolidated indicators of ROSATOM and its organizations, exclusive of organizations which financial reporting is classified.

** Main financial indicators of ROSATOM activities in 2009-2010 are given in Appendix 3; a Statement by the Audit Commission on financial and economic activities of the State Atomic Energy Corporation ROSATOM and its organizations in 2010 is in Appendix 4; an auditors' statement on the consolidated financial statement of ROSATOM for 2010 is given in Appendix 5.

In 2010, the total amount of fines for failures to observe legislation and regulatory requirements (including fines and surcharges resulting from outdoor tax inspections) was 22 million rubles. No non-financial sanctions were applied in the reporting year.

Prime cost dynamics (decrease by 1%) was affected by the following factors:

- an increase in tangible costs due to growth in production output, and volume of works and services;
- growth of amortization expenses due to commissioning of new main assets;
- an increase in remuneration costs and extra fees mainly due to readjustment of the salary budget.

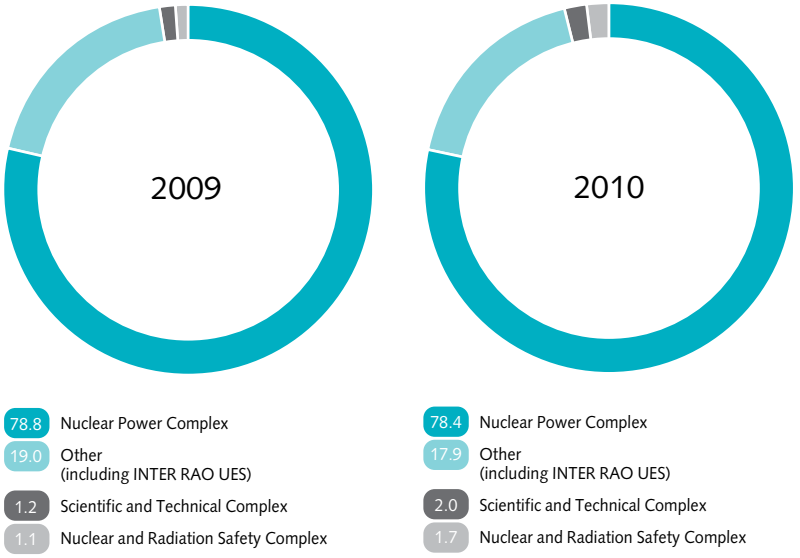
The said increase in costs was compensated for by growth of end-product remainder in storage and by reduction of volumes of works in process and goods remainder.

An increment of gross profit in 2010, as compared to 2009, was predominantly due to growth of gross profit of organizations within the electricity-generating division and conditioned by proceeds growth factors with prime cost reduction. Thereat, the dynamics of the gross profit outstrips that of proceeds; this trend remains even if the factor of price growth in the tomorrow electricity and power market is excluded.

The growth of managerial and sales costs is conditioned mainly by an increase by 19 billion rubles of accrued industry reserves (as per Resolutions of the Government of the Russian Federation No. 68 as of 30 January 2002 and No. 576 as of 21 September 2005) in accordance with the investment program of Rosenergoatom Concern approved for 2010.

A major share of EBITDA increment in 2010, as compared to 2009, falls with NPC (97% of a total growth or 47 billion rubles), with insignificant growth in other divisions. The EBITDA growth factors are in line with the proceeds growth drivers and associate with an increase in release and rate growth of electricity, growth of export supplies in 2010, and efforts made by divisions to reduce constant production costs.

ROSATOM proceeds from sales to external buyers in 2009 and 2010, %



Prime cost of goods, products, works and services sold by ROSATOM and its organizations in 2009-2010 (per cost fraction), bln RUB

Indicator	2009	2010	2010 / 2009, %
Tangible costs	140.8	145.1	103.1
Remuneration costs	70.7	72.4	102.4
Social disbursements	13.2	14.9	112.9
Wear	26.4	27.8	105.3
Other costs	13.6	10.5	77.2
Total for cost fractions	264.7	270.7	102.3
Balance (increment [–], reduction [+]):			
In-process	–10.9	–4.1	–
Remainder of end-product and resale goods	9.6	–8.1	–
Remainder of shipped-off products	–2.3	–1.0	–
Total	**261.1**	**257.5**	**98.6**

1.3.2. MAIN FINANCIAL AND ECONOMIC INDICATORS

The main factors that affected the growth of labor efficiency at ROSATOM and its organizations are additional proceeds and optimization of human resources programs.

The quick assets ratio decreased in 2010 by 15% due to a reduction in a cash remainder and short-term financial investments, as well as due to a growth of accounts payable. The working capital ratio decreased to a lesser extent (by 9 %) as associated with a growth of inventories within the working assets.

In 2010, inventories turnover decreased (from 214 days to 233 days) at the expense of growth of remainder of feed, end products and works in process in the "Fuel" and "Mining" divisions.

Turnover of accounts receivable of buyers and customers slightly decreased (from 27 days to 33 days), while turnover of accounts payable to suppliers and contractors increased (from 63 up to 51 days).

Performance indicators

Indicator	2009	2010
Labor efficiency (in current prices), mln RUB/man*	1.64	3.01
Added value/proceeds** (internal performance), mln RUB	–	0.61

* In view of a substantial change in the planning and reporting perimeter (from 67 enterprises within the planning period in 2009 up to 137 enterprises within the planning perimeter in 2010) the performance calculation data of 2009 and 2010 are not comparable. A recalculation of performance in the comparable planning perimeter for 2009 would produce 2.26 mln RUB/man.

** The 2009 value of this indicator is not comparable because of changes in the consolidation perimeter occurring in 2010 (the Table uses the sign «–»).

Labor efficiency in separate divisions of ROSATOM, mln RUB/man

Division	Labor efficiency in current prices
Mining	2.49
Fuel	3.57
Machine engineering	2.03
Generation	5.02
Advanced materials	1.36

Cost indicators, %

Indicator	2009	2010
Share of fixed production costs in proceeds	23.15	19.06
Share of managerial costs in proceeds	4.10	3.50

Business solvency indicator

Indicator	2009	2010
Debt/EBITDA	0.48	0.26
Debt-to-equity ratio	0.30	0.26
Ratio of received federal funds to equity from product (works, services) sales	1.40	0.14

Liquidity indicators

Indicator	2009	2010
Quick assets ratio	2.08	1.76
Working capital ratio	3.17	2.89

Turnover ratio, days

Indicator	2009	2010
Time of inventory turnover	214	233
Time of accounts receivable turnover	27	33
Time of accounts payable turnover	63	51

Profitability indicator, %

Indicator	2009	2010
Return on sales (ROS)	8.2	8.9
Return on assets (ROA)	2.7	3.0
Return on equity (ROE)	4.1	4.0
Return on EBITDA	29.7	36.4

1.3.3. STRUCTURE OF ROSATOM AND ITS ORGANIZATIONS' ASSETS; MAIN CHANGES IN THE ASSETS STRUCTURE

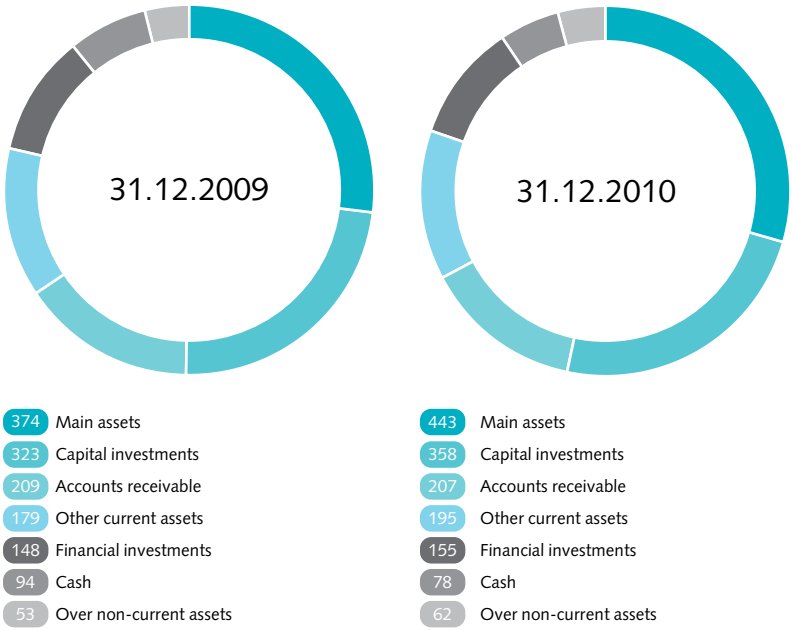
Growth of book value of main assets by 69 billion rubles and that of capital investments by 35 billion rubles (as compared to 2009) is conditioned by commissioning of facilities of Rosenergoatom Concern, including Rostov-2, and refurbishment of production capacities at UECC, AECC, PA ECP, SCC, continuation of construction of Zheleznogorsk TPP, and completion and commissioning of Seversk TPP.

Growth of financial investments that amounted to 7 billion rubles resulted from an increment of long-term financial investments by 31 billion rubles and a reduction of short-term financial investments by 24 billion rubles.

Long-term financial investments grew mainly because of acquisitions of affiliated and subsidiary companies. In the reporting year, a company of the Effective Energy Group (an affiliate of ARMZ) invested in Uranium One Inc. to increase the Group's interest to 23.15%. Late in 2010, the controlling block of stock of Uranium One Inc. was acquired to bring the Group's interest in Uranium One Inc. to 51.4 %; the investments cost 29 billion rubles as of the end of 2010 (Uranium One Inc., as an affiliate, to be counted in commencing 1 January 2011). In addition, Rosenergoatom Concern is a shareholder of the Project Company, which is implementing the Akkuyu NPP construction project (Turkey), being established as a joint stock company. Related investments will be 1 billion rubles (participation share 31.34 %).

Short-term investments were reduced mainly due to closure of deposits in the reporting period.

Assets structure of ROSATOM, bln RUB



1.3.4. STRUCTURE OF ROSATOM AND ITS ORGANIZATIONS' CAPITAL AND RESERVES

Main capital and reserves constituents of ROSATOM and its organizations are:

- target financing received by ROSATOM to implement statutory activities as per the Federal Law "On the State Atomic Energy Corporation ROSATOM" No. 317-FZ as of 1 December 2001;
- equity capitals (funds) of organizations (enterprises) towards which ROSATOM acts as the owner on behalf of the Russian Federation;
- additional capital;
- reserved capital, including industry-wide reserves created as per Resolutions by the Russian Federation Government No. 68 as of 30 January 2002 and No. 576 as of 21 September 2005;
- undistributed profits.

Growth of capital and reserves by 131 billion rubles in the reporting year was conditioned by:

- federal subsidies to acquire long-term financial investments subsequently spent to pay for an additional issue of shares of Atomenergoprom (55 billion rubles);
- a contribution of the Russian Federation to charter funds of subordinate FSUEs (6 billion rubles);
- an increase in the additional and reserve capital (72 billion rubles) as conditioned mainly by an increase in payments by Rosenergoatom Concern to industry-wide reserve funds because of growth of proceeds.

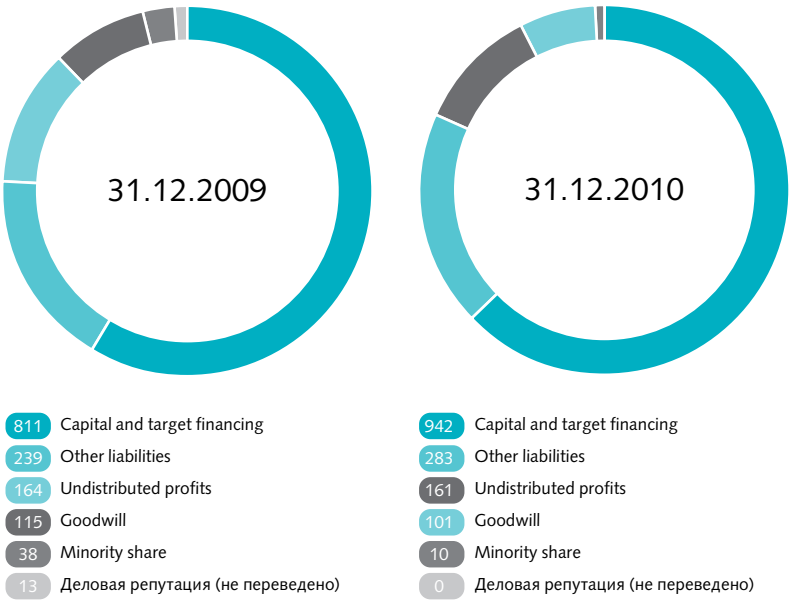
The said growth was compensated for by a reduction in the heading "target financing" (by 2 billion rubles) through the use of target financing for execution of functions by ROSATOM under the Federal Law "On the State Atomic Energy Corporation ROSATOM" No. 317-FZ as of 1 December 2001.

An increase in the undistributed profits (46 billion rubles) was due to the net profit of the reporting period (44 billion rubles) and exclusion of a loss of INTER RAO UES because of a change in the ownership share (8 billion rubles). The sum was partially reduced at the expense of payments to the reserve fund (3 billion rubles) and for ROSATOM activities (3 billion rubles).

A reduction in goodwill (by 13 billion rubles) and minority share (by 28 billion rubles) is associated with a change in the ownership share of INTER RAO UES (from 59.92%, as of 1 January 2010, to 44.14%, as of 31 December 2010).

A reduction in loans and credits by 63 billion rubles was mainly conditioned by payments for the bond issue of Atomenergoprom in an amount of 50 billion rubles and placement of a new bond issue in an amount of 10 billion rubles.

Structure of ROSATOM and its organizations' capital and reserves, bln RUB



1.3.5. CONSOLIDATED INDICATORS OF ROSATOM CASH FLOW BY ACTIVITIES

In 2009, cash obtained through financial activities was spent to finance current and investments activities.

ROSATOM and its organizations in 2010 financed investment activities predominantly from cash received from main activities.

Consolidated indicators of ROSATOM cash flow by activities, bln RUB

Indicator	2009	2010
Cash balance as of the beginning of the year	46.6	94.2
Net growth (drop) of current operations cash	–15.8	50.6
Net growth (drop) of investments cash	–146.7	–44.9
Net growth (drop) of financial cash	203.9	–20.7
Total growth (drop) of cash	41.4	–15.0
Change in consolidation perimeter (balance comparability as of the 2009 yearend and balance as of the beginning of 2010)	6.4	–
Effect of exchange rate to ruble changes	–0.2	–1.3
Cash balance as of the end of reporting period	94.2	77.9

1.4.

NATIONAL ATOMIC ENERGY POLICY

TATIANA ELFIMOVA

Deputy Director General for Execution of Authorities and Budget

"ROSATOM is a unique corporation in terms of world experience. On the one hand, we are authorized to implement national atomic energy policy in the interests of the Russian Federation and its citizens. On the other hand, we carry out commercial activities to strengthen our positions in the world nuclear market. It is important to continuously work on maintaining the balance between these two areas with the aim of improving general efficiency of the Corporation's operations."

In accordance with the Federal Law "On the State Atomic Energy Corporation ROSATOM" No. 317-FZ as of 1 December 2001, the Corporation has been established and acts to pursue State Policy, legal regulation, public services, and management of public property as associated with the uses of atomic energy, development and safe functioning of enterprises of the Russian nuclear power and weapon complexes, ensuring nuclear and radiation safety, nuclear material and technology nonproliferation, development of nuclear science, technology and professional education, and international cooperation in this area.

1.4.1. LEGAL AND REGULATORY ACTIVITIES

In 2010, ROSATOM drafted and supported the adoption of 75 legal acts associated with execution of authorities by the Corporation and aimed at solving nuclear industry development tasks.

In the reporting year, amendments were made to Federal Laws "On the State Atomic Energy Corporation ROSATOM" No. 317-FZ as of 1 December 2001 and "On Noncommercial Organizations" No. 7-FZ as of 12 January 1996.

In January 2010, a draft Federal Law "On Radioactive Waste Management" passed first readings in the State Duma of the Russian Federation. In the reporting year, a draft Federal Law "On the Management of Spent Nuclear Fuel" was refined and passed an interagency review process.

1.4.2. BUDGET ALLOCATIONS

ROSATOM has authorities of the chief controller, which include the function of Russian Federation Treasury property budgetary accounting. First of all, budgetary accounting concerns nuclear materials that are in exceptional federal ownership, the state reserve and special fissile materials inclusive. Budgetary accounting is carried out by the chief controller in accordance with applicable budget legislation and regulations.

Execution of the chief controller authorities by ROSATOM raises the level of control over spending of budgetary funds on the part of the Ministry of Finance of the Russian Federation and the Accounts Chamber of the Russian Federation and enhances the effectiveness of budget funds management.

At the same time, ROSATOM has associated authorities of chief controller of the budget revenues, including that from the export of highly enriched uranium and natural component of low enriched uranium under the Russia-U.S. intergovernmental HEU Agreement.

1.4.3. IMPLEMENTATION OF FEDERAL TARGET PROGRAMS

In 2010, work continued to implement all federal target programs (FTP) ROSATOM is responsible for.

Implementation of federal target programs

FTP	Foreseen financing – total (mln RUB)	Including:			Implementation of FTP in the reporting period (%)	Including:		
		from the federal budget (mln RUB)	from budgets of Russia's Federal Subjects (mln RUB)	from extra-budgetary sources (mln RUB)		from the federal budget (mln RUB)	from budgets of Russia's Federal Subjects (mln RUB)	from extra-budgetary sources (mln RUB)
Research and development in priority areas of development of the science and technology complex of Russia in 2007–2012	134.2	134.2	–	–	100.0	100.0	–	–
National technological base in 2007–2011	744.0	372.0	–	372.0	94.2	100.0	–	88.4
Development of nanoindustry infrastructure in the Russian Federation in 2008–2011	344.1	310.0	–	34.1	100.0	100.0	–	100.0
Development of the base of electronic components and radio electronics in 2008–2015	279.1	179.4	–	99.7	100.0	100.0	–	100.0
Fire safety in the Russian Federation until 2012	13.0	13.0	–	–	100.0	100.0	–	–
Housing in 2002–2010	18.7	17.1	1.6		71.7	69.1	100.0	
Nuclear power technologies of the new generation in 2010–2015 and until 2020	4,509.8	3,170.0	–	1,339.8	100.0	100.0	–	100.0

1.4.4. STATE PROPERTY MANAGEMENT

During the reporting period, ROSATOM monitored the process of formalizing state rights of real estate items by subordinate FSUEs and worked to settle land relations.

Rights of the Russian Federation were formalized in regard to 19,179 facilities, or 98.3% of a total number of facilities subject to formalization of such rights.

1.4.5. NUCLEAR MATERIAL CONTROL AND ACCOUNTING

Thirteen nuclear material control and accounting inspections were carried out in 2010.

A federal register of nuclear materials in federal ownership was compiled.

A list of nuclear materials owned by legal entities of the Russian Federation, as well as those owned by foreign states and legal entities temporarily staying in the territory of the Russian Federation, was generated.

Work and measures to maintain, service and replenish the federal reserve were performed in full scope in accordance with requirements of the state security regime, state secret protection, physical protection of nuclear material, as well as nuclear, radiation, industrial and fire safety.

1.5.

INTERNATIONAL COOPERATION

NIKOLAY SPASSKIY

Deputy Director General for International Cooperation

"Each country has the right to making its sovereign choice of whether to develop nuclear power or not. We respect the choice of our partners whatever it is. However, we have an opinion of our own in this regard and we don't hold it back. We are confident that, in spite of the Fukushima tragedy, there is no alternative to nuclear power development, at least in the coming decades. But conclusions must be drawn from the Fukushima accident, very serious ones. In particular, it is necessary to substantially strengthen the international nuclear safety legislative regime."

One of ROSATOM strategic goals is the support of the geopolitical interests of the nation and attainment of leadership by Russian companies on the world market of nuclear technologies and services.

In the reporting year, international cooperation was carried out in the following areas:

- strengthening of the international legal basis of cooperation to support promotion of Russian companies on world markets of technologies and services;
- support of large-scale international projects;
- strengthening of the nuclear nonproliferation regime;
- participation in the IAEA and other nuclear-related international organizations.

INPRO Project

The IAEA's International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) was initiated by the President of Russia in 2000 and started by IAEA member states that adopted a resolution aimed at supporting the use of atomic energy as a sustainable resource capable of meeting the energy needs of mankind in the 21st century.

One of the main achievements of the project is the commencement, within INPRO, of new activities of the IAEA, which include a systemic assessment of nuclear power systems, and provision of assistance to the interested IAEA Member State in long-term planning of development of national nuclear power infrastructures that meet sustainable development requirements.

The INPRO methodology is an effective tool; it is used by IAEA Member States to comprehensively assess nuclear power technologies and systems (including in relation to any NPP project over the entire life cycle).

Russian experts took part in implementation of five joint research projects within INPRO, including the project to make a preliminary assessment of the efficiency of Belarus' national energy system, considering building a NPP to a Russian design (AES-2006), as well as a project on studies of legal and institutional support of the nuclear power system based on transportable (floating) nuclear power installations.

On the initiative of Russia, the IAEA held a jubilee session on the occasion of the 10-th anniversary of the founding of INPRO where participating countries summed up their cooperation. ROSATOM has announced an initiative on development of an international multilateral cooperation program of research and development in fast neutron reactors, including safety studies.

1.5.1. STRENGTHENING OF THE INTERNATIONAL LEGAL BASIS OF COOPERATION

In the reporting year, 13 intergovernmental agreements were concluded (10 in 2008; 13 in 2009), including five intergovernmental agreements concerning construction of NPPs in Turkey, Venezuela, Vietnam, Armenia, and Ukraine. Projects for Turkey and Armenia envisage a crucially new scheme of interaction, i.e. "Build-Own-Operate," with the scheme described in fair detail in both agreements. For instance, the agreement with Turkey provides that investments in NPP construction (about US$20bn) will be offset through electricity sales on the Turkish market. The agreement contains all necessary guarantees.

An umbrella intergovernmental agreement was signed with a long-standing partner – India; that became possible after relief of constraints on nuclear cooperation with Delhi by the Nuclear Suppliers Group.

Twenty interagency agreements and other joint documents (10 in 2008; 17 in 2009) were signed on cooperation in specific areas (exploration, staff training, science and technology exchanges, etc.), including those with new partners – Argentina, Namibia, Egypt, Kuwait, Qatar, and Mexico.

Intergovernmental agreements on the peaceful uses of atomic energy with Australia and Japan, construction of an NPP with Turkey, and setting up a uranium mining company, Dornod Uran, with Mongolia were ratified. By this, shaping of the international contractual basis for the cooperation of ROSATOM with foreign partners in the peaceful uses of atomic energy was nearly completed.

A legal basis is available for cooperation with 54 countries, as of 31 December 2010.

1.5.2. SUPPORT OF LONG-TERM INTERNATIONAL PROJECTS

Political and legal support was rendered to ARMZ to expand its uranium resource base. In the interests of ARMZ's acquisition of Uranium One Inc.'s controlling block of shares, there were interactions with Kazakhstan, Canada and the United States. ROSATOM consistently interacted with Mongolia on establishing the JV Dornod Uran to facilitate the start of its operations. Efforts were made to support ARMZ's asset acquisition plans in Tanzania and Namibia.

1.5.3. STRENGTHENING OF THE NUCLEAR NON-PROLIFERATION REGIME

To strengthen the nuclear nonproliferation regime, ROSATOM continued the Russia-US (Russian Research Reactor Fuel Return Program, RRRFRP). Under this program, nuclear fuel was repatriated from Belarus, Bulgaria, the Czech Republic, Germany, Hungary, Kazakhstan, Latvia, Libya, Poland, Romania, Serbia, Ukraine, Uzbekistan, and Vietnam.

In 2010, fresh highly enriched fuel was returned from Belarus (47 kg.) and Ukraine (50.6 kg.) and irradiated highly enriched fuel was repatriated from Poland (455 kg.), Ukraine (55.9 kg.), Belarus (42 kg.) and Serbia (13 kg.).

As part of this program, as of 31 December 2010, a total of 604 kg. of fresh and 986.7 kg. (with regard to uranium) of irradiated highly enriched fuel was returned.

ROSATOM participated in preparation and conduct of the Nuclear Nonproliferation Treaty's 2010 Review Conference and drafting of its final document.

ROSATOM prepared a Memorandum on the Nuclear Security. This Memorandum was circulated on behalf of the Russian Federation at the Nuclear Security Summit held in Washington, DC.

On the Summit's sidelines, a Protocol to the Agreement between the Government of the United States of America and the Government of the Russian Federation Concerning the Management and Disposition of Plutonium Designated as no Longer Required for Defense Purposes and Related Cooperation was signed. The agreement provides for disposition by each party of 34 metric tons of surplus weapons-grade plutonium. Protocol signing became possible as a result of an agreement reached with the U.S. partners regarding adjustment of terms and conditions of this Agreement.

1.5.4. PARTICIPATION IN THE IAEA AND OTHER NUCLEAR-RELATED INTERNATIONAL ORGANIZATIONS

In the reporting year, ROSATOM took part in the work of the following international organizations:

- International Atomic Energy Agency (IAEA),
- Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD/NEA),
- European Organization for Nuclear Research (CERN),
- Commission of the Commonwealth of Independent States Member Nations in Peaceful Use of Atomic Energy,
- International Thermonuclear Experimental Reactor (ITER),
- International Scientific and Technical Center (ISTC),
- Facility for Antiproton and Ion Research (FAIR),
- Generation IV International Forum (GIF),
- UN Scientific Committee for Effects of Atomic Radiation (UNSCEAR),
- Preparatory Commission of the Comprehensive Test Ban Treaty Organization (Preparatory Commission for the CTBTO),
- Council under the EurAsEC Integration Committee on Cooperation in Peaceful Uses of Nuclear Energy.

In 2010, the Agreement between the Government of the Russian Federation and the International Atomic Energy Agency (IAEA) Regarding the Establishment on the Territory of the Russian Federation of a Physical Reserve of Low-Enriched Uranium and Supply of Low-Enriched Uranium therefrom to the International Atomic Energy Agency for its Member States was signed to form the world's first international nuclear fuel "bank." The guaranteed reserve is called for to secure supplies of nuclear fuel to states including those that do not have all links of the nuclear fuel cycle process chain.

On November 25, 2010, the entire inventory of the garanteed reserve was placed in the IUEC storage facility (Angarsk, Irkutsk Region). The reserve amounts to 120 metric tons of uranium hexafluoride enriched 2.0% up to 4.95%. This amount is sufficient to ensure two reloads of the world's most widely used light-water reactors of 1,000-megawatt capacity. In December 2010, the IAEA conducted an inspection in the IUEC to check the physical inventory of the material in storage and seal guaranteed reserve containers.

In October 2010, new IAEA Director General Yukiya Amano paid his first visit to Moscow. An agreement between the IAEA and the Government of the Russian Federation concerning training of junior professionals for work in the Agency and the nuclear industry was signed.

Russia also participated in activities of other international organizations:

OECD/NEA	In 2010, Russia joined the Framework Agreement for International Collaboration on Research and Development of Generation IV Nuclear Energy Systems. ROSATOM was designated as the Implementing Agent for this agreement. To support the interests of Russia on the world isotopes market, the Corporation joined the OECD/NEA High-Level Group on Security of Supply of Medical Radioisotopes to ensure reliable molybdenum-99 supplies.
EurAsEC	The 7th meeting of the Council for Cooperation in the Peaceful Uses of Atomic Energy of the Integrating Committee of the Eurasia Economic Community was held (22 December 2010, Obninsk, Kaluga Region), which approved a draft Program of rehabilitation of EurAsEC countries' territories affected by uranium mining, produced by the Corporation.
CIS	ROSATOM drafted a Framework Cooperation Program of the Commonwealth of Independent States participating countries in the field of the peaceful uses of atomic energy – COOPERATION ATOM-CIS – and its implementation plan. The program and plan were approved by the CIS Economic Council on November 19, 2010, and passed up for review by the CIS Interstate Council at the level of heads of government.

1.5.5. FULFILLMENT OF FINANCIAL COMMITMENTS OF THE RUSSIAN FEDERATION

In the reporting year, all financial commitments of the Russian Federation in the framework of international activities were fulfilled. A contribution to the IAEA Extrabudgetary Fund of 23.0 million rubles was transferred to support the INPRO International Project Implementation Plan in 2008-2012. A voluntary contribution of 23.6 million rubles was paid to the Technical Cooperation Fund of the Agency for 2010. The national science and technology support program of IAEA safeguards was implemented; the program framed work worth a total of 7.8 million rubles.

In 2010, ROSATOM made a Russian contribution worth US$3.0 million to the IAEA Extrabudgetary Fund to support repatriation of the irradiated highly enriched nuclear fuel of the research reactor of the Vinca Institute of Nuclear Sciences of the Republic of Serbia (2,392 kg. of irradiated nuclear fuel, of which 13 kg. was irradiated highly enriched fuel). The Russian contribution supported a task important for both nonproliferation and environmental protection. The IAEA acknowledged the project to repatriate the Vinca research reactor fuel projects as a remarkable achievement of the Agency's work in 2010 (2010 Report by the IAEA Director General).

Contributions amounting to 80,000 Euro (for 2009 and 2010) were transferred to support the activities of the Secretariat of the Multinational Design Evaluation Program implemented under the auspices of OECD/NEA.

In 2010, participation in the Shelter Chernobyl Fund and Nuclear Safety Account was supported. The Russian Federation contributed US$7.0 million to the Shelter Fund.

1.5.6. FULFILLMENT OF INTERNATIONAL COMMITMENTS AND NATIONAL LEGISLATION IN EXPORT CONTROL

In 2010, seminars on export control were held: two seminars in the European and Siberian regions for officers responsible for export control on sites and two workshops for technical experts responsible for exported product identification.

In the reporting year, no cases of export control violations at the Corporation's organizations were reported.

2 CORPORATE GOVERNANCE

The total amount of purchase in the reporting year made 166.4 bln rubles. Total savings attained

19.7 bln rubles (11.8 %)

The economic result from the implementation of the Treasury projects (within the scope of the Program on reformation of the financial-economic division) attained

~1.2 bln rubles

61 normative circulations

of the President of the Russian Federation and the Government of the Russian Federation were adopted in the area of Rosatom activities

The credit rating agency Standard&Poor's in 2010 confirmed previously assigned to JSC Atomenergoprom rating

«BBB-» long-term rating

«ruAAA» national scale rating

the ratings' forecast "Stable"

2.1.

GOVERNING BODIES

The Governing Bodies of ROSATOM were established in accordance with the Federal Law "On the State Atomic Energy Corporation ROSATOM" No. 317-FZ as of 01.12.2007, as the Supervisory Board, the Director General and the Governing Board.

Employees of the Corporation can participate in the work of ROSATOM governing bodies by raising issues for their consideration in accordance with the established procedure.

2.1.1. SUPERVISORY BOARD OF ROSATOM

In accordance with the Federal Law "On the State Atomic Energy Corporation ROSATOM", the ROSATOM Supervisory Board is the supreme management body. It includes representatives of the President and the Government of the Russian Federation, as well as the Director General of ROSATOM, who is a member of the Supervisory Board by position. The Chairman of the Supervisory Board is appointed by the President of the Russian Federation. No members of the Supervisory Board, exclusive of the Director General, are on the executive management of the Corporation.

Over the reporting period, some changes took place in the ROSATOM Supervisory Board: on 16 November 2010, Igor Shuvalov, the First Deputy Chairman of the Government of the Russian Federation, was appointed the Chairman of the ROSATOM Supervisory Board and Sergey Sobyanin was relieved of duties as the Chairman of the Supervisory Board.

In 2010, the Supervisory Board held 10 meetings, of which two were in praesentia.

Members of the Supervisory Board (as of 31 December 2010):

Igor Shuvalov, First Deputy Chairman of the Government of the Russian Federation (Chairman of the Supervisory Board)

Andrey Belousov, Head of the Department of Economics and Finance of the Government Staff of the Russian Federation

Igor Borovkov, Chief of Staff of the Military Industrial Commission under the Government of the Russian Federation and Deputy Chief of the Government Staff of the Russian Federation

Larissa Brychyova, Aide to the President of the Russian Federation and Head of the State Legal Directorate in the Presidential Executive Office

Arkady Dvorkovitch, Aide to the President of the Russian Federation

Sergey Kirienko, Director General of the State Atomic Energy Corporation ROSATOM

Sergey Prikhodko, Aide to the President of the Russian Federation

Sergey Shmatko, Minister of Energy of the Russian Federation

Yuri Yakovlev, Head of the Economic Security Service in the Federal Security Service of the Russian Federation.

2.1.2. DIRECTOR GENERAL OF ROSATOM

The Director General is the sole executive body of the State Atomic Energy Corporation ROSATOM and administers its current activities. The Director General is appointed to / dismissed from the position by the President of the Russian Federation as advised by the Chairman of the Government of the Russian Federation. Sergey Kirienko was appointed the Director General of the State Atomic Energy Corporation ROSATOM by Decree of the President of the Russian Federation No. 1663 as of 12.12.2007.

2.1.3. GOVERNING BOARD OF ROSATOM

The Governing Board* is a collegial executive body of the State Atomic Energy Corporation ROSATOM. Governing Board members are appointed to / dismissed from their positions by the Supervisory Board as advised by the Director General and they work in the Corporation full time.

Over the reporting period, the Governing Board held 48 meetings (of them 31 in praesentia). A total of 217 issues were reviewed (of them 170 at in praesentia meetings).

Composition of the Governing Board (as of December 31, 2010) see p. 30-33.

2.1.4. AUDIT COMMITTEE

The Audit Committee of ROSATOM controls the financial and economic activities of the Corporation. Audit Committee members were approved by the Supervisory Board on 22.04.2008.

The Audit Committee as of 31 December 2010:

Anton Siluanov, Deputy Minister of Finance of the Russian Federation, Chairman of the Audit Committee

Roman Artyukhin, Head of the Federal Treasury of the Ministry of Finance of the Russian Federation

Victor Belyakov, Deputy Head of the 12th Main Directorate of the Ministry of Defense of the Russian Federation

Victor Zobov, Head of Division in the Defense Industry and High Technologies Department within the Government of the Russian Federation

Alexey Kaulbars, Director of the Department for Budget Policy in Military, Law Enforcement and Governmental Defense Order at the Ministry of Finance of the Russian Federation.

2.1.5. COMMISSIONS, COMMITTEES, PANELS WITHIN THE EXECUTIVE BODIES

SCIENTIFIC AND TECHNICAL BOARD

The Scientific and Technical Board of the State Atomic Energy Corporation ROSATOM is a standing consultative and advisory body that was set up to render scientific, methodological, informational, analytical and expert support to the activities of the Corporation.

PUBLIC COUNCIL

The Public Council of ROSATOM was set up with the aim of involving nongovernmental organizations in the policymaking process in the uses of atomic energy, environmental protection, and nuclear and radiation safety.

COMMISSIONS AND COMMITTEES

Specialized commissions and committees are established subordinate to the Governing Board and Director General to enhance work efficiency. These include:

- Strategic Committee (mid- and long-term strategic planning),
- Investment Committee (planning and development of promising investment policy areas),
- Budget Committee (planning and budgeting at different levels),
- Public Reporting Committee (development of the public reporting system of ROSATOM and its organizations),
- Committee for Risks (risk management),
- Control Commission (performance inspection and oversight of operations of the Corporation's enterprises),
- Commission for Lawmaking Activities (drafting legislation that affects the activities of the Corporation and its organizations),
- Commission for Prevention and Elimination of Emergencies and for Fire Safety (prevention and elimination of emergencies associated with operations of the Corporation's enterprises, as well as fire safety at the Corporation's enterprises),
- Awards Commission (awarding Corporation employees who distinguish themselves with prominent work and scientific results).

* Information on the incomes of the Governing Board members can be found on ROSATOM's website at: http://rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/aboutcorporation/public_reporting/incomeGD/ and at: http://rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/aboutcorporation/public_reporting/incomeZGD/

GOVERNING BOARD OF ROSATOM

Sergey
KIRIENKO

Director General of State Atomic Energy Corporation ROSATOM, Chairman of the Board

Born on July 26, 1962, in Sukhumi.

Education: Gorky Institute of Water Transport Engineers and Russian Presidential Academy of National Economy and Public Administration

1986 – 1991: secretary of the Krasnoye Sormovo shipyard's Komsomol committee, first secretary of the Gorky regional Komsomol committee, member of the Gorky regional council of people's deputies.

1991 – 1997: director general of Joint Stock Company AMK Concern, chairman the Governing Board of Bank Garantiya, president of NORSI-Oil petroleum company.

1997 – 1998: First Deputy Minister of Fuel and Energy of Russia.

1998: Chairman of the Government of Russia.

1999 – 2000: member of the State Duma of the Federal Assembly of Russia, leader of the Soyuz Pravikh Sil (Union of Right Forces).

2000 – 2005: Plenipotentiary Representative of the President in Volga Federal District.

2005 – 2007: Head of the Federal Atomic Energy Agency.

Since 2007: Director General of the State Atomic Energy Corporation ROSATOM.

Awards: Order of Honor, Order of Merit for the Fatherland IV Class, Order of St. Serafim Sarovsky II Class, Order of St. Sergiy Radonezhsky I Class, and the Anatoli Koni Medal.

Ivan
KAMENSKIKH

Deputy Director General – Director of Directorate for Nuclear Weapons Complex

Born on February 3, 1946, in Ocher, Perm Region.

Education: Perm Polytechnic Institute in 1970.

1970 – 2000: design engineer, senior design engineer, department head, sector head, first deputy chief designer and first deputy chief engineer in the Federal Nuclear Center Russian Scientific and Research Institute of Technical Physics (Snezhinsk, Chelyabinsk Region).

2000 – 2004: Deputy Minister of the Russian Federation for Atomic Energy.

Since 2004: deputy head and acting head of the Federal Atomic Energy Agency, Deputy Director General of the State Atomic Energy Corporation ROSATOM and Director of the Nuclear Weapons Complex Directorate.

Awards: Order of Credit and Order of Friendship. He was given a State Award for Achievements in Science and Technology and Governmental Award for Achievements in Science and Technology.

Alexander
LOKSHIN

Deputy Director General – Director of Directorate for Nuclear Power Complex

Born on October 11, 1957, in Chita.

Education: M.I. Kalinin Leningrad Polytechnic Institute.

1980 – 1996: engineer, senior engineer of a thermal tests laboratory, then senior engineer of reactor control, unit shift supervisor and plant shift supervisor at Unit 2 of Smolensk NPP (Desnogorsk, Smolensk Region).

1996 – 2001: deputy head of the General Directorate, deputy head of the Commerce Department, head of the Information Analysis Department, first deputy director for marketing, economics and commercial activities; acting director; director; deputy director general and branch director at Smolensk NPP; first deputy director general; acting director general of Rosenergoatom Concern

Since 2008: Deputy Director General of the State Atomic Energy Corporation ROSATOM and Director of the Nuclear Power Complex Directorate.

Awards: Honored Power Engineer of Russia.

Nikolay
SOLOMON

Deputy Director General
for Economy and Finance

Born on January 3, 1971, in Moscow.

Education: Moscow State Automobile and Road Technical University, Finance Academy under the Government of the Russian Federation. Nikolay Solomon is a member of England and Wales Association of Certified Accountants.

1994 – 2003: positions in departments for auditing and consulting at PricewaterhouseCoopers (consulting of large companies in the energy sector).

2003 – 2005: director of the Department for Project Management, acting director general of the Center for Finance and Accounting of JSC YUKOS-Moscow.

2005 – 2009: financial inspector and director for economics and controlling of the Siberian Coal Energy Company.

Since 2009: Deputy Director General of ROSATOM for Finance; Deputy Director General for Economics and Finance at the State Atomic Energy Corporation ROSATOM.

Evgeny
EVSTRATOV

Deputy Director General –
Director of Directorate
for Nuclear and Radiation
Safety

Born on July 10, 1961, in Angarsk, Irkutsk Region.

Education: Moscow Engineering and Physics Institute; Ph.D. (physics and mathematics).

1984 – 1991: engineer, junior researcher, researcher in a branch of the I.V. Kurchatov Institute of Atomic Energy (TRINITY, Troitsk).

1991 – 2007: senior researcher, acting deputy director for economics, deputy director for economics of the Nuclear Safety Institute of the RAS.

Since 2008: deputy head of the Federal Atomic Energy Agency, Deputy Director General of ROSATOM and Director of the Nuclear and Radiation Safety Directorate.

Tatiana
ELFIMOVA

Deputy Director General,
Public Authority Execution
and Budgeting, States Secretary

Born on July 30, 1959, in Moscow.

Education: M.V. Lomonosov Moscow State University, Innovation Management Academy; Ph.D. in chemistry; reader in automated radio electronics production support systems.

1986 – 1997: researcher assistant, associate professor at the Moscow Aviation University.

1997 – 2000: deputy head of the Budget and Finance Directorate of the RF Ministry of Energy.

2000 – 2005: head of the Information Analysis Department of the Administrative Directorate, deputy head of the Directorate, assistant to the Plenipotentiary Representative at the Administration of the Plenipotentiary Representative of Russian President in Volga Federal District.

Since 2005: advisor to the head of the Federal Atomic Energy Agency, deputy head of the Federal Atomic Energy Agency, Deputy Director General of the State Atomic Energy Corporation ROSATOM, Deputy Director General of the State Atomic Energy Corporation ROSATOM for Public Authority Execution and Budgeting, States Secretary.

Awards: Order of Merit II Class, Medal for Merits in Nuclear Support, E.P. Slavsky Badge of Honor

Tatiana
KOZHEVNIKOVA
Deputy Director General
for HR Management

Born on September 27, 1967, in Moscow.

Education: M.V. Lomonosov Moscow State University; Ph.D. in economics.

1993 – 2001: managerial positions in human resources management at Coca-Cola, Mars, Ernst&Young.

2002 – 2009: HR director, member of the Governing Board at METRO Cash & Carry.

Since 2009: Deputy Director General for HR at ROSATOM.

Victor
RATNIKOV
Deputy Director General
for Property and Administration Complex

Born on July 15, 1971, in Mytishchi, Moscow Region.

Education: Moscow State Linguistic University.

1993 – 1994: deputy representative of Nizhniy Novgorod Region in the Government of the Russian Federation.

1994 – 1995: president of Doveriye Personality Development Foundation.

1995 – 1997: head of office of the Stabilnost MPs group in the State Duma of the Federal Assembly of Russia, assistant to a member of the Federation Council of the Federal Assembly of Russia.

1997 – 1998: assistant to the minister, head of the Secretariat of the Minister of Fuel and Energy of Russia.

1998 – 2001: deputy head of the department and head of the information division at the Department of Governmental Information.

2001 – 2005: deputy plenipotentiary representative of the President of Russia in the Volga Federal District.

Since 2005: assistant to the head of the Federal Atomic Energy Agency, deputy director general of ROSATOM and head of the Office Staff, Deputy Director General for Property Management and Administrative Complex

Evgeny
SOFIYN
Deputy Director General
for Security

Born on November 16, 1953, in Gorky.

Education: N.I. Lobachevsky Gorky State University.

1976 – 2007: field and managerial positions in the State Security Committee of the USSR (KGB) and the Federal Security Service of the Russian Federation (FSB).

2007 – 2008: deputy head of the Federal Atomic Energy Agency, Deputy Director General of the State Atomic Energy Corporation ROSATOM.

Awards: Order of Credit, Medal for Excellence in Public Order Protection.

Nikolay
SPASSKIY

Deputy Director General
for International Cooperation

Born on August 10, 1961, in Sebastopol.

Education: Moscow State Institute of International Relations with the Ministry of Foreign Affairs of the USSR; Ph.D. in history and political science; Full State Counselor of the Russian Federation.

1983 – 1985: consultant in the Press Department of the USSR Ministry of Foreign Affairs.

1985 – 1991: consultant, senior consultant, third and, later, first secretary in the Department of the USA and Canada of the MFA of Russia.

1991: adviser to the Minister of Foreign Affairs.

1991 – 1997: expert, deputy director, first deputy director and director of North America Department in the Ministry of Foreign Affairs of Russian Federation; member of the Ministerial Collegium.

1997 – 2004: Ambassador of Russia to Italy and San Marino with concurrent accreditation.

2004 – 2006: Deputy Secretary of the Security Council of Russia.

Since 2006: states secretary, deputy head of the Federal Atomic Energy Agency, Deputy Director General for International Relations at the State Atomic Energy Corporation ROSATOM.

Petr
SHCHEDROVITSKIY

Deputy Director General
for Strategic Development –
Director of Directorate
for Scientific and Technical
Complex

Born on 17 September, 1958, in Moscow.

Education: V.I. Lenin Moscow State Pedagogical Institute; Ph.D. in philosophy.

1984 – 1988: senior engineer, junior researcher in the Moscow Institute of Oil.

1988 – 1990: deputy head of the Laboratory of Industrial Engineering and Production Management at the Moscow Regional Road Passenger Entity.

1990 – 2005: head of the sector for regional culture development planning at the Moscow Culture Research Institute.

For several years worked as an expert in regional and industrial policy, innovative activities and staff training. Member of the Board of the Center for Strategic Research – Northwest Foundation.

2000 – 2005: adviser to the Plenipotentiary Representative of the President of the Russian Federation in the Volga Federal District (for strategic development).

2005 – 2006: director general of FSUE TSNIIATOMINFORM, advisor to the head of the Federal Atomic Energy Agency.

2006 – 2007: chairman of the board of JSC VNIIAES.

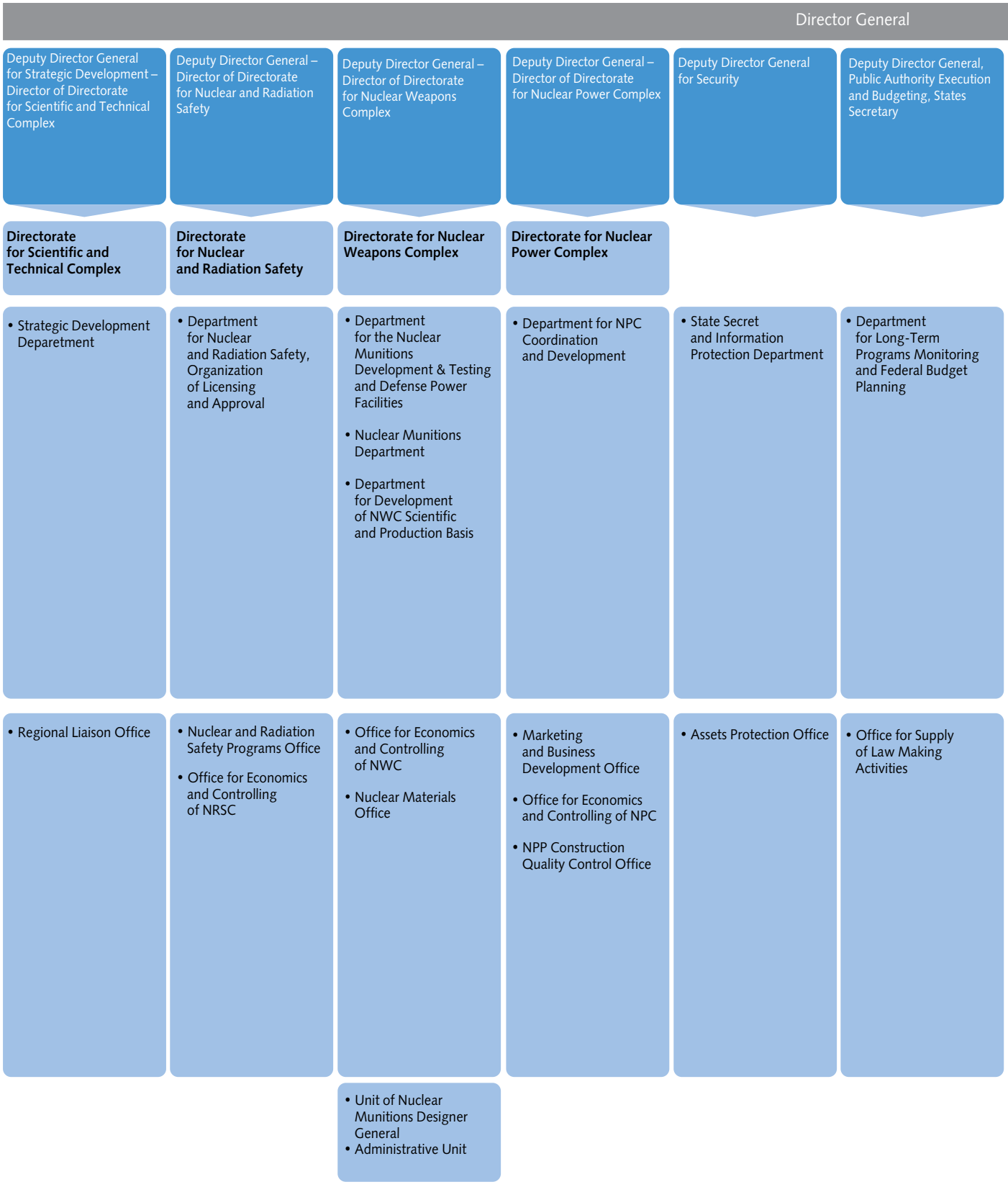
2007 – 2008: deputy director of JSC Atomic Energy Power Corporation.

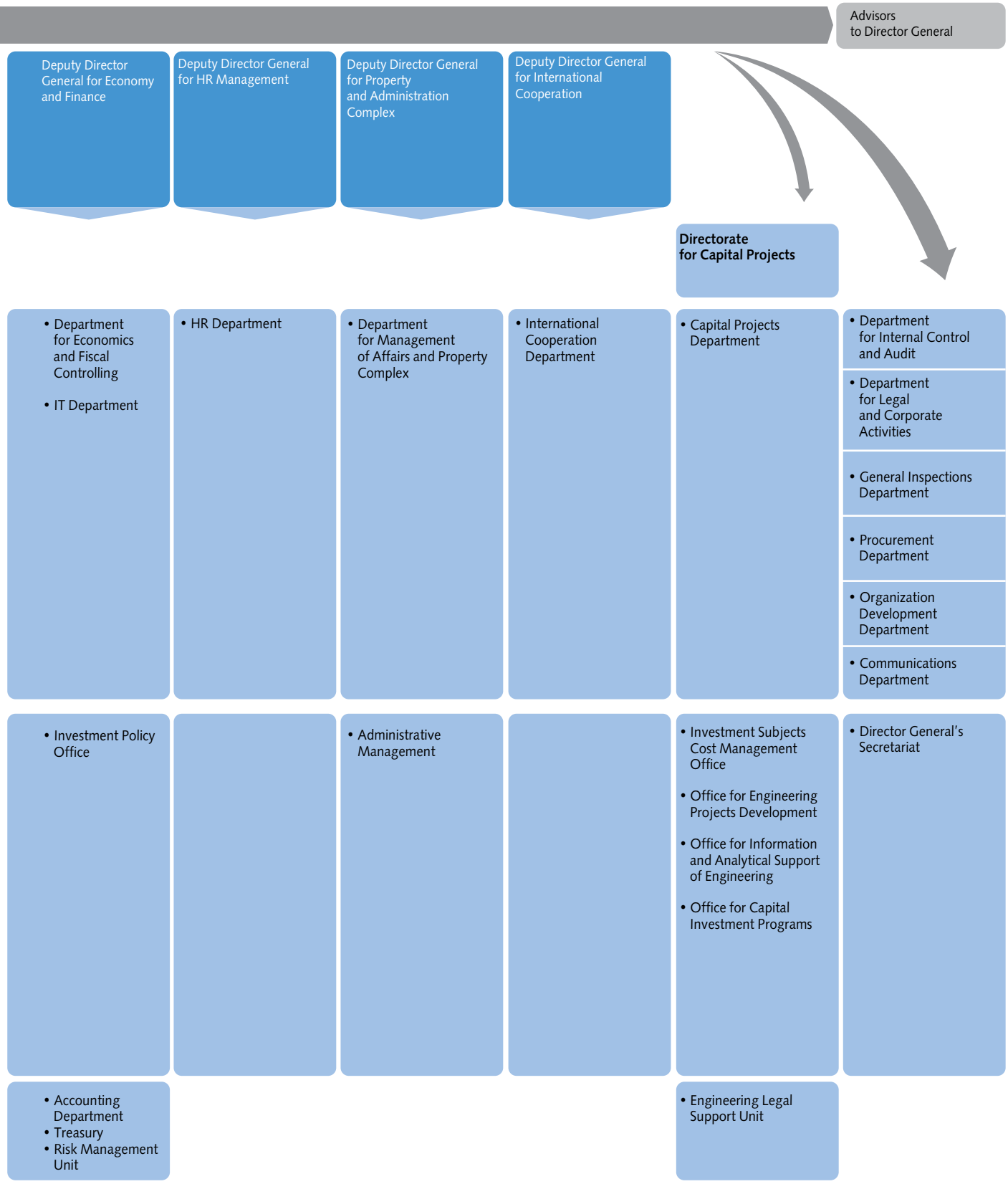
Since 2008: Deputy Director General of ROSATOM, Deputy Director General of ROSATOM for strategic development and Director of the Directorate for Scientific and Technical Complex.

Advisor to the Minister of Education and Science of the Russian Federation.

Awards: Akademik I.V. Kurchatov Badge of Honor II Class.

ORGANIZATIONAL STRUCTURE OF STATE CORPORATION ROSATOM

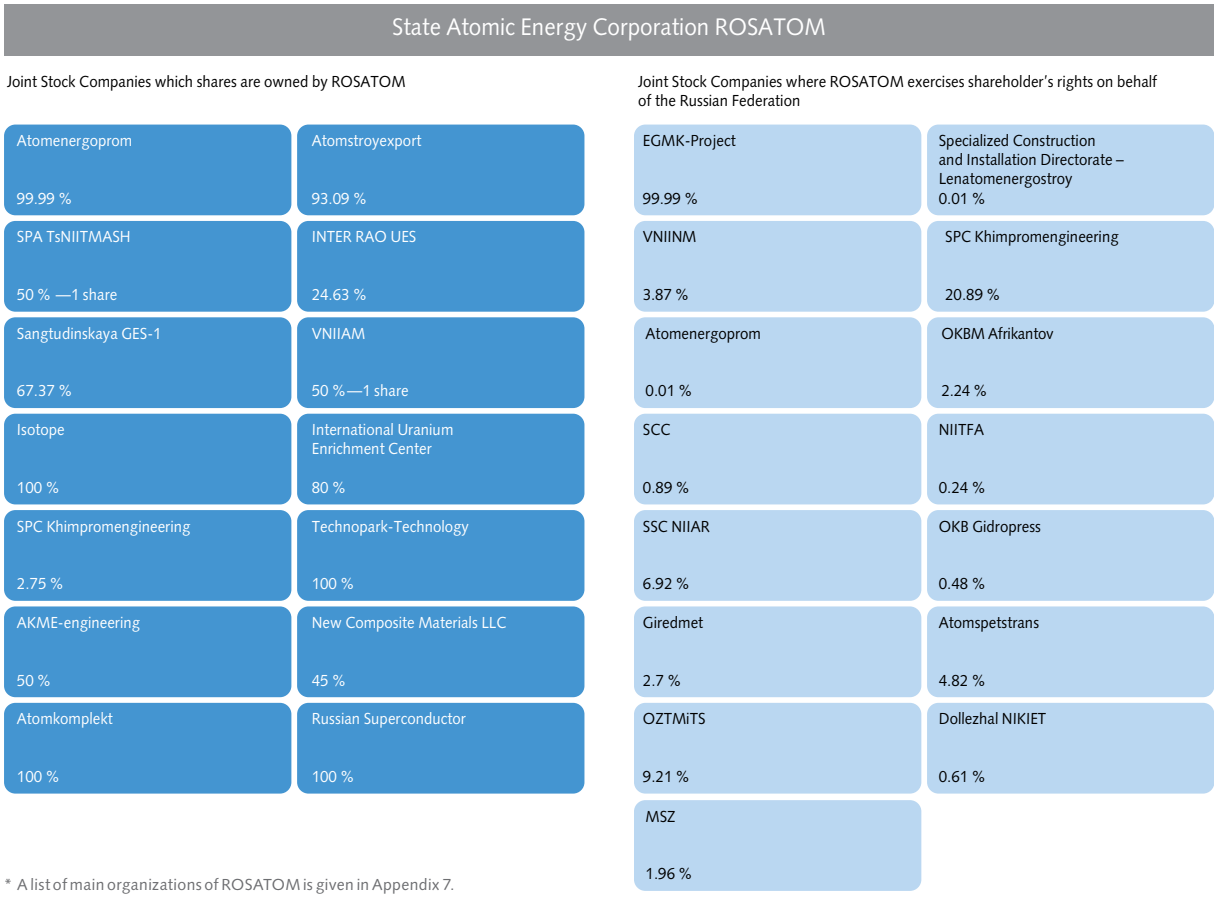



Advisors to Director General
Deputy Director General for Economy and Finance
Deputy Director General for HR Management
Deputy Director General for Property and Administration Complex
Deputy Director General for International Cooperation
Directorate for Capital Projects
• Department for Economics and Fiscal Controlling
• IT Department
• HR Department
• Department for Management of Affairs and Property Complex
• International Cooperation Department
• Capital Projects Department
• Department for Internal Control and Audit
• Department for Legal and Corporate Activities
• General Inspections Department
• Procurement Department
• Organization Development Department
• Communications Department
• Investment Policy Office
• Administrative Management
• Investment Subjects Cost Management Office
• Office for Engineering Projects Development
• Office for Information and Analytical Support of Engineering
• Office for Capital Investment Programs
• Director General's Secretariat
• Accounting Department
• Treasury
• Risk Management Unit
• Engineering Legal Support Unit

2.2.

CORPORATE STRUCTURE

Corporate structure of the State Atomic Energy Corporation ROSATOM*



* A list of main organizations of ROSATOM is given in Appendix 7.

In 2010, ownership scale and structure changed as follows:

- consolidation of 80% of ARMZ shares by Atomenergoprom;
- consolidation of shares of Petrozavodskmash by Atomenergomash;
- consolidation of shares of SNIIP, OZTMiTS, ITsPYaF, IFTP, MPTM by Atomenergomash;
- completion of the establishment of a specialized association for project support for facilities pertaining to NWC, NRSC, NFC and nuclear industry science at GSPI;
- consolidation of shares of Atomenergoremont, UKS and ENITs by Rosenergoatom Concern;
- consolidation of shares of CenterAtom by Aliliancetransatom;
- consolidation of shares of OK RSK, VNIINM, EC RGC by JSC TVEL as part of the establishment of the Fuel Company TVEL;
- consolidation of shares of St. Petersburg Isotope by Techsnabexport;
- completion of the establishment of a common industry-wide leasing operator at TENEX-Service (acquisition of TENEX-Service shares by Atomenergoprom);
- acquisition by ARMZ of the controlling block of stock of the Canadian company Uranium One Inc. (after deal closure, the total share of ARMZ and its affiliates in Uranium One Inc. amounted to 51.4%);
- consolidation by Atomenergomash of the controlling block of stock of EMSS Holdings Limited (Cyprus), which owns 92.68% of shares of Energomashspetstal (Ukraine).

2.3.

ENHANCEMENT OF CORPORATE GOVERNANCE

2.3.1. RESULTS 2010

– A system of corporate governance, supervisory control and functional management of nuclear industry organizations by ROSATOM was implemented.

– Regulations and scenarios for the Unified Industry-wide Document Management System (UDMS) for business processes, such as "Collegial Management Bodies," "Contracting Activities," "Court and Claims Activities," "Intellectual Property Objects," "Corporate Information," and "Proxies" were introduced.

– Registration of additional issues and placement of securities aimed at their submission for budgetary appropriations (as per provisions of the Federal Law "On the Federal Budget for 2010 and until 2011 and 2012" No. 308-FZ as of 2 December 2009) were carried out.

– 61 regulatory legal acts by the President of the Russian Federation and the Government of the Russian Federation related to ROSATOM activities were adopted (since 2008, a total of 147 regulatory legal acts by the President of the Russian Federation and the Government of the Russian Federation were adopted, of which 32 in 2008 and 54 in 2009).

– 13 regulatory legal acts by ROSATOM were registered by the Ministry of Justice of the Russian Federation (since 2008, a total of 37 regulatory legal acts produced by the Corporation were registered by the Ministry of Justice of the Russian Federation, of which 7 in 2008 and 17 in 2009).

– 1,951 agreements, 999 governmental contracts, 4,040 document packages for contract award bids (governmental contracting) were subjected to legal review.

– The Third-party Arbitration Court was established.

– In 2010, 127 applications to obtain protective documents (patents, certificates) for results of intellectual activity gained through work using budgetary funds, rights for which are owned by the Russian Federation were submitted; also, 149 protective documents (patent, certificates) were obtained for the results of intellectual activity gained through work using budgetary funds, rights for which are owned by the Russian Federation.

– Documents on fire safety at nuclear facilities and prevention of recurrence of the emergency of August 2010 were produced jointly with other agencies.

Work done in the reporting period:

– follow-on placement of the 6th issue of Atomenergoprom bonds worth 10 billion rubles;

– completion of the formation of the Fuel Company TVEL;

– follow-on to the formation of the national isotope operator at Isotope, establishment of a joint venture of Isotope and SSC NIIAR, acquisition of RAIMS trading company by Isotope;

– selling of a shares package of IUEC (10%) to the State Concern Nuclear Fuel (Ukraine);

– development of functional strategies (long-term development program) to support legal and corporate functions (preliminary estimates show the economic effect of project implementation at 94 billion rubles in 2011-2015);

– follow-on to the establishment of the Project Company to build Akkuyu NPP (Turkey)

Third-party Arbitration Court

The Third-Party Arbitration Court was established within the Center of Arbitration and Legal Appraisal (CALA) on 25 May 2010.
The goal of the Third-Party Arbitration Court is independent, competent, confidential and fast-track arbitration of economic disputes of nuclear industry companies.
Since the beginning of operation (July 2010), the court has agreed to hear 7 cases, with rulings made on all of them (3 in 2010 and the others in January-February 2011).

2.3.2. GOALS FOR 2011

- Adoption of common Regulations of ROSATOM concerning the interaction procedure of the Corporation's organizations for corporate decision-making;
- implementation of regulations and scenarios of the Unified Industry-wide Document Management System (UDMS) for business processes, such as "Collegial Management Bodies," "Corporate Information," and "Proxies" in the Corporation's organizations;
- implementation of the Departmental Interaction Procedure of ROSATOM structural divisions as relates to public disclosure of information about Atomenergoprom and the Generic Interaction Procedure of structural divisions as relates to public disclosure of information about Atomenergoprom;
- implementation of regulations on handling insider information in ROSATOM and its organizations;
- elimination of excess ownership levels and inefficiently functioning companies within the Corporation system;
- organization of "covenant desk" activities (covenant observance monitoring system);
- updating the regulatory methodological documentation that governs legal protection and accounting of intellectual property objects produced by work under ROSATOM orders.

2.4.

DEVELOPMENT OF THE GOVERNANCE SYSTEM

EVGENY SOFIYN

Deputy Director General for Security

"For the nuclear weapons complex and nuclear power and industry complex of the Russian Federation to function securely, unique developments and technologies are produced which, as a rule, contain a state secret and other restricted-access information. At present, effective protection of such information is possible only with the use of up-to-date methods and means. This work is closely tracked by ROSATOM management."

VICTOR RATNIKOV

Deputy Director General for Property Management and Administrative Complex

"Nuclear power markets are markets with strong competition where large, vertically integrated companies and alliances dominate. The consolidation of all assets of the Russian nuclear industry has opened broad perspectives for the promotion of products and services on the international market for ROSATOM. The Corporation will continue consolidating assets, including international ones, and building efficient mechanisms for nuclear property management."

2.4.1. TREASURY MANAGEMENT

In 2010, work continued to enhance the ROSATOM financial model. In the reporting year, to provide financial resources needed to meet the strategic targets set by the Corporation and minimize risks of losing financial stability, "Mid-Term Financial Strategy Basics" were adopted to set target parameters of loans involved and determine preferable financial instruments.

Also in the reporting year, the ROSATOM Financial Policy was adopted and circulated to all its organizations. The Financial Policy establishes procedures for interaction with banks and conduct of financial transactions by Corporation organizations.

In 2010, consolidation of reserves in base banks was carried out and a mechanism of intra-group financing was introduced to allow a significant reduction in the external debt of Corporation organizations (by 38%) while reducing the cost of its servicing (average weighted rates of investments are 3-4 percentage points higher than market statistics published by the Bank of Russia).

In 2010, the economic effect of implementation of Treasury projects (as part of the FEB Transformation Program) was about 1.2 billion rubles.

To optimize the ROSATOM debt portfolio, issues of Atomenergoprom bonds worth 50 billion rubles placed in November 2009 were prepaid. The bonds were prepaid predominantly through the use of intra-group financing.

A new issue of Atomenergoprom bonds worth 10 billion rubles was placed with maturity of 4 years at a rate of 7.5% that set a level for further borrowings in banks.

In the reporting year, preparations were made for a long-term syndicated loan for Techsnabexport, which was the first public syndicated transaction for Russian nuclear industry enterprises.

FEB TRANSFORMATION PROGRAM

The program to transform the Financial and Economic Bloc of ROSATOM and its organizations has been underway since 2009. In 2009-2014, it is planned to implement 160 projects (including projects in the framework of the IT Transformation Program; see also Section 2.4.3.).

One of key projects of the Program (I 6.1.3.1.) is development of the Multifunctional Shared Service Center (MF SSC). In the reporting year, more than 30 enterprises, including ARMZ, Atomenergomash, Techsnabexport, NCCP, and MSZ, switched to MF SSC servicing for accounting and taxation. In 2010, the first branches of MF SSC were opened in Elektrostal and Novosibirsk. More than 100 enterprises of the nuclear industry will shift to MF SSC services within four years.

Start-up savings owing to the shift to IT-servicing and accounting and taxation servicing (A&T-servicing) was 5% (at the expense of staff costs); the plan is to reach savings of 30% in A&T-servicing and 45% in IT-servicing.

In the reporting year, nuclear industry organizations and enterprises started generating monthly accounts reports on the seventh working day (as of 31 December 2010, 280 enterprises); this allowed the accounting database to become a common source of information for governance reporting.

In 2010, the deployment of the Corporation's Payment Center started. The Payment Center allows the automation of interactions with banks, greater effectiveness of the use of temporary clear balance, and assurance of proper control over the use of funds of organizations, including funds received from the Russian federal budget.

Other results of the reporting year include computer-assisted budgeting basing on SAP IP software; development of a uniform methodology for prime cost planning, accounting and calculation, including with consideration of features of certain activities (mining, enrichment, fabrication, generation); further development of a design solution for SAP EPR deployment methodology, as well as development of a methodology for planning budget indicators and a cost estimates planning standard for administrative and economic activities of the Corporation.

2.4.2. INVESTMENT MANAGEMENT

The Corporation's investment activity is carried out in accordance with the Provision on the Investment Policy of ROSSATOM and the Provision on the Investment Committee of ROSATOM.

The investment management mechanisms are:

- collegial decision-making on key investments by the Investment Committee of ROSATOM and investment committees of ROSATOM's largest organizations pertaining to the nuclear power complex (NPC), which allows the avoidance of subjectivity in evaluations of effectiveness, risks and other characteristics of planned investments;
- annual drafting by the Corporation's organizations and defense at investment committees of relevant levels of investment memoranda containing clear and justified information on a mid- and long-term investment policy of an organization and its compliance with the strategic goals of ROSATOM;
- the use of a certification procedure for investment projects, which ensures appropriate work-through of economic, technical and organizational justifications of investment decisions;
- the use of the gate approach in investing;
- planning and control over implementation of planned schedules and budgets at all stages of implementation of investment projects.

In 2010, the following documents were adopted:

- The Standard for management of investment projects and programs of ROSATOM, its organizations and subordinate enterprises and their affiliates;
- The Standard of investment planning of ROSATOM;
- The Standard for generation of certificates of investment projects and programs of ROSATOM, ROSATOM organizations and their affiliates as well as subordinate FSUEs.

In 2010, in the framework of the Programs of Transformation of FEB and IT, the "Implementation of the Uniform Investment Policy" and "Formation and Implementation of a Program of Measures of ROSATOM for Interaction with the Investment Community" projects were implemented. Also in the reporting period, the project and project portfolio management information system was introduced (as part of the "Implementation of PPMIS" project).

Organizations of the Corporation produced more than 60 certificates of investment projects. Mid-term, investment and budget planning processes were integrated as relates to the use of common formats and data on investment projects and programs.

In 2010, measures aimed at accelerating modernization of the organizations' production equipment were implemented. The Common Industry-wide Leasing Operator was established at TENEX-Service.

The credit rating agency Standard & Poor's in 2010 affirmed the long-term rating "BBB–" and national rating "ruAAA" earlier given to Atomenergoprom, with a "Stable" forecast for these ratings. Standard & Poor's believes Atomenergoprom's ratings reflect a very high likelihood for the holding to receive timely and sufficient urgent support from the Government of the Russian Federation in case of a stress financial situation. Atomenergoprom has a high (as compared to similar Russian companies) cost-effectiveness of electricity generation. In addition, the organization holds strong positions in world market segments such as mining, conversion and enrichment of uranium, and fabrication of fuel rods. Atomenergoprom's liquidity indicators are also evaluated as adequate.

In the reporting year, ROSATOM held two investment forums: on June 9 in Moscow and November 18 in Stockholm (Sweden). Investment forums are carried out with the aim of building up an integrative understanding by the international investment community of the current situation in the Russian nuclear industry and its development prospects.

Investment areas of ROSATOM organizations in 2010

Organization (Division)	Investment areas
Nuclear Power Complex	
JSC ARMZ ("Mining" Division)	development of the resource base and natural uranium mining in Russia;
	development of a global resource base and uranium mining on the basis of the global growth platform;
	leadership in uranium mining and processing technologies.
JSC TVEL ("Fuel Company" Division)	development of main production, achievement and maintenance of a world-class level of nuclear fuel fabrication;
	development of non-nuclear productions within the production core;
	development of the infrastructure, engineering utilities and social sphere;
	implementation of measures under FTPs and encumbrances.
JSC Techsnabexport ("Sales and Trading" Division)	development of a transport and logistics infrastructure;
	broadening the network of overseas sales companies;
	advancement of software and information support of uranium product exports.
Rosenergoatom Concern JSC ("Electricity Generation" Division)	NPP construction investment projects;
	investment projects for operating life extension of Generation I and II reactors;
	investment projects at facilities for management of irradiated nuclear fuel and radioactive waste;
	development of new reactor installations, including reactors in framework of the AES-2006 project, mid-power reactors and fast neutron reactors;
	design and construction of floating nuclear co-generation plants;
	the VVER-TOI Project;
	other investment projects (care and maintenance, R&D, science and technology activities, "Safe and Reliable Operation of Existing Power Units", "Program for Increasing Electricity Generation at Operational Power Units of Rosenergoatom Concern JSC", "Program for Increasing Capacity Factor at Operating NPPs").
JSC Atomenergomash ("Machine Engineering" Division)	completion of the corporate outline through acquisition and integration of Russian and foreign technology companies;
	creation of alliances and partnerships with international technology leaders;
	development of the production and technology basis of enterprises within Atomenergomash and corporate management processes.
JSC AEP, JSC NN AEP, SPb AEP ("Capital Projects" Division)	JSC AEP: R&D, development of engineering competences, maintenance and development of immovable property, development of a complex of machines, equipment, software and other means of production;
	JSC NN AEP: mechanization of construction sites for execution of construction and installation works; equipment and machinery for business units; development of infrastructure; IT projects;
	JSC SPb AEP: R&D, development of engineering activities, improvement of material and technical resources and management methods; IT projects.
Nuclear and Radiation Safety Complex	
FSUE RosRAO, FSUE Atomflot, FSUE MCC	implementation of the FTP "Nuclear and Radiation Safety in 2008 and until 2015."
Scientific and Technical Complex	
JSC SSC NIIAR	development of technologies and production of mixed oxide fuel for fast neutron reactors (FTP NPNG);
	development of an MBIR multipurpose research fast neutron reactor (FTP NPNG);
	implementation of the FTP "Nuclear and Radiation Safety in 2008 and until 2015."

ROSATOM investment program sizes in 2010

Complex	Organization/enterprise	Actual size of financing of investment programs and projects, mln RUB (VAT exclusive)
Nuclear Power Complex	JSC ARMZ	30,542.0
	Fuel Company TVEL	23,443.9
	JSC Techsnabexport	2,941.0
	Rosenergoatom Concern JSC	150,000.0
	JSC Atomenergomash	10,879.6
	JSC Atomenergoproekt	654.7
	JSC NN AEP	498.0
	JSC SPb AEP	396.8
Nuclear and Radiation Safety Complex	FSUE RosRAO	147.0
Scientific and Technical Complex	JSC SSC NIIAR	644.1
Nuclear Icebreaker Engineering Complex	FSUE Atomflot	276.1

TARGETS FOR 2011

- peer review of the Rosatom investment management system for compliance with the world's best practices and completion of the "Implementation of the Uniform Investment Policy" project;
- optimization of the investment planning system;
- launching of the "Replication of PPMIS" project (second of three projects as part of the stage-by-stage introduction of PPMIS in nuclear industry);
- interactive training of the Corporation's employees and organizations in investment project management.

2.4.3. INFORMATION TECHNOLOGY MANAGEMENT

In December 2009, the Rosatom IT Transformation Program for 2010-2014 (based on the world's best IT products: SAP, Documentum, Primavera, etc.) was launched. The program is aimed at improving the efficiency of Corporation activities by building up a common industry information space, reducing costs and increasing labor efficiency.

In 2010, as part of the program, an electronic document management system and computer-aided human resources management systems, procurement and administrative activities were introduced. Also in the reporting year, preparations were made to deploy the target accounting systems in management companies (JSC ARMZ, JSC TVEL, JSC Techsnabexport, JSC Atomenergomash), engineering companies and Rosenergoatom Concern with subsequent dissemination in more than 150 enterprises and organizations.

Deployment of industrial automation software in the reporting year at JSC ARMZ, JSC Atomenergomash and JSC TVEL takes in a great deal of the scope of the Program.

Information systems for project portfolio management, including capital projects, are implemented to ensure effective project management. Information exchange between software complexes being implemented is supported by a common industry-wide system of regulatory and reference information that allows the codes to "speak" a common language. To ensure the reliable operation of the systems, work was started in 2010 to set up a data processing system and a corporate data transfer network based on the Multifunctional Shared Services Center (Greenatom CJSC). An automated user support contact center was established to assist users of IT systems being deployed.

In the course of IT systems implementation, great attention is paid to information security. In the reporting year, an information security concept was developed, along with a methodology for its adaptation in divisions, as well as basic engineering solutions.

2.4.4. RISK MANAGEMENT

CORPORATE RISK MANAGEMENT SYSTEM

To improve the effectiveness of activities included in the area of sustainable development, ROSATOM started implementing a uniform approach to risk management in all organizations of the Corporation.

In 2010, work was started to create a corporate risk management system (CRMS). The system implies integration of the experience in risk management accumulated by the nuclear industry into a common corporate system that provides for the comprehensive management of industrial, technological, operating, financial, investment and other risks.

In the reporting year, the following results were achieved:

- a target-oriented model of CRMS was developed;
- the Risk Management Policy was adopted and regulatory, methodological, organizational and administrative documentation related to risk management was developed;
- an organizational structure for the risk management system was formed;
- risks of the Corporation were analyzed, assessed and prioritized;
- risk preparedness parameters were formulated;
- a CRMS development strategy through 2015 was developed.

CORPORATE RISK MANAGEMENT SYSTEM

Main objectives of CRMS:

- support for implementation of the ROSATOM strategy through risk management;
- up-to-date identification of risks arising, assessment and minimization of threats capable of affecting the results of activity of the Corporation and its organizations;
- implementation of procedures for continuous monitoring and notification of risks;
- identification of risk owners and their responsibilities;
- integration of the risk management process in managerial decision-making processes for optimal use of resources through risk-profit balance management;
- informational support for the Corporation management and employees, as well as the Corporation's organizations, in managerial decision-making and identification of possibilities for optimizing risk management processes.

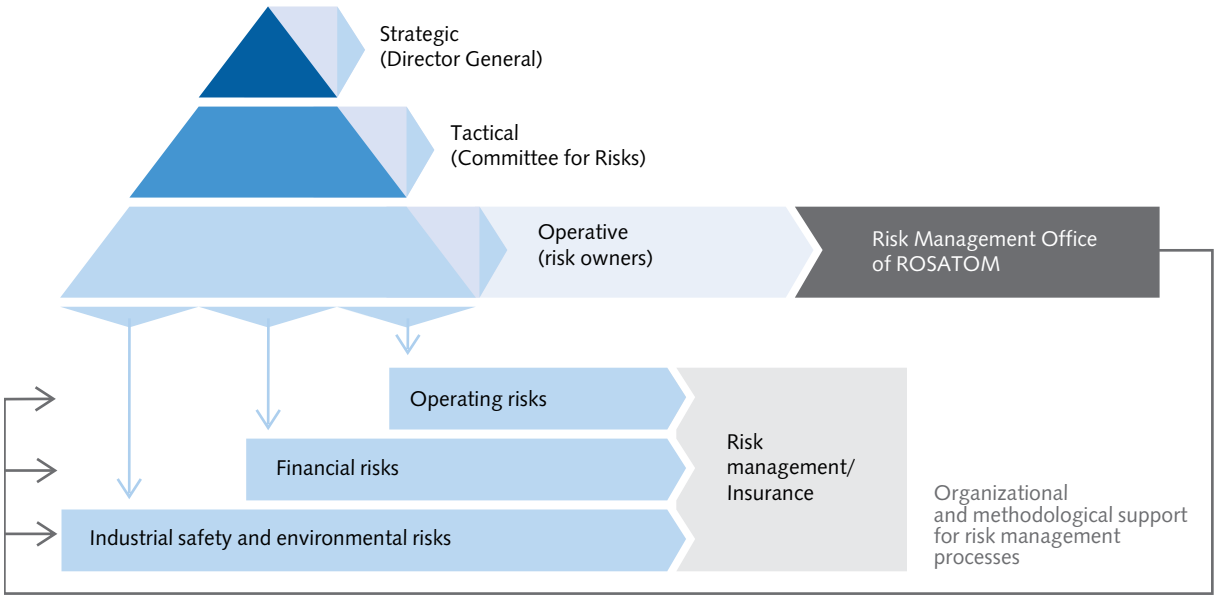
The risk preparedness parameters developed meet the requirements for achievement of the strategic goals of the Corporation and stakeholders expectations, i.e., state and social responsibility, responsibility for occupational safety, public health and environmental protection.

In the reporting year, the Committee for Risks attached to the Director General of ROSATOM and a risk management office were established. A task of the latter is to arrange for regular identification, assessment, monitoring of risks and control of the risk minimization process. The risk management system includes three control levels: strategic (Director General), tactical (Committee for Risks) and operative (risk owners).

RISK INSURANCE

To minimize financial consequences of potential adverse risk events, insurance is arranged for with regard to risks associated with property damage/loss, third party civil liability, and life and health of employees. In addition, construction and installation risks and nuclear damage liability are subject to insurance.

Corporate Risk Management System



Civil liability insurance of an operating organization (nuclear installation operator) and third party liability at transportation of radioactive substances, nuclear materials and products thereof is carried out in accordance with the Vienna Convention on Civil Liability for Nuclear Damage (Vienna, 21 May 1963) and the Federal Law No. 170-FZ as of 21 November 1995 "On the Use of Atomic Energy."

Liability for potential nuclear damage of enterprises and organizations of ROSATOM subject to the Vienna Convention is insured by the Russian Nuclear Insurance Pool.

In addition to the said Federal Law, the Government of the Russian Federation ensures payments to compensate for losses and damages that may be caused by radiation impact and for which the operating organization is liable (in part where losses and damages caused exceed a liability limit established for a given organization).

To increase the reliability of insurance, the Corporation provides for the opportunity to re-insure the property risks of Russian NPPs in the international pooling system. In 2010, international insurance inspections with the involvement of representatives of the international pooling system (nuclear insurance pools of the U.K., Ukraine and Nordic countries) and the Russian Nuclear Insurance Pool were conducted at NPPs. In the course of the inspections, risks of NPPs with VVER and RBMK reactors were analyzed. Also, activities associated with handling nuclear fuel, NPP control, staff competence, fire safety, environmental monitoring, etc., were checked. Based on the inspection results, the international experts concluded the level of safety at the inspected NPPs met world standards and decided it was possible to re-insure the property risks of the Russian NPPs in the international pooling system.

In 2010, international insurance inspections were conducted at Kola and Kursk NPPs (in 2009, at Leningrad and Balakovo NPPs). In 2011, it is planned to conduct inspections at Beloyarsk and Novovoronezh NPPs, and an insurance audit at the largest enterprises of the nuclear industry.

To improve and standardize insurance management processes, regulations establishing basic principles of insurance protection and regulating the interaction of insurance system players were put into effect in addition to regulations already in force.

In addition, in the reporting year, the "Insurance" chapter of the Uniform Industry-wide Procurement Standard of ROSATOM was written and put into force to allow the introduction of a common approach to the selection of insurance service suppliers, improve the efficiency of funds allocated for insurance and facilitate the development of fair competition and transparency in awarding insurance service orders.

INDUSTRIAL SAFETY AND ENVIRONMENTAL RISKS

Safe functioning of nuclear facilities, including those of NWC, NPC, STC, NRS and the nuclear-propelled fleet, is a priority strategic objective of ROSATOM.

For enterprises of the Corporation, a source of danger may be potential anthropogenic factors (terrorist attacks, human errors, warfare, social upheaval, etc.), man-induced factors (aircraft crashes, equipment failures, control systems, means of transport, power supply systems, etc.), and natural factors (earthquakes, hurricanes, floods, tsunami, etc.).

NRS of nuclear facilities is based on the principle of defense in depth, which implies building up a number of sequential levels of defense that consider potential threats, including:

- setting up several physical barriers on the path of potential diffusion of radioactive products into the environment;
- mandatory engineering and administrative measures to retain the integrity and efficiency of the barriers set up;
- availability of plans for protection of personnel, the general public and the environment in case of collapse of the barriers.

In normal operation, technologies employed at nuclear industry enterprises exclude environmental radionuclide releases in excess of established guidelines. This is confirmed by regular radiation monitoring in the controlled areas and surveillance zones of the enterprises, as well as by monitoring data obtained by the Russia's Federal Service for Hydrometeorology and Environmental Monitoring and the Federal Service for Supervision of Consumers' Rights Protection and Human Well-being.

In case of operational events at nuclear facilities, they are investigated in accordance with the applicable procedures established by federal regulations and are subject to close attention on the part of operating organizations, control bodies and regulators.

External oversight of safety of facilities within the jurisdiction of ROSATOM is carried out by the Federal Environmental, Industrial and Nuclear Supervision Service, Ministry of Defense of the Russian Federation, Ministry of the Russian Federation for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters, Federal Medical Biological Agency, etc.

FINANCIAL RISKS

ROSATOM and its organizations are susceptible to financial risks, such as foreign exchange risk, interest risk, credit risk, liquidity risk, as well as commodity risk (nuclear fuel cycle products and services market risks, electricity and power market risks).

In 2010, the Provision for Financial Risk Management was produced to establish principles and organization of financial risk management in ROSATOM and its organizations, and to identify management objects and tools and risk management reporting.

RISKS OF LARGE-SCALE INVESTMENT PROJECTS

ROSATOM is implementing a massive investment program. A major part of investments relates to construction of power units. In terms of influence, a substantial risk factor for ongoing investment projects is the risk of termination of or reduction in financing from the federal budget. Given the fact that the amount of financing is stipulated in the Federal Law on the Federal Budget for 2011 and 2012-2013, as well as the ROSATOM Long-Term Activity Program, the possibility of this risk is assessed as minimal.

To minimize the risks of large-scale investment projects, the Corporation has implemented an investment management process and carries out continuous monitoring of project implementation. In 2011, it is planned to further raise informatization of the investment process and gradually integrate the process of the investment project risk management in the corporate risk management system.

POLITICAL RISKS

To a large extent, political risk factors are beyond the influence of ROSATOM. These include:

- worsening political relations between the Russian Federation and states where the Corporation's organizations operate; changes in the political course of the said states; imposition of sanctions by states due to some action (inaction) of the Russian Federation, its authorities or persons/entities under its jurisdiction;
- imposition by the Russian Federation of bans and constraints on the Corporation's exports of goods and services to certain states due to a violation by such state of the nuclear nonproliferation regime and other reasons;
- unfavorable changes in terms and conditions of implementation of construction projects and the commercial regime in place in regard to goods and services produced by organizations of the Corporation, induced by foreign states that may entail inability (or limited ability) to fulfill obligations under contracts concluded.

The following is carried out to minimize political risks:

- interaction with officials from authorities and regulators of foreign states to inform them regularly of the progress of projects and settlement of disputed issues (if any);
- informing federal executive bodies and the leadership of the Russian Federation of the Corporation's operations abroad;
- establishment of information centers to educate and inform the general public in foreign states as part of NPP construction projects.

OPERATING RISKS

Operating risks ROSATOM faces in its activities include reputational and HR risks.

The nature of the Corporation's activities determines its significant susceptibility to reputational risks. Along with continuous safety and reliability enhancement of NPPs, ROSATOM considers it a priority to build up positive public attitudes to development of nuclear technologies. Public acceptability is formed through higher information transparency and open interaction with all stakeholders (for details, please refer to Section 4.7. "Interaction with Stakeholders").

As part of implementation of the socially acceptable risk concept, which is a principle of state policy in nuclear and radiation safety, a system of personnel radiation risk management is being developed at the Corporation's enterprises. The system is aimed, among other things, at increasing social protection and assuring the rights of employees to adequate information about health risks associated with their professional activities.

Financial and commodity risks and their minimization approaches

Risks	Description of situation	Risk minimization approaches
Foreign exchange risks	Accounts of the Corporation's organizations are denominated in different currencies, which their susceptibility to impacts from unfavorable changes in exchange rates.	Diversification of currencies using export contract prices as the currency. Attraction of loans in currencies of export contracts to maintain balance of currency requirements and commitments.
Interest risks	The Corporation and its organizations' susceptibility to interest risk is associated with a growth of commitments and reduction in investments due to unfavorable changes in market interest rates.	Maintenance of a balance of interest incomes and expenditures in terms of due dates and volumes.
Credit risks (risks of partner banks, risks of internal and external partners)	The Corporation and its organizations are susceptible to a risk of losses due to their partners' failure to meet contracted financial liabilities on time.	Establishment of criteria for selection of partner banks to work with the Corporation's organizations. Introduction of a procedure for approval of intra-group loans to the Corporation's organizations. The use of various forms of assurance that external partners will meet liabilities.
Liquidity risks	The Corporation and its organizations have a rather high free cash-to-debt ratio that allows the Corporation to pay its liabilities on time and in full and implies a low susceptibility to the liquidity risk.	Centralized management of the cash flow of the Corporation and its organizations. Implementation of a system of rolling forecasts of liquidity and cash flow budgets. Introduction of a cash-pooling system (intra-group financing). Support of reserve credit lines and overdrafts.
Risks of commodity and nuclear fuel cycle markets	Organizations of the Corporation are susceptible to volatility risks of markets of natural uranium, uranium conversion and enrichment services and uncertain future values of macro-economic indicators. The level of market prices for NFC products and services substantially depends on factors beyond the influence of the Corporation (the scale of world nuclear power development, political nature of the international nuclear material trading, world macroeconomic situation, potential technology breakthroughs, procurement policy of utilities, presence of transportation and logistics constraints, etc.).	Balance of pricing mechanisms (market-oriented, base-escalation, combined). Combination of market quotations of different consulting agencies. Fixing of minimum price values, introduction of price caveats. Forecasting of market quotation variations. Increase of own, geographically diversified uranium resources with low-cost mining.
Risks of electricity and power markets	As regards changes in regulated prices, the Corporation is susceptible to a risk of electricity rate changes due to the fact that the decision to set up price regulation is made on the basis of the agreed position of the Ministry of Energy of the Russian Federation and the Federal Tariff Service. As to changes in free electricity prices, susceptibility to risk is determined by the availability of a free market and linked mainly to uncertainties in the dynamics of the market electricity price, as well as factors that affect it (fuel price, climatic factors, etc.). According to governmental resolution No. 205 as of 7 April 2007, it is envisaged to liberalize, stage-by-stage, the wholesale market with a transition to fully free electricity prices commencing 1 January 2011.	The possibility of hedging risks using financial derivatives due to the low liquidity of new trading platforms is limited. It is planned to develop instruments for minimizing the said risks.

Personnel are one of key resources of ROSATOM. Given its ambitious plans for nuclear industry development, a lack of workers of sufficient competence or the inability to mobilize them for implementation of new projects, including those overseas, could negatively affect the strategic goals of the Corporation. A number of HR-related factors are beyond the control of the Corporation (for example, a reduction in the number of graduates of schools and universities and, consequently, a reduction in the number of young specialists). Besides, many of the enterprises are located in closed administrative territorial formations (CATFs or "closed" cities) and single-industry cities where there are serious constraints on necessary HR decision-making. The Corporation monitors the influence of these factors and considers them in staff development models of the nuclear industry (for details, please refer to Section 4.2. "HR Management").

TARGETS FOR 2011

The Corporation created a development plan for the risk management system that includes gradual alignment of the organizational structure and risk management processes in ROSATOM organizations and further integration of CRMS in planning and decision-making processes.

2.4.5. PROCUREMENT MANAGEMENT

Procurement activity is aimed at achieving the strategic goal of improving efficiency of Corporation operations.

Main objectives of 2010:

- creation of a transparent and reliable procurement management system of ROSATOM and its enterprises; recruitment of staff and drafting of regulatory documentation to regulate its operation;
- optimization of costs of purchasing materials, resources and equipment, including through reduction of prices of products, works and services, achieved through the introduction of economically effective purchasing and payments methods in procurement procedures;
- ensuring compliance of procurement procedures to the requirements of regulatory authorities and legislation of the Russian Federation.

PROCUREMENT REGULATORY BASIS

The key document that regulates ROSATOM procurement activities is the Uniform Industry Procurement Standard adopted in 2009*.

The Standard was updated in 2010. The changes introduced were based on the experience in applying it gained in 2009, including on proposals received from the Corporation organizations.

In elaboration of the Standard, accompanying documents were developed to regulate:

- procurement planning;
- rules of calculation of initial (maximum) purchase price;
- procurement procedure (generic methodology of review and evaluation of bids);
- reporting and effectiveness of procurement activities.

DEVELOPMENT OF PROCUREMENT SYSTEM

In 2010, an organizational structure of procurement activities was formed by:

- Department for Methodology and Procurement Organization of ROSATOM;
- structural divisions for organization and follow-up of procurement activities in Corporation organizations;
- a system of authorized bodies in key divisions;
- a system of procurement permit-issuing bodies including the Central Procurement Commission and standing procurement commissions in key divisions (the work of permit-issuing bodies is aimed at enhancing oversight and effectiveness of procurement planning and conduct);
- a commission consisting of representatives of the customer, organizer, consumer and the Corporation to exclude the possibility of concerting and to the improve objectiveness of decisions being made;
- a sole organizer of procurements worth over 100 million rubles (Atomkomplekt), which is independent from the customer.

* http://zakupki.rosatom.ru

In 2010, work was also started to computerize the procurement process; modules of procurement planning and reporting on implementation of the annual procurement program were put into operation by the end of the year.

RESULTS OF 2010

In the reporting year, using own funds, ROSATOM and its organizations conducted 23,360 procurement procedures with a total worth of over 144 billion rubles. An economizing effect of 18 billion rubles (12.4% of the procurement amount) was achieved.

In the reporting year, 1,166 procurement procedures worth in total over 21 billion rubles were conducted by the Corporation using the federal budget resources.

An economizing effect of 1.6 billion rubles (7.9% of the procurement amount) was achieved.

TARGETS FOR 2011

- to increase competition, involve the maximum number of players, prepare bidders for the procurement process in a timely manner;
- to reduce the number of breaches of procedures and regulations;
- to improve competence of buyers (at the level of organizations) through creation of a training and advanced training system. Also in 2011, throughput procurement-related KPIs will be introduced;
- to reduce transaction costs and procedural complexity of procurement within the industry;
- to complete computerization of procurement, including the procurement process, to broaden the range of procurement players, ensure uniformity of procurement documents used by customers, downsize the role of the "human factor" in processes of supplier qualification and screening, reveal violations and bar wrongful actions of users, generate reliable reports in real time, minimize garbling, shorten time for operations during procurement;
- to continue preparing draft laws on procurement activities.

ROSATOM procurement activities and total savings, bln RUB

	2009	2010
Total amount of placement, of this:	20.44	166.40
with own funds of ROSATOM	9.16	144.99
with funds from the federal budget	11.28	21.41
Total savings, of this:	1.41 (6.9 %)	19.69 (11.8 %)
savings of own funds of ROSATOM	0.92 (10.0 %)	18.00 (12.4 %)
savings of the federal budget funds	0.49 (4.3 %)	1.69 (7.9 %)

2.4.6. INTERNAL CONTROL AND AUDIT SYSTEM

Activities of the internal oversight and audit system are aimed at achieving the strategic goal of improving the efficiency of the Corporation through prevention of risks (minimization of losses) arising from operations of the Corporation and its organizations.

RESULTS OF 2010

During the reporting period, 253 oversight measures of control were carried out, including 162 out-of-house and 91 in-house audits, that is, 124.3% of the target. Based upon the results of the oversight measures, the Director General sent 165 instructions to Corporation officials and organization heads, 118 of them with due dates in 2010 (54 on elimination of violations revealed and 64 on improving the efficiency of Corporation departments and organizations of the Corporation, enhancement and optimization of corporate links and relations). As of December 31, 2010, 95% of instructions were fulfilled and 5% of instructions were in process and under oversight by the Department for Internal Control and Audit.

Divisions of internal control and audit were set up in 18 organization of the Corporation.

In 2010, the Central Arbitration Committee, which maintains law and ensures pre-trial settlement of disputes in the field of placement of orders for supply of products, works and services for the Corporation and its organizations, received 301 claims, of which 91 were considered justified and 56 partially justified.

In the reporting year, based on inspection results, 202 employees of Corporation organizations were subject to disciplinary punishment, including 35 dismissals of management employees of Corporation organizations. Material from five inspections that revealed signs of crime was forwarded to law enforcement.

PROGRAM TO COUNTER THEFT

In 2010, implementation of the Integrated Program for Countering Theft and Fraud in ROSATOM and its Organizations in 2010–2011 was started.

In the framework of the program, on June 21, 2010, a hotline was launched that allows employees and third parties to inform the Corporation, on conditions of confidentiality, of facts of theft, fraud or other abuses they are aware of. The hotline is a public oversight tool that makes it possible to reveal facts about theft both material and immaterial on an industry scale that are potentially hazardous due to their consequences*. In 2010, the hotline received 156 reports; all reports were responded to.

* http://www.rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/employee/theft/

A proportion of employees who are ready to report abuses via the hotline (basing on the polls data) increased from 55% to 59% over the second half of 2010.

The Corporation also launched work to maintain an atmosphere of scrupulosity and zero tolerance of unlawful acts. A set of measures were implemented at Corporation enterprises. Those included:

- distribution of informational materials (posters, imprinted calendars, booklets) to 51 organizations with a total number of employees of over 200,000;
- The "Honesty and Labor Travel Together" creative picture contest for nuclear workers' children (participants were 390 children of employees of 45 organizations);
- publications in corporate media resources explaining Program provisions and describing its results.

TARGETS FOR 2011

- completion of the "Development of a Mechanism for Integrated Assessment of Existing Internal Audit Systems in ROSATOM and its Organizations" project;
- optimization of the organizational structure of the Department for Internal Audit and Control (in ROSATOM organizations (FRC Level 2) an "Internal Audit" function will be developed);
- improvement of documents regulating activities of internal oversight divisions, including amendment of regulations for inspection planning and conduct as regards clarification of the procedure for conduct and formalization of results of oversight measures;
- launch and implementation of an internal audit quality improvement program.

Commission for Settlement of Conflicts of Interest

In 2010 the Commission for Settlements of Conflicts of Interest was established. It is tasked as follows:

- enforcement of observance by Corporation officials of constraints and prohibitions, requirements for prevention or settlement of conflict, as well as fulfillment of their duties stipulated in Federal law No. 273-FZ as of 25 December 2008 "On Countering Corruption" and other federal laws;
- implementation of corruption prevention measures in ROSATOM.

The Department of Asset Protection of ROSATOM is producing a Corruption Counteraction Concept that will reflect all basic notions and signs of a conflict of interest, as well as measures aimed at training personnel in actions in case a conflict of interest is revealed in nuclear industry organizations. Since July 2010, the corporate website has had a page "Countering Corruption" where information on signs of corruption in activities of ROSATOM and its organizations is received

3 MAIN ACTIVITIES

In the reporting year the State Corporation purchased 21 sets of teraflop class supercomputers, the productivity of the supercomputers is

10^{12} operations per second

The maximum electricity generation for all the period of NPP operation has been achieved with the value of

170.1 kWh

The funding of research and development activities in State Corporation Rosatom attained

10 bln rubles

In Russia and other countries State Corporation Rosatom engaged in construction of

14 NPP units

3.1.

NUCLEAR WEAPONS COMPLEX

IVAN KAMENSKIKH

Deputy Director General, Director of the Directorate for the Nuclear Weapons Complex

"2010 is the jubilee year for the nuclear industry. It was 65 years ago that the foundations were laid to pursue a successful nuclear deterrence policy, which has provided safeguards for our country's security and sovereignty. The nuclear weapons complex of today continues to fill government defense orders. In addition, the weapons complex creates innovative technologies used in nonmilitary sectors of the economy."

3.1.1. NUCLEAR DETERRENCE POLICY

The strategic objective of ROSATOM is to keep the country's nuclear arsenal at such a level as would provide the required safeguards for a nuclear deterrence policy. This objective is achieved through the activities of the nuclear weapons complex (NWC).

Over the past 65 years, nuclear and thermonuclear weapons have not been used directly for military purposes. After the dangers involved in the use of nuclear weapon were acknowledged internationally and Soviet-U.S. parity in nuclear armaments was established, the process of reducing and limiting nuclear arsenals was started. Another step in this multistage process was the Strategic Arms Reduction Treaty signed by the Russian Federation and the United States of America on 8 April 2010.

The positive trends in strategic arms reduction are paralleled by emerging threats from nuclear terrorism and the growing number of countries possessing nuclear weapons. For these reasons, the reliability of the nuclear shield is what provides safeguards for the country's national security.

The NWC comprises enterprises carrying out development, manufacturing, in-service support and disposal of the Russian Federation's nuclear munitions and military nuclear power systems in service on surface ships and submarines of the Russian Navy.

3.1.2. CONTRIBUTION TO DEVELOPMENT OF THE CIVIL SECTOR

Supercomputer

In 2010, work was completed by ROSATOM on the construction of a compact supercomputer of the teraflop class (10^{12} operations per second) that does not require special engineering systems or servicing personnel.

The supercomputer's technical and economic performance is not inferior to foreign analogs, including power consumption, efficiency (price to capacity ratio), weight and dimensions.

In the reporting year, 21 supercomputer packages with Russian-made systems and applied software were delivered to 15 organizations for operation.

NWC activities contribute greatly to the evolution of science and nonmilitary industries. NWC enterprises carry out fundamental research in the field of ultrahigh energies, pressures and temperatures, and ultra-dispersed and unstructured materials, as well as applied research in nuclear medicine. Propulsion systems are developed for deep-space missions and the protection of the planet against dangerous space objects. Laser systems for various applications and supercomputers are manufactured.

3.1.3. RESULTS 2010

ACCOMPLISHMENTS OF THE NWC

One of the major events of 2010 is the approval by the Government of the Russian Federation of the Federal Target Program "Development of the Russian Federation Weapons Complex for 2007-2015 and until 2020." As part of the FTP, computational, experimental, testing, manufacturing and engineering capability will be upgraded and further developed in line with a whole spectrum of international commitments Russia will unconditionally abide by.

The entirety of the tasks set forth by this program for 2010 was accomplished with the preset indicators and targets achieved.

The complete range of tasks set in the FTP "Commercial Disposal of Armaments and War Material (2005–2010)" was also accomplished.

For other programs aimed at strengthening the country's defensive capability to which ROSATOM is a party, the allocated federal budget funds and the contractors' own funds were spent in full and in accordance with designated purposes.

In the reporting year, NWC enterprises fulfilled 100% of state defense orders for the supply and creation of special-purpose items and military power plants for the Ministry of Defense of the Russian Federation.

NWC RESTRUCTURING

Optimization measures were undertaken in 2010 within the NWC enterprises, including the reduction of excessive personnel accompanied in parallel by growth in the productivity of labor and specialist staff wages. The personnel dismissed and the engineering and manufacturing resources released were removed from the NWC and redeployed in enterprises implementing knowledge-intensive innovative projects in nonmilitary production sectors.

SAFETY OF NWC OPERATIONS

In the reporting year, a unified structure was established within the Corporation for the management of safety activities at ROSATOM's facilities. The protracted forest fires in the summer of 2010 were an acid test for NWC corporate safety systems. This test was passed successfully thanks to the joint efforts of ROSATOM and the Russian EMERCOM to secure the integrity of nuclear and radiation installations and the safety of nuclear material at the federal nuclear centers in the cities of Sarov and Snezhinsk.

3.2.

NUCLEAR POWER COMPLEX

ALEXANDER LOKSHIN

Deputy Director General, Director of Directorate for Nuclear Power Complex

"A critical task faced by the nuclear power complex is to ensure full-scale construction of nuclear power units. We must professionally build nuclear plants by their scheduled dates. The construction and operation of advanced high-technology NPPs with one of the world's highest safety indices is the basis for ROSATOM's competitive edge and efficiency."

The nuclear power complex (NPC) incorporates organizations that ensure operations of nuclear power, power engineering and nuclear fuel cycle facilities, including enterprises in prospecting and mining of natural uranium, conversion and enrichment of uranium, fabrication of nuclear fuel, electricity generation, manufacturing of components and development of novel nuclear fuel technologies and the gas-centrifuge technological platform.

NPC activities are aimed at achieving the strategic goals of ROSATOM, namely providing the country's economy with nuclear electricity, safeguarding Russia's geopolitical interests, taking Russian companies to leading positions on the global nuclear technologies and services market, and raising the efficiency of the Corporation's activities.

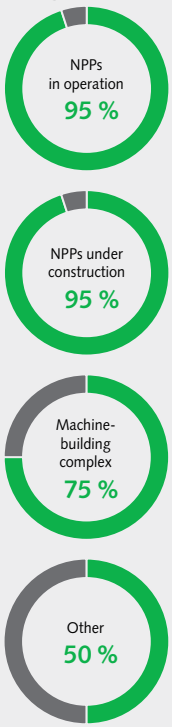
The promotion of Russian nuclear products on international markets has ensured a 25% increase in the overall export volume as compared to a year earlier (US$4.57 billion in 2010). In the reporting year, the five-year portfolio of export contracts amounted to US$22.37 billion (20% and 53% growth compared to 2009 and 2008, respectively).

NPC performance figures

Indicator	2008	2009	2010	2010 / 2009, %
Nuclear electricity generation, bln kWh	162.3	163.3	170.1	104.2
NPP capacity factor, %	79.5	80.2	81.3	101.4
Number of units under construction in Russia	7	9	9*	100.0
Number of units under construction outside Russia	5	5	5	100.0
Uranium mining volume (production), thnd t	3.7	4.6	5.2	113.0
Raw uranium resources, thnd t	578	662	727	109.8

* Less Rostov-2, put into commercial operation on 10.12.2010.

Breakdown by enterprises (through 2015)



The ROSATOM production system (RPS)

Project implementation suggests introduction and development at the Corporation's facilities of the RPS, based on the principles and procedures of the Toyota Production System (so-called lean production) for raising labor efficiency.

RPS makes it possible to introduce new approaches to manufacturing activities and change personnel attitudes towards nonmanufacturing losses (excessive stock, vacant rooms, downtime, unnecessary movements, inefficient use of employees' creative potential and so on). As part of project implementation, it is planned to establish pilot projects (departments, products) at enterprises and to train personnel. Positive RPS experience will be extended via a unified branch center (JSC PSR) and a dedicated centralized fund, as well as through consulting and RPS introduction contracts to be made with enterprises and by using a new system of personnel motivation.

Anticipated RPS results are an economic effect and formation of a trained personnel team to launch a self-developing process within organizations.

In 2010, RPS was introduced in 23 organizations and enterprises. The effects achieved were:

- Rosenergoatom Concern: the repair time on NPP units cut by 56 days and that on turbine sets by 24.6 days. Economic effect – 840.3 million rubles.
- AEM: economic effect – 12.5 million rubles.
- TVEL: labor productivity grew by 23%, the volume of work in process decreased to 31 % and the area of vacant production space amounted to 25%. Economic effect – 350 million rubles.

3.2.1. NUCLEAR FUEL CYCLE

FORMATION OF GLOBAL RAW MATERIAL RESOURCES

A prerequisite for the Corporation to efficiently provide the country with nuclear electricity is the availability of sufficient raw uranium resources in the medium and longer term.

According to the IAEA Red Book, Russia is the the world's third biggest holder, after Australia and Kazakhstan, of mineable uranium reserves (566,000 tons) with 77% of Russia's reserves falling, in terms of cost, within the high-price category of reserves (over US$80 per 1 kg. of uranium).

The imbalance between production of and demand for uranium, high cost of mining and growing demand for uranium were reasons behind the acquisition of uranium mining assets to diversify mining in terms of cost geographically and form a global uranium company.

In June 2010, ARMZ Uranium Holding Co. (JSC Atomredmetzoloto) announced a deal to consolidate the controlling block of shares in Uranium One Inc. The transaction, completed in December 2010, brought the share of ARMZ in Uranium One Inc. up to 51.4% through the purchase of additionally-issued Uranium One Inc. shares (356 million ordinary shares). Payment was made by ARMZ in a 50% stake in SP Akbastau, a 49.7 % stake in SP ZARECHNOYE and US$610 million.

Taking control of Uranium One Inc. has increased the volume of the raw material reserves controlled with a competitive mining cost from 178,000 tons to 272,000 tons.

In the longer term, the acquisition of Uranium One Inc. and the establishment of a global company will make ROSATOM a leader in the uranium mining segment and will strengthen the Corporation's export potential in more advanced processes: uranium enrichment, fabrication of nuclear fuel and, ultimately, NPP construction.

On 15 December 2010, ARMZ announced an arrangement to purchase 100% of Mantra Resources Limited, Australia, with uranium assets in Tanzania and Mozambique (the company's main project is Mkuju River, Tanzania, with a uranium reserve of over 39,000 tons).

In parallel with the arrangement to buy the Australian company, an optional Put/Call Agreement was signed between ARMZ and Uranium One Inc. for the purchase of the 100% of stock in Mantra Resources Limited. Following the closure of the transaction by ARMZ, Uranium One Inc. becomes the operator of Mkuju River, the key project of Mantra Resources Limited.

MINING AND USE OF NATURAL URANIUM IN THE PROCESS CHAIN

Global uranium mining volume reached 53,400 tons in 2010, which is 6.1% percent higher than in 2009. Most of the growth comes from an increase in mining in Kazakhstan (by 28%) and Niger (by 29.5%).

ARMZ has consolidated the management of uranium mining both within and beyond Russia to cover the demand of Russia and global nuclear engineering and nuclear power for raw material. ARMZ is one of the world's five largest uranium mining companies, with a market share of 9.6% in 2010.

In the uranium mining sector, ARMZ is the world's second largest (after BHP Billiton) holder of mineral and raw material resources (727,000 tons of uranium as of 31 December 2010) and the world's fourth largest natural uranium producer (5,173.4 tons of uranium). The volume of uranium mining controlled is 5,740 tons.

In the reporting period, ARMZ carried out geological prospecting at 10 Russian deposits with total volume of funding for geological prospecting activities amounting to 1.5 billion rubles. Growth in the reserves was 32,500 tons of uranium. In 2010, existing reserves at the deposits in the Elkon uranium mining district and at the Orlovskoye deposit in Transbaikalia Territory were estimated under the international code JORC. Outside Russia, geological prospecting was undertaken in Kazakhstan, Armenia, Tanzania and Namibia.

In 2010, a program was launched to computerize ARMZ's Russian segment as part of ROSATOM's "FEB and IT Transformation" programs. The computerization program includes upgrades to ARMZ's IT infrastructure and installation of advanced software packages, including those with no analogs internationally.

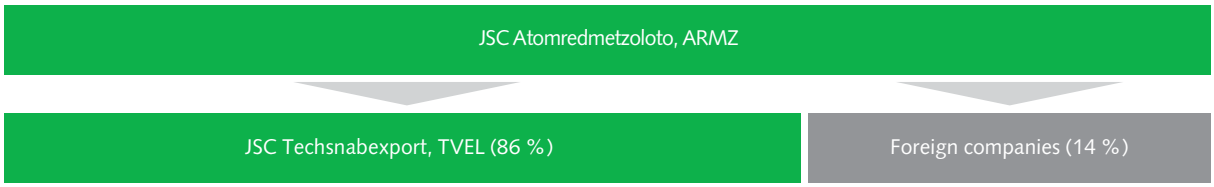
Operation of all NPP units in the world requires about 69,000 tons of uranium annually.

Uranium production by major mining countries, t

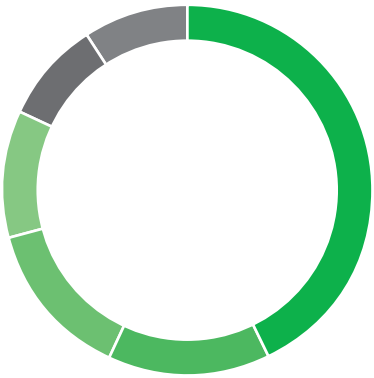
	2008	2009	2010	2010/2009, %	Share in global mining, %
Kazakhstan	8,521	13,900	17,803	128.1	33
Canada	9,000	10,175	9,332	91.7	18
Australia	8,430	7,962	6,203	77.9	12
Namibia	4,352	4,681	4,476	95.6	8
Russia	3,521	3,564	3,562	100.0	7
Niger	2,923	3,243	4,200*	129.5	8
Uzbekistan	2,338	2,338	2,338	100.0	4
USA	1,508	1,442	1,629	113.0	3
Total	**40,593**	**47,305**	**49,543**	**104.7**	**93**
Others	3,055	3,000	3,807	126.9	7
Total	**43,648**	**50,305**	**53,350**	**106.1**	**100**

* AREVA's projections for Niger (2010).

Structure of uranium supplies by Atomredmetzoloto

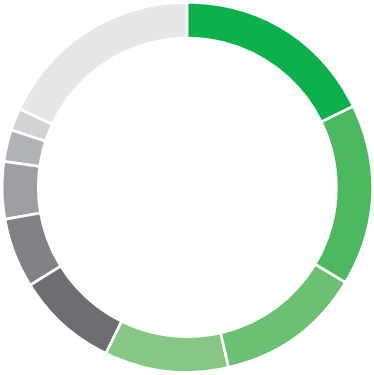


Structure of developing uranium deposits in 2010, %



43 BHP Billiton
14 ARMZ
14 AREVA
11 Rio Tinto
9 Cameco
9 Kazatomprom

Structure of natural uranium production by the leading companies in 2010, %



18 Kazatomprom
16 Cameco
13 AREVA
11 Rio Tinto
9 ARMZ
6 BHP Billiton
5 NGMK
3 Uranium One Inc.
2 Paladin Energy
17 Other

Cooperation in overseas construction of enrichment facilities

In 2010, under its contract made in August 2008 with the Chinese company CNEIC for technical assistance in building phase 4 of a gas-centrifuge plant of 500,000 SWU/year in China, Techsnabexport delivered major process and auxiliary components in rendering the contracted complex of services. Supplies of major components were completed by the end of 2010. The launch of the enrichment facility is scheduled for mid-2011.

URANIUM ENRICHMENT TECHNOLOGIES AND EQUIPMENT

Most gas centrifuges (GC) go to the Russian market as part of the program to retrofit Russia's enrichment facilities. There are three GC makers in Russia (all within the circuit under control of TVEL): KMZ, Tochmash and UZGTs.

GC manufacturing facilities are undergoing a restructuring process with manufacturing capability being concentrated within two of them to improve logistics and reduce manufacturing areas, and programs underway to reduce power consumption and increase automation and mechanization.

A number of scientific and technical projects were completed in 2010 to develop auxiliary components for further use with advanced GC models (of generations 9 and 10).

URANIUM ENRICHMENT MARKET

Russian nuclear industry has competitive GC-based uranium enrichment technologies. Uranium enrichment services are expressed in separative work units (SWUs). The capacity of the international uranium enrichment services market is 49 million SWUs per year.

The major suppliers of ROSATOM's uranium enrichment services are Techsnabexport (known under the trademark TENEX in foreign countries), a supplier of low enrichment uranium (enriched uranium product or EUP) and uranium enrichment services; and TVEL, a supplier of complete nuclear fuel including EUP and similar services. Techsnabexport supplies Russian NFC products to North American, South American, Western European, African and Asia-Pacific countries. TVEL supplies fuel for Russian-designed reactors both within and outside Russia.

Major foreign competitors are AREVA (France), URENCO (Great Britain, Germany, and Holland) and USEC Inc. (USA). These Russian and foreign companies account for 94% of the market. The remaining 6% is held by smaller suppliers who operate within domestic markets and limit their activities to stock material.

The global uranium market is characterized by periodic contractions in activity. The overwhelming majority of deals are long-term. The period of 2009-2010 saw increased contraction in activity and, therefore, an escalation in competition for the market of NPP reactor demands worldwide after 2015. The 2010 results prove the efficiency of Russian suppliers' activities in this market.

Techsnabexport is also the agent for a number of contracts made for the purpose of the Agreement between the Government of the United States and the Government of the Russian Federation Concerning the Disposition of Highly

Enriched Uranium from Nuclear Weapons signed on 18 February 1993 (the HEU Agreement).

The key factors that make Russian nuclear power competitive in the world market are the status and the commonly recognized reliability of the potential supplier, these being defined by the following parameters:

– the existence of a technologically efficient and productively diversified framework (four enrichment facilities in Russia);

– a faultless history of supplies to multiple consumers across the world;

– an efficient distribution network including subsidiaries in target markets: Tradewill in Great Britain, Tenex-Korea in South Korea, Tenex-Japan in Japan, Internexco in Germany, and TENAM in the USA;

– the capability to ensure competitive prices and other commercially attractive contract parameters;

– the capability to ensure uninterrupted supplies thanks to the existing stock in storage;

– the capability of offering NFC products and services on a "package" basis.

The total share of ROSATOM in the world market for uranium enrichment services is 45%.

DELIVERY OF EUP AND ENRICHMENT SERVICES

Supplies of EUP and uranium enrichment services from Russian nuclear industry enterprises are the prime activity of Techsnabexport. At the present time, deliveries of uranium enrichment services account for around 40% of the demand from Western-designed reactors. Techsnabexport supplies uranium products to all key regional segments of the world market with these being consumed by over 30 companies in 16 countries of the world.

The portfolio of Techsnabexport long-term contracts formed by the end of the reporting year with a horizon of contraction to beyond 2020 increased by more than 11% as compared to the same indicator from the previous year and reached nearly US$20 billion. Altogether, there were 15 new contracts made in 2010 for the supplies of Russian NFC products to foreign partners.

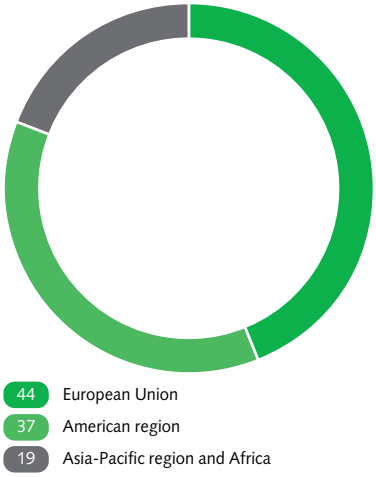
Thanks to the HEU Deal with USEC Inc. and a contract with a group of Western companies (AREVA, Cameco, NUKEM) to supply natural feed component (NFC LEU), and thanks to the implementation of the program for the physical transfer to Russia of the contracted portion of NFC LEU that had not been completed, the HEU Deal was fulfilled, in general, to 82% of its scheduled volume as part of the 20-year implementation period.

European supplies traditionally account for the largest share in the export structure. This is achieved not only through direct deliveries to energy companies as end consumers but also thanks to collaborative work with European enrichment companies. At the same time, no noticeable increase in nuclear generation facilities is anticipated in Europe, which may influence the long-term dynamics of exports to this region.

In the United States, no direct collaboration with U.S. utilities was possible until recently due to antidumping restrictions on supplies of Russian uranium products introduced in the 1990s. The signing in 2008 of the Amendment to the Agreement Suspending the Antidumping Investigation opened the U.S. market to commercial contracting. Altogether, 11 contracts were made by Techsnabexport in 2008–2010 with nine U.S. utilities for a total sum of about US$5 billion.

As part of the above-mentioned HEU-LEU program, LEU continues to be supplied to the United States for USEC Inc. to place on the market of end consumers (utilities).

Regional distribution of Techsnabexport's uranium products supplies in 2010



Of greatest interest in terms of the nuclear power evolution and projected growth in demand for NFC goods and services is the Asia-Pacific region, where Techsnabexport is acting to expand its presence by achieving the following goals:

– development of direct relations with energy companies;

– conclusion of long-term contracts (up to 10 years and more);

– orientation towards selling products of maximum added value;

– allowance for specifics of regional markets.

Techsnabexport's accomplishments in 2010 show stable growth in business and the attainment of 100% or greater efficiency for all key targets set by ROSATOM.

FABRICATION AND MARKETING OF NUCLEAR FUEL

The export of fuel assemblies, nuclear fuel components and fabrication technologies and equipment is an essential factor for achieving the strategic goal of ROSATOM to safeguard the country's geopolitical interests and move Russian companies into leading positions in the global market for nuclear technologies and services.

TVEL is one of the global nuclear fuel suppliers, along with AREVA, Westinghouse and GNF. The share of ROSATOM (Fuel Company TVEL) in the nuclear fuel market is 17 %.

Nontax federal budget revenues from the HEU Agreement amounted to 25.05 billion rubles in 2010 (100.7 %).

The total cost of long-term contracts with Techsnabexport's suppliers (a portfolio of enrichment and raw material orders) was 250 billion rubles in 2010.

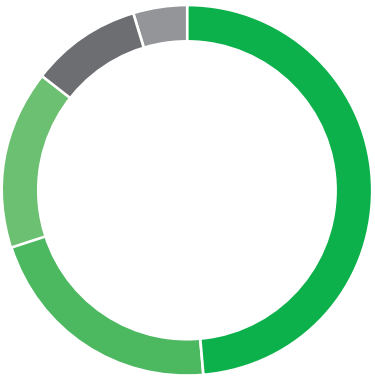
A contract to supply nuclear fuel and related services for Mohovce-3,4 was signed in April 2010 between TVEL and Slovenske electrarne, a.s. during the official visit of the Russian President to Slovakia. The contract stipulates deliveries, beginning in 2010, of fuel assemblies for the initial load of both reactors, as well as for the five subsequent loads in each of the reactors.

In August 2010, following the demonstration of the engineering and commercial advantages offered by Russian nuclear fuel, Temelin-1 in the Czech Republic was loaded fully with Russian-made fuel. Temelin-2 will switch to Russian nuclear fuel in 2011.

In October of the reporting year, a cooperation agreement was signed between TVEL and State Concern Nuclear Fuel (Ukraine) for a project to build a nuclear fuel fabrication facility in Ukraine.

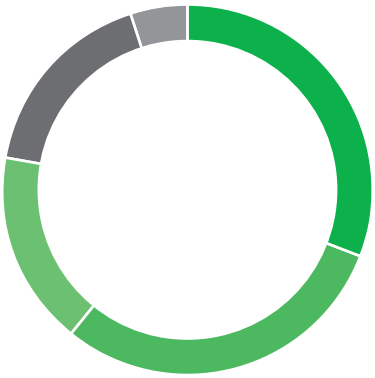
The total cost of TVEL's 5-year portfolio of contracts for foreign sales of products, goods, services and technologies amounts to US$4,619.3 million.

Segmentation of the nuclear technologies market by reactor types, %



48,8 PWR
21,3 BWR
15,7 Russian-designed
9,7 PHWR
4,5 Other

Shares of companies in the nuclear technologies market, %



31 Westinghouse / Toshiba
30 AREVA
17 TVEL
17 GNF
5 Other

Fuel Company TVEL

The formation of a TVEL-based fuel company was completed in 2010. It incorporates separation and sublimation, GC manufacturing, nuclear fuel fabrication and research facilities. The formation of the company is expected to have an effect on scale and synergy, raise safety, efficiency of production and competitiveness of products and build up additional resources for upgrading and innovative development.

The Fuel Company's development program through 2020 is aimed at implementing the Corporation's strategic initiative, that is, to retain global leadership in the initial NFC phase both through growth on the markets for NFC products and services, as well as in related markets, thanks to the growth in operational efficiency.

TVEL accounts for 100 % of the nuclear fuel components and FA deliveries to Russian-designed NPPs and for 2% of those to foreign-designed NPPs.

3.2.2. POWER ENGINEERING

TOP PRIORITIES IN THE EVOLUTION OF THE POWER ENGINEERING COMPLEX

The task faced by Atomenergomash (the power engineering division) is to ensure the evolution of nuclear power both at home and on foreign markets via secured supplies of components for the construction of Russian-designed NPPs in such volume and with such quality as the customer requires.

PERFORMANCE INDICATORS OF ATOMENERGOMASH IN 2010

Components made by Atomenergomash (AEM) are in service in 13% of NPPs and 2% of heat power plants in the world, including 40% of power plants in Russia, the CIS countries and the Baltic states. As of 31 December 2010, components manufactured by AEM's group of companies were employed in 22 countries of the world.

AEM is the only maker of a number of equipment lines for Russian-designed NPPs under construction.

In the reporting year, components were manufactured for the Rostov, Kalinin, Balakovo, Kursk, Smolensk, Bilibino, Beloyarsk, Leningrad, Novovoronezh and Novovoronezh II NPPs in Russia, as well as for NPPs in operation or under construction in foreign countries, including Kozloduy, Dukovany and Paks. Specifically, reactor island components were shipped to Beloyarsk-4 (shipment and installation of the BN-800 reactor vessel). Auxiliary components for the machine hall and HP and LP pipelines were also shipped.

In 2010, the companies within AEM manufactured 17 billion rubles worth of components (56.4% more than in 2009). That growth was achieved thanks to an increase in the loading level of manufacturing facilities to ensure fulfillment of large orders for nuclear installations built in Russia and in foreign countries, along with implementation of programs to raise the efficiency of manufacturing. Growth in production volumes was also associated with integration of Petrozavodskmash in the holding's circuit.

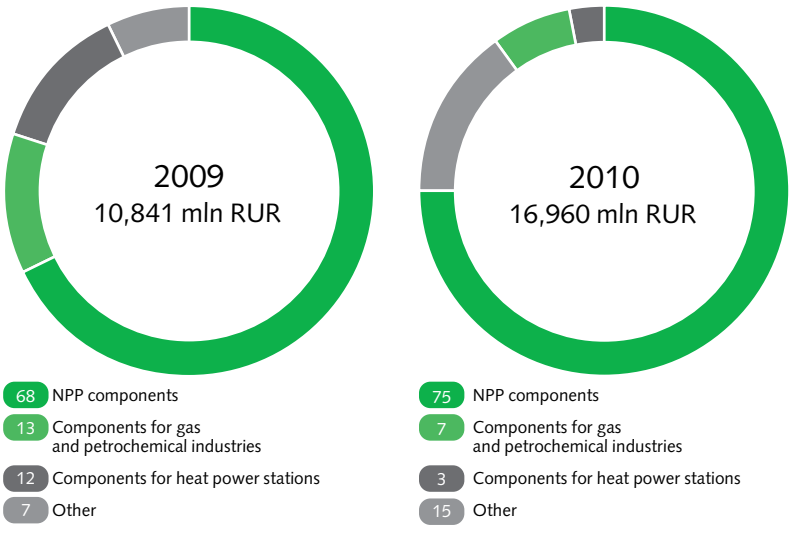
In the manufacturing structure, the share of products for nuclear power increased from 68% to 75% year on year.

Strategic objectives of ROSATOM	Evolution priorities of Atomenergomash
Efficiently providing the country's economy with nuclear electricity and products and services from the nuclear power generation complex	Implementation of R&D programs to perfect existing products and fabrication technologies and create new products for nuclear industry.
	Establishment of its own competences in manufacturing of NPP components, including through integration of assets with manufacturing and engineering companies possessing the required technological competences in the manufacturing of NPP components.
	Enhancement of corporate nuclear manufacturing capability through upgrading and technological advancement programs to enable supplies of a spectrum of key NPP components in the amount of at least three packages annually, beginning in late 2012.
Advancing Russian companies to leading positions on the global market for nuclear technologies and services	Maximization of global market operations through localizing manufacturing and establishing an international cooperation system.
	Establishment of its own competences in manufacturing NPP components.
	Enhancement of corporate manufacturing capability for production of NPP components.
	Development of servicing competences to maximize revenues at all NPP lifecycle stages.
Improving the Corporation's performance	Ensuring efficiency of major manufacturing and auxiliary functions.

Manufacturing components for NPPs by Atomenergomash

Vessel components	Russia's only maker of steam generators for Russian NPPs and reactor vessels for fast-neutron reactors.
Pumping equipment	Russia's only manufacturer of MCPs for all Russian reactors.
Valves	A maker with the capability to manufacture over 70 % of all valve lines for NPPs.
Pipelines	One of the largest makers of high-pressure piping.

Manufacturing structure of Atomenergomash Group of companies by activities, %



KEY EVENTS IN 2010

In 2010, the following enterprises were integrated in the corporate circuit of AEM's group of companies: Energomashspetsstal Works, a maker of large-size special-steel blanks for power plant components, including nuclear reactors, special-purpose pumps, steam generators and hydrogenerators, and Petrozavodskmash, a manufacturer with the required competences in producing a range of key nuclear island components.

Programs to integrate the acquired assets were implemented in 2010. Both makers have launched production of a number of reactor island components. To ensure their readiness to manufacture two sets of key NPP components, process equipment was purchased as part of technical conversion investment programs.

The purchase of these assets, with expertise in making a key range of NPP components, led to a decrease in the monopoly in the reactor compartment manufacturing market to 10% in 2010.

A memorandum of mutual understanding was also signed in the reporting period with an Indian EMS-company as part of a project to localize manufacturing and engineering capability in India to produce long-lead NPP components based on Russian technology. Work is currently underway to establish two AEM subsidiaries in India to act as founders for a Russian-Indian joint venture to specialize in manufacturing components and services for the nuclear and heat power industries.

In 2010, AEM and Alstom, France, confirmed earlier arrangements by ALSTOM Atomenergomash, a joint venture established in 2007 for production of low-speed steam turbines and generators of 1,200–1,700 MW based on Arabelle technology, and defined new lines of cooperation, specifically in manufacturing of high-capacity steam turbines for Russian cogeneration plants, including turbines of power units designed to operate with supercritical steam parameters, and in production of emergency diesel generators for upgrading existing turbine-generator plants at Russian NPPs.

AEM's contribution to the development of related industries

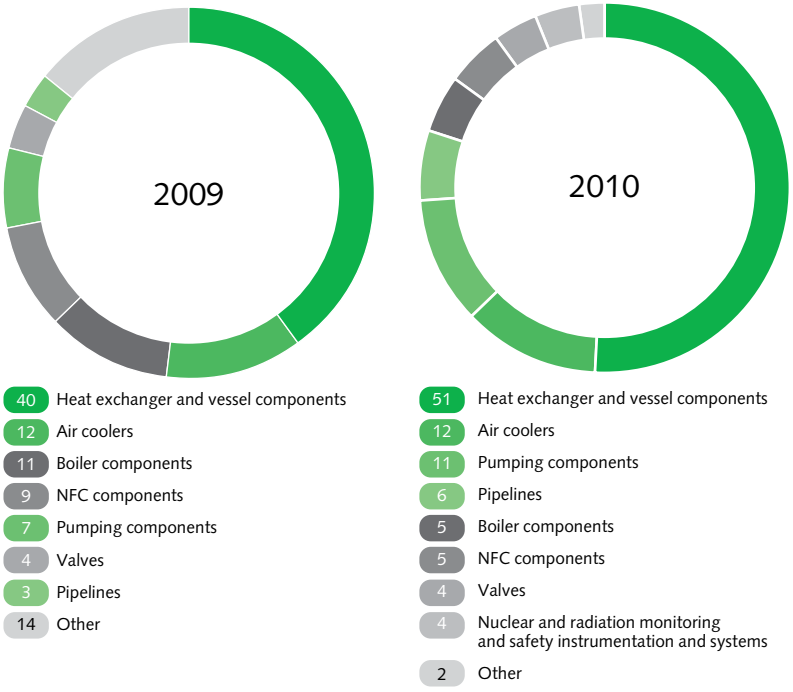
Heat power

AEM is Russia's leading maker of waste-heat boilers for steam-generator plants and accounts for 65% of supplies.

Gas and petrochemical industries

AEM has been successfully developing collaboration with Gazprom, Lukoil, Rosneft and other enterprises in the gas and petrochemical industries, boosting manufacturing of modular-design components (tailored to climatic conditions).

Manufacturing structure of Atomenergomash's group of companies by activity, %



3.2.3. ENGINEERING

To retain the position of global technological leader in international markets, the Corporation needs to have in its structure modern engineering organizations that are competitive in terms of cost and quality of units under construction, of the construction schedules and of the safety of the facility's operation and further decommissioning.

In 2007, three major engineering companies (SPbAEP, NIAEP, AEP) were formed based on the respective design institutes. They carry out the entire spectrum of activities in engineering surveying, design and construction of NPPs. The establishment of the engineering companies made it possible to concentrate design, building and engineering resources within one entity that is responsible for implementing NPP turnkey construction contracts.

The overall management configuration for engineering activities is as follows: ROSATOM acts via its subsidiary, Atomenergoprom, as the investor by making tripartite investment agreements with Atomenergoprom and Rosenergoatom Concern. Rosenergoatom, in turn, makes contracts with engineering companies as the prime contractors for the entire spectrum of design, surveying, construction and assembly work.

COMPETITIVE ADVANTAGES OF RUSSIAN ENGINEERING

The role of ROSATOM in improving the conditions of the EPCM-contract is to fix the best practice and extend it to all players in the nuclear design and construction market. This manifests itself in the establishment of a model contract for the complete cycle of pre-design and design activities and of the model EPCM-contract for nuclear power unit construction.

A system for integrated management of schedules, costs, resources, risks, contents and objectives of projects began to be introduced in the reporting year (based on SuccessDrivenProjectManagement methodology).

Apart from their original design management competences, the Corporation's engineering companies formed procurement and construction management divisions. A system of standards and a range of engineering and organizational solutions are expected to be introduced in the near term to ensure the efficiency of quality, schedule and cost management in construction of installations and streamline interactions among parties to investment projects based on an "investor–customer–contractor" pattern.

THE "ESTABLISHMENT OF A MODEL PROJECT FOR AN OPTIMIZED AND INFORMATIZED POWER UNIT OF THE VVER TECHNOLOGY (VVER-TOI)" PROJECT

The world's most widespread technology (2/3 of the installed capacity) is PWR (Pressurized Water Reactor), which also includes the Russian VVER technology (water-cooled water-moderated power reactor). This is what half of the reactors in operation in Russia are based on. Most of the power units currently under construction in the world (55 out of 65) also use PWR technology.

EPCM-companies (Engineering Procurement Construction Management) are the companies that employ methods and tools of portfolio turnkey project management. The function of an EPCM-company includes engineering, supplies, construction and project management.

Technological data of key products by analog nuclear companies

	AREVA (EPR 1600)	Toshiba (AP 1000)	MHI AREVA (ATMEA 1)	ROSATOM (AES-2006)	Comparison of AES-2006 design features with similar designs
Reactor type	PWR	PWR	PWR	PWR	-
Status	Under construction	Under construction	Project	Under construction	Especially strong
Power, MW (el.)	1,650	1,100	1,150	1,150	Especially weak
Capacity factor	92	93	92	93	Especially strong
Service life	60	60	60	50	Especially weak
Radiation effects on personnel, man-Sv	0.35	0.7	0.5	0.5	Especially weak
Core damage frequency	10E-6	5,09E-7	10E-6	6,1E-7	Especially strong
Release limit frequency	10E-7	5,9E-8	10E-7	1,8E-8	Especially strong
Type of safety systems	Active/passive	Passive	Active/passive	Active/passive	Especially strong
Fuel	UO2 and MOX	Sintered UO2	UO2 and MOX	UO2 and UO2+Gd203	Especially weak
Fuel cycle, months	24	18	24	18	Especially weak
Autonomous operation time	24	72	24	72	Especially strong

Source: independent assessment data from Roland Berger, 2010.

To raise the economic efficiency of Russian-designed units, in 2009, ROSATOM, jointly with the Commission for the Modernization and Technological Development of the Russian Economy under the President of the Russian Federation, initiated the "Establishment of a Model Project for an Optimized and Informatized Power Unit of the VVER Technology (VVER-TOI)" project (see also the "Scientific and Technical Complex" section).

The purpose of the project is to design a model AES-2006-based VVER unit to be competitive against foreign analogs (given the integral economics at all lifecycle stages) with the following parameters:

- the estimated cost of building a commercial unit is 20% lower than that for Novovoronezh II/1;
- the yearly estimated operating costs of the unit is 10% lower than Balakovo-4, Russia's best unit in this indicator;
- the design construction period of a commercial unit is 40 months (the industry's current standard is 60 months);
- the design and engineering documentation for the unit should be developed in an advanced information environment and should be ready for licensing, certification and international tendering.

The implementation of the VVER-TOI project is expected to lead to a qualitatively different NPP lifecycle management system.

6D DESIGN

NIAEP, jointly with Toshiba Corporation, Japan, is introducing a technology for the integrated management of the NPP lifecycle processes at design and construction stages known as the 6D Project. The project is being carried out under a general framework cooperation agreement between Atomenergoprom and the Toshiba Corporation.

The 6D project is based on a single information model of an NPP containing data on the project's working documentation in a 3D format, on procurement and delivery of materials and components (4D), activity progress planning (5D), and human, material and technological resources (6D).

This technology not only makes it possible for one to see in advance what a plant will look like, but also to resolve many construction problems at a stage as early as design. It also enables modeling of movements of process and other components, reshuffling of personnel, automatic production of working documentation (reports, drawings, diagrams), and generation, depending on the construction results, of a realistic digital model of the unit to be used during operation and further for upgrading and decommissioning the unit.

The major objective of the 6D project is to optimize the construction of units. Work is now nearing completion on generating a 3D model of Rostov-3 to form the framework for the further 6D model. The project's results are critical both in terms of reducing the time and cost of building Russian nuclear power units and in terms of meeting the requirements for taking part in international tenders.

The 6D project has been at its commercial operation phase since January 2010. It is planned that, by the end of the second quarter of 2011, designs will be completed for 49 rooms of the reactor department and for 10 zones of the turbine department, and, by the end of 2011, for the rest of the rooms and zones at Rostov-3. Onsite implementation of 6D technology field engineering concepts is expected to be launched as part of the closing stage scheduled for September 2011.

SAFETY OF NPP CONSTRUCTION

Power units are built by engineering companies based on designs meeting all Russian safety regulations and standards and international requirements. Possibilities for improving NPP safety are assessed and identified at all NPP lifecycle stages.

The site and deployment locality are investigated at the preliminary phase of activities to identify natural and technological hazards for potential impacts to be assessed, including development projections with calculation of maximum parameters. Where required, site engineering protection measures are taken to prevent or reduce potential adverse effects. In the NPP siting licensing process, safety case materials are subject to review by the Federal Environmental, Industrial and Nuclear Supervision Service.

A preliminary safety assessment report and Level 1 probabilistic safety analysis report are generated at the design documentation development stage. Prior to approval, the design undergoes a state expert review for compliance with nuclear, radiological and other safety requirements.

For the NPP construction phase, construction organization methods ensuring that design safety targets are achieved in construction and erection are developed as part of design and working documentation. Before the NPP is commissioned, the serviceability of safety systems and controlling systems is tested, and the parent metals and welded joints in safety-related components are inspected. The prime contractor and customer organizations are responsible for supervising the compliance of the construction work with respective technical specifications and design documentation. The project designers carry out field supervision. The Federal Environmental, Industrial and Nuclear Supervision Service is responsible for state construction supervision.

MINIMIZATION OF ENVIRONMENTAL IMPACT FROM CONSTRUCTION PROJECTS

Minimization of adverse environmental impact from all NPP construction projects is achieved through adherence to design requirements in construction. Environmental impact from construction is determined by existing technologies for handling building waste, land, water and atmospheric air.

An important task faced by engineering companies is to ensure that the environmental safety level of nuclear construction projects is maintained at all lifecycle stages.

INNOVATIONS IN 2010

As of the year end, AEP, Moscow, had in possession 160 intellectual property items against 131 in 2009. In 2010, AEP filed a patent application for an invention ("A device for pre-stressing of a reinforced-concrete structure") and 10 applications to register computer programs. Two patents were received for the inventions "A device for localizing the corium in a nuclear reactor" and "A gantry for the reinforced-concrete containment of a nuclear power plant." Both inventions were commercialized. In the reporting year, AEP also received 10 certificates for officially registered computer programs.

NPP safety provisions at different lifecycle stages

1. Construction concept	• Environmental safety analysis for the facility starts from the execution of the initial document (Declaration of Intent) on building a new nuclear source in a particular region
2. Siting	• Study of natural and technological hazards • Environmental impact assessment
3. Design	• Preliminary safety analysis report • Probabilistic safety analysis • State expert review for compliance with safety requirements
4. Construction	• Development of methods of organizing construction to ensure the achievement of design safety targets • Construction supervision • Field supervision • State construction supervision
5. Commissioning	• Serviceability test of safety systems and controlling systems • Status inspection of parents metals and welded joints in components
6. Operation	• High standards of NPP operation safety, including in extreme situations (the NIAEP-designed Armenian NPP has withstood an earthquake of magnitude 7)
7. Decommissioning	• Establishment of decommissioning infrastructure • Use of innovative designs for ensuring safety

SPbAEP developed applications and a database for designing reinforced-concrete and metal structures for the construction departments of SAVRD-ZhBK. The application enables as full automation as possible of the RFS reinforcement working documentation process, which cannot be realized because of certain requirements in marketed Bentley Rebar, Bentley ProConcrete and Tekla Structures products. The use of the application makes it possible to cut the working documentation release time considerably.

NIAEP won the "Innovation of the Region – 2010" contest sponsored by the Government of Nizhny Novgorod Region with its project "Management of Nuclear Power Plant Construction Based on the Intellectual Design Technology." Intellectual design technology proposes that design (3D), delivery of components, work schedules and human resources be managed in a single integrated information model. Using the technology helps cut construction and assembly time while at the same time increasing labor productivity and improving work quality and safety at project sites.

3.2.4. NPP CONSTRUCTION

As of 31 December 2010, 30 countries in the world operated 441 nuclear reactors with annual energy generation of 375.3 GW (14% of the global energy demand). The United States has the largest number of reactors (104) with France and Japan having the second and the third largest numbers of reactors (58 and 55 respectively). Russia is fourth with 32 reactors.

Source: IAEA.

http://www-pub.iaea.org/MTCD/publications/PDF/OPEX_2010_CD_web/Start.pdf

NPP CONSTRUCTION IN RUSSIA

ROSATOM is facing the challenge of bringing the share of nuclear electricity in Russia's overall electricity generation up to 25% by 2030.

To this end, i n accordance with the ROSATOM Long-Term (2009-2015) Activity Program (LTP), emphasis in the evolution of nuclear power is placed on NPP construction. Funding for construction is provided via an investment program financed by Rosenergoatom Concern and from the Russian Federation's federal budget with invested funds, as the LTP envisions, put in Rosenergoatom's authorized capital and entered in its investment program.

Apart from large-scale construction of units, the strategic objectives of ROSATOM make it necessary to extend the life of the NPPs in operation, implement a program to enhance generation at effective units (via power, capacity factor and increased efficiency) and increase utilization of the existing capability (including by reducing the frequency and duration of outages). Part of the investments is spent to accomplish these tasks.

The volume of Rosenergoatom's investment program in 2010 was 163.3 billion rubles, of which 103.24 billion rubles was earmarked for funding NPP construction projects.

Federal funding of NPP construction projects in 2010, billion rubles

NPP	Planned for 2010*	Planned, following reallocation**	Actual
Beloyarskaya-4, BN-800	6.66	11.84	11.84
Novovoronezh II/1	18.77	16.35	16.35
Novovoronezh II/2	2.03	1.85	1.85
Leningrad II/1	12.59	4.70	4.70
Leningrad II/2	1.89	4.50	4.50
Rostov-3	11.30	14.00	14.00
Total	**53.24**	**53.24**	**53.24**

* The initial budget allocations for 2010 as approved by the investment agreement of 04.03.2010 (No. 10.4.4.4.10/49).

** Given the results of Rosenergoatom's investment program for 9 months of 2010, budget funds were reallocated among the investment programs subject to annual limits. The investment reallocation data are given in supplementary agreement No. 2.1/105-D-4 dated 06.12.2010 to Investment Agreement No. 10.4.4.4.10/49 dated 04.03.2010.

The return on and payback times for the power units commissioned under the LTP, for which contracts have been made with respect to power supplies to the wholesale electricity and power market, are regulated legislatively.

In accordance with Russian Government Resolution No. 89 dated 24 February 2010, "On Certain Issues of Organizing Long-term Competitive Power Takeoff in the Wholesale Electricity (Power) Market," the payback period for NPP units commissioned, for which power supply contracts have been made, is 25 years; the benchmark return on funds invested is 10.5%, as defined in the procedures approved for pricing the power of newly commissioned nuclear and hydroelectric power plants, including pump storage stations (Russian Federation Federal Rates Service order dated 13 October 2010, No. 486-e).

As of 31 December 2010, there were 9 power units under construction in the Russian Federation.

For the construction of the Akademik Lomonosov floating NPP, components for the transfer system were shipped to the Baltijskiy Zavod. The vessel for the floating units took its final shape and was launched on 30 June 2010.

Construction of nuclear power units in 2010

Leningrad II/1,2	During the year, work was performed at 69 facilities with 18,500 tons of reinforcement assembled and 73,500 m3 of concrete laid. A corium localization device installed in the reactor building of unit 1. Structural steel arranged for the erection of evaporative cooling tower 1. First concreting on the reactor building of unit 2 completed. Land allocation certificate for the construction of units 3 and 4 approved. Rostechnadzor licenses for the deployment of units 3 and 4 received.
Novovoronezh II/1,2	Construction work was performed at 101 facilities of which 90 were startup facilities. Reinforced blocks for inside containment tier 4 installed to the elevation +38.5. The containment concreted to the elevation +26.6. Reactor cavity concreted to the elevation +11.28. Structural steel for the turbine department frame assembled and installation of the frame filling began. Concrete ring for the cooling tower of unit 1 installed. Kamenno-Verkhovskiy water intake facility put into operation.
Rostov-3,4	Construction work completed in the foundation part for the reactor department of unit 3 (up to the elevation of 13.2 m), enabling containment assembly and thermal and electric equipment installation. Earlier manufactured components examined and integrated as planned. Contracts made to procure exclusive long-lead items.
Kalinin-4	Over the year, 5,350 tons of pipelines, 8,700 tons of components and 1,700 km of wire cables installed. Major components (reactor vessel, steam generators, ECCS hydraulic accumulators, pressurizer) assembled. MCP welding completed and the turbine plant shaft aligned. Evacuation of systems onto the open reactor started in December 2010. Assembly work is nearing completion and commissioning started.
Beloyarsk-4	Civil preparedness reached in the reactor department (elevation +16.65), on which the reactor vessel assembly shop was erected. Main reactor vessel assembled and successfully tested with assembly of internals begun.
Baltic NPP	Detailed design forwarded to Glavekspertiza of Russia for expert review. Work was being performed to prepare the site for construction (grading, installation of temporary roads and water and power supply systems, erection of the concrete mixing and grouting facilities). Nuclear island pit excavated.

OVERSEAS NPP CONSTRUCTION

As part of overseas NPP construction projects, the Corporation not only undertakes all project activities, from feasibility studies to NPP servicing (including fuel supplies) and decommissioning, but is also in a position to localize manufacturing of power plant components and transfer in part the technological solution, support the development of the customer's branch infrastructure, train specialist personnel, manage electricity generation, and carry out the trading and sale of electricity. In some cases, involvement in the funding of NPP construction projects is considered. No other company in the world has the capability to make an integrated proposal of such completeness and scale.

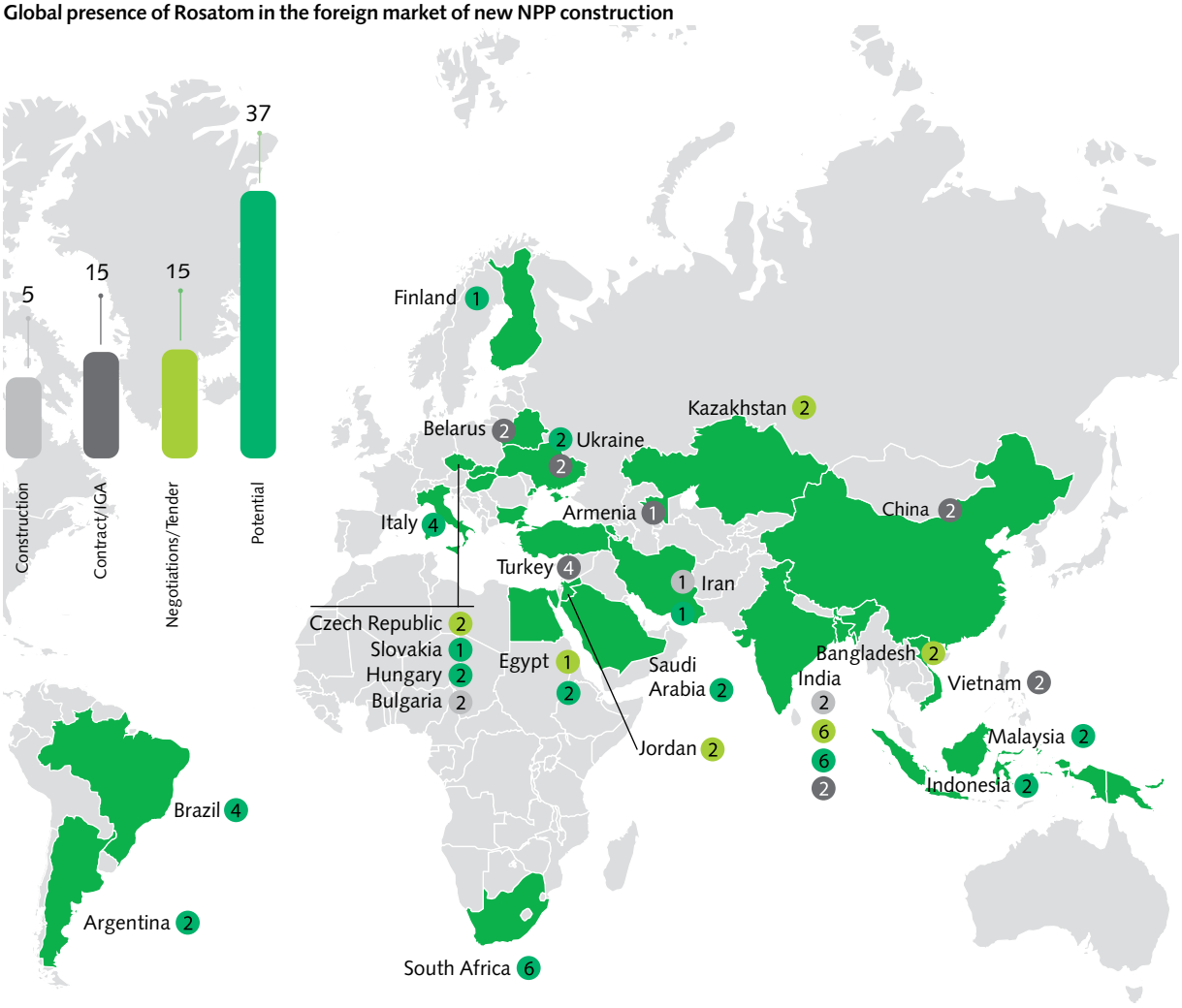
ROSATOM seeks to retain and expand its presence in foreign markets, placing emphasis not just on the traditional area of presence such as the CIS countries (Ukraine, Armenia), Central and Eastern Europe (Bulgaria, the Czech Republic, Hungary, Slovakia) and Asia (China, India), but also considering participation in projects in new markets in Southeast Asia, the Middle East, North Africa and Latin America.

Atomstroyexport acts as the prime contractor for overseas NPP construction projects.

As of 31 December 2010, ROSATOM is the world's leader in the number of NPPs built simultaneously outside its home country (five units). As a base technological platform, these projects have the reference VVER technology to which nuclear power units are built in Russia. Tianwan NPP has also been successfully completed in China.

Overseas NPP construction	
China	Final acceptance reports signed on 15 April 2010 for Tianwan's units 1 and 2.
Iran	First criticality achieved at Bushehr's unit of 1,000 MW.
India	Major operations for the construction of Kudankulam-1,2 completed, working documentation released and 99.1 % of components shipped. A contract signed on 15 March 2010 for top-priority design work to be undertaken on Kudankulam-3, 4 as part of the earlier memorandum on full-scale construction in India.
Bulgaria	Memorandum of understanding signed between ROSATOM and NEC EAD, Bulgaria, 30 November 2010, as a complement to the earlier agreements made with Atomstroyexport, with respect to guidelines on establishing the Belene Energy Company. Memorandums of cooperation also signed with potential strategic project investors (Fortum Corporation, Finland, and Altran Technologies, France) for the construction and operation of the Belene NPP. Activities completed in 2010: – the pit for the construction of Belene-1 prepared; – a concrete mixing plant launched; – sewage treatment works completed; – the construction and geotechnical laboratories fitted out; – drilling operations and onsite investigations completed. Work on new construction and delivery of new components not begun yet suspended until all documents receive final approval.

Global presence of Rosatom in the foreign market of new NPP construction



A major foreign project launched by the Corporation in 2010 is the project to build the Akkuyu NPP in Turkey. This is the world's first project to be implemented on a Build–Own–Operate basis. The Corporation is not only the supplier of works and services for the NPP turnkey construction but also the owner of the project and is funding the project on a shared basis with other stakeholders. The Russian nuclear industry holds a total 51% stake in the project, of which ROSATOM and its operations hold 66.67% and the remaining 33.33% is held by INTER RAO UES. The project is not limited to the NPP construction and further occasional deliveries of fuel and services, with most of the economic effect anticipated at the NPP construction phase and expected to be achieved thanks to returns on electricity sales the conditions for which are set forth in the intergovernmental agreement.

In the longer term (through 2025), ROSATOM plans to build 37 new units in 16 countries.

Prospects for expanded overseas NPP construction	
India	A memorandum on large-scale construction of Russian-designed NPPs in India (6 to 8 units) signed on 15 March 2010.
Turkey	An intergovernmental agreement signed on 12 May 2010 to build Turkey's first NPP (Akkuyu-1-4). An agreement was ratified by the Turkish side on 15 July 2010 and by the Russian side on 29 November 2010. Akkuyu NPP, a design company, registered on 13 December 2010 in Ankara. The founders of the company are the ROSATOM organizations involved in the project and INTER RAO UES of Russia.
China	A general contract signed on 23 November 2010 to build Tianwan-3,4.
Ukraine	Agreement signed on 9 June 2010 between the Russian and Ukrainian governments on cooperation on the construction of Khmelnitsky-3,4.
Vietnam	An intergovernmental agreement signed on 31 October 2010 to build the Ninh Thuan NPP (units 1 and 2). A tripartite agreement (ROSATOM, E4 Group and EVN) signed under which, on the initiative of Vietnam's EVN corporation, E4 Group was made part of the Ninh Thuan NPP project as contractor for the feasibility study.

3.2.5. ELECTRICITY GENERATION

Rosenergoatom Concern is the operator for all NPPs in operation in Russia, as well as the ordering party for those under design or construction. Rosenergoatom incorporates 10 effective NPPs with a total installed capacity of 24.2 GW.

Rosenergoatom Concern is a generating company with Russia's and the world's second largest NPP installed capacity.

Russian NPPs

The "Long-Term Energy Foresight of the Russian Federation and Strategic Interests of ROSATOM" project

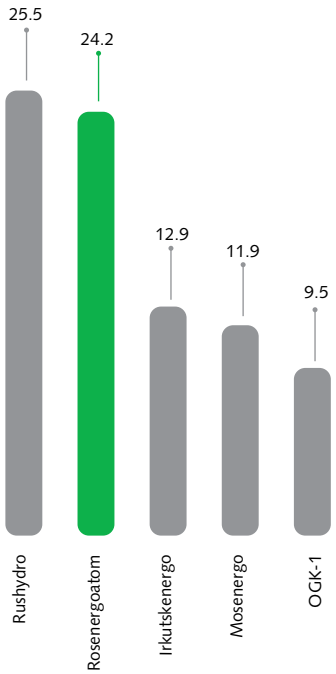
Foresight is a prediction technique that involves members of the expert community and decision-makers in activities, making it possible to shape the image of the desired future to be shared by all players, identify evolutionary targets and ensure the realization of the predictions thanks to the coordinated efforts of the players concerned.

The project's major result in 2010 was a four-party agreement made by the Russian Federation Ministry of Energy, the Federal Tariffs Service, ROSATOM and Siberian Coal Energy Company to build a system of technological predictions in power industry.

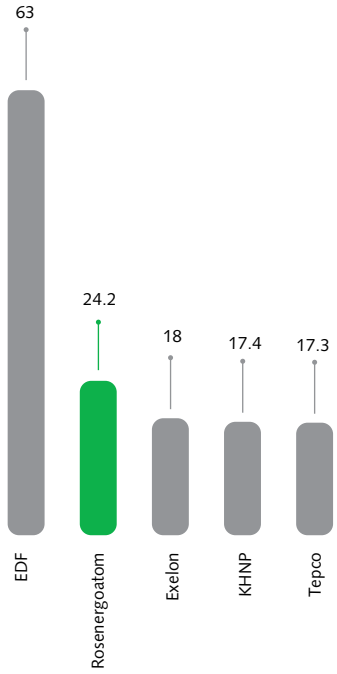
A base scenario of global power industry evolution was developed for two extremum models of markets/grids. To verifying the results obtained and to get expert community more involved in the process, an international energy conference was held on 25-26 November 2010. This gathered over one hundred representatives of Russian energy market companies, global energy companies, expert organizations, regulatory authorities and universities in Russia, the United States, Germany, Great Britain, France and other countries.

The position developed by ROSATOM was presented at the 6th Baykal Economic Forum, the World Energy Congress in Montreal and the St. Petersburg International Innovation Forum.

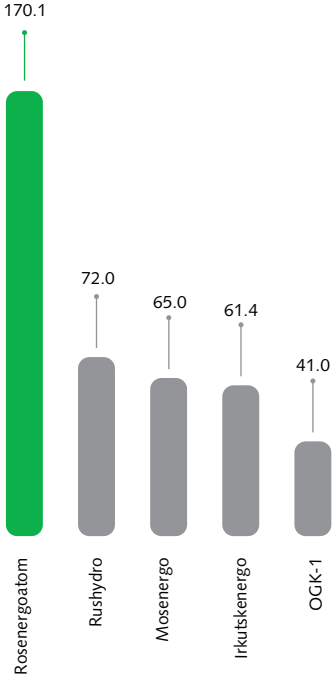
Installed capacity of Russia's major generating companies in 2010, GW



World's Top 5 companies by installed capacity, GW



Electricity generation by Russian generating companies in 2010, billion kWh



ELECTRICITY GENERATION

The generation of electricity in 2010 reached 170.1 billion kWh, its highest in the period of NPP use, and 100.6% of the figures on the Federal Tariff Service's balance and 104.2% of the 2009 figure.

Rosenergoatom is the biggest Russian electricity generating company.

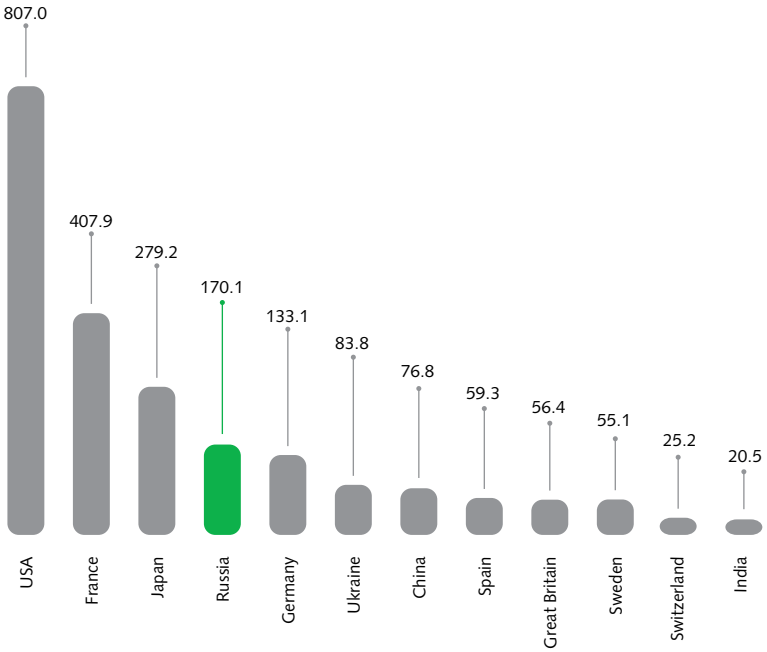
In the overall volume of electricity generation in Russia, nuclear electricity generation in 2010 was as follows: NPPs with VVER reactors – 88.97 billion kWh (106.3% compared to the same period the previous year); NPPs with RBMK, BN and EGP reactors – 81.16 billion kWh (102.0 % compared to the same period the previous year).

The gain in the physical volume of generation, as compared to the previous year, was achieved thanks to:

– electricity generation at Rostov-2 put into commercial operation on 10 December 2010 (generation of 4.6 billion kWh against a target figure of 3.7 billion kWh);

– reduced power unit repair time (183.5 days in 2010);

Nuclear electricity generation in 2010, billion kWh



– an increase in electricity generation by NPPs in operation (the equivalent power growth at the units in operation was 422 MW in 2010);

– a reduction in grid limits (4,292.8 million kWh in 2010 against 6,626.7 million kWh in 2009).

CONTRIBUTION TO REGIONAL ENERGY SECURITY IN RUSSIA

In Russia, nuclear electricity accounts for 16.6% of overall electricity generation volume.

Nuclear electricity contributes greatly to the unified power grids of Russia (in its European part, the share of NPPs amounts to 31.8%). Realizing the significance of its contribution to the national energy balance, ROSATOM is actively working to optimize indirect economic impact in an effort to avoid nuclear electricity rate growth in order to hold down overall growth in electricity rates in Russia and, accordingly, reduce the risk of accelerated inflation rates.

POWER UNIT UPRATING

As the result of efforts undertaken as part of the program to enhance nuclear generation, incremental electricity generation of 3.2 billion kWh was achieved in 2010, including owing to growth in the installed capacity of units (2.0 billion kWh) and to a capacity factor increase of 1.2 billion kWh.

As part of the program, thanks to the capacity and efficiency increase, equivalent power growth at units in operation amounted to 2,222 MW in 2010, as compared to 2006, with 2010 growth of 422 MW.

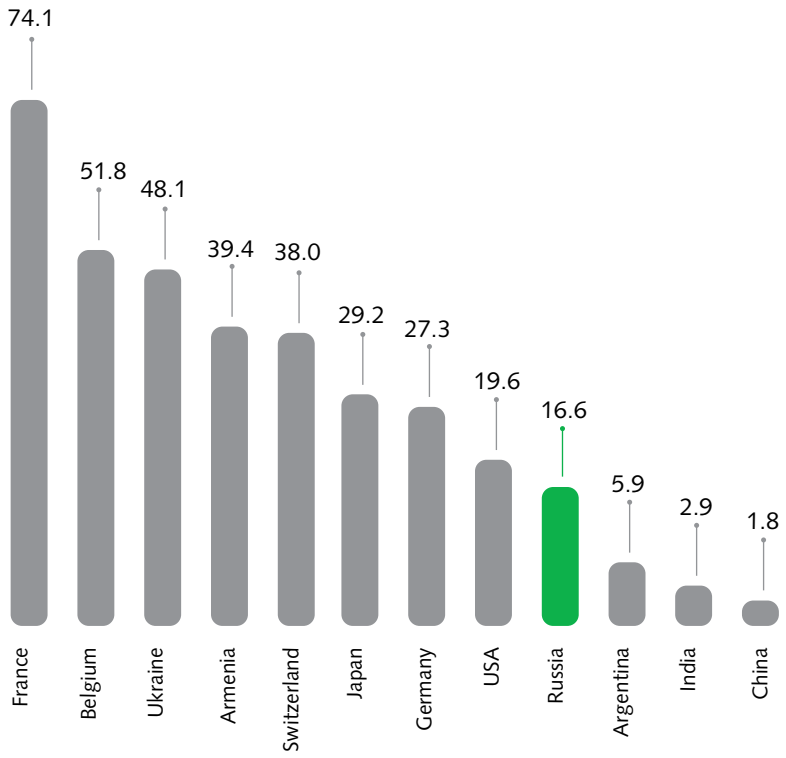
Work was completed in 2010 on raising the efficiency of the K-500-65/3000 turbines at RBMK units. Blades of an improved profile were delivered and installed as replacements in turbine stages 4 and 5 for turbine generators TG-2 at Kursk-1, TG-1 (Smolensk-1), TG-1 and TG-3 (Leningrad-1, 3), TG-2 (Smolensk-1) and TG-4 (Leningrad-2).

Work was completed on TG-2 at Smolensk-1, TG-2 at Kursk-1, TG-4 at Leningrad-2 and TG-1 at Smolensk-1 as part of scheduled upgrading work, thanks to a retrofit of the steam separators at RBMK units.

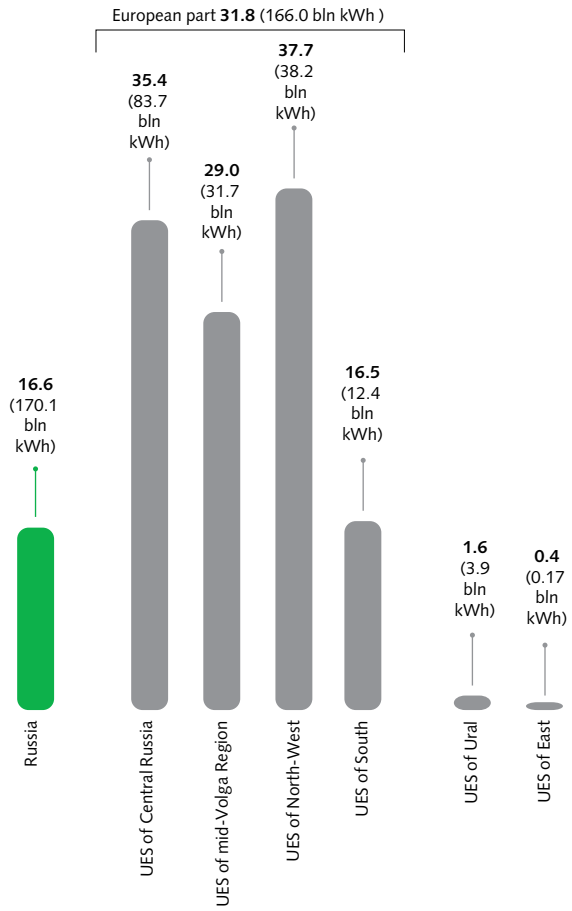
Capacity factor increase

The capacity factor of Russian NPPs has been growing since 2004. As the result of the implementation of a capacity factor increase program at the NPPs in operation, the nuclear capacity factor amounted to 81.3% in 2010, which is 1.1% higher than the previous year's figure.

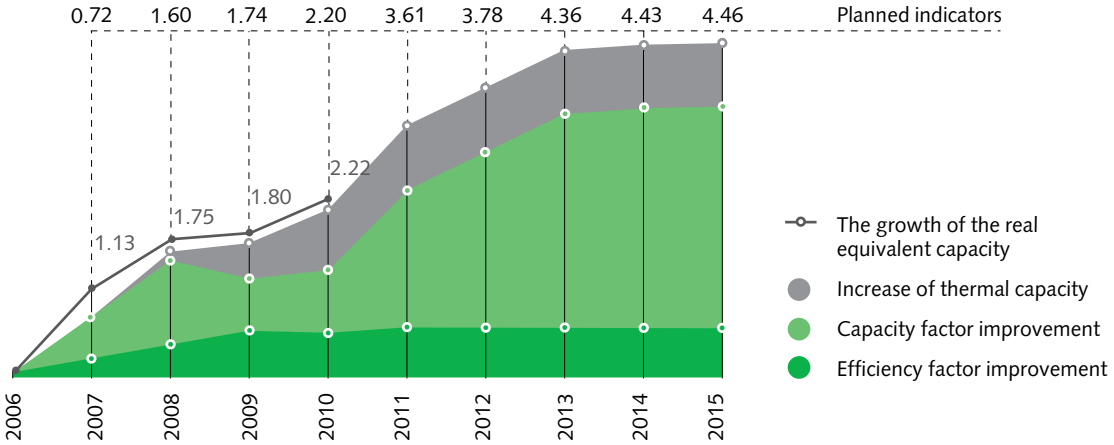
Share of nuclear power in electricity generation, 2010, %



Contribution of NPPs to electricity generation by the United Energy System (UES) of Russia in 2010, %



Actual growth in equivalent power, %



In the reporting year, work was undertaken to raise the thermal power of RBMK units by 5% (Leningrad-3, 4, Kursk-3), of VVER-1000 units by 4% (Kalinin-1, 2, Balakovo-1) and of VVER-440 units by 7%.

Work was completed to convert VVER-1000 units to an 18-month fuel cycle (Balakovo-1-4, Rostov-1, Kalinin-2, 3) and RBMK units to a two-year overhaul period.

POWER UNIT LIFE EXTENSION

As part of the activities to raise efficiency of NPPs in operation, work was completed at Beloyarsk-3 under the life extension program (LEP), including work to establish a backup control post, install a second package of emergency protection hardware, retrofit the emergency power supply systems and upgrade the radiation monitoring system. Following upgrading, the systems were put into operation. Work was also completed to replace 16 modules of the PGN-200M steam generators.

As the result of work undertaken as part of LEP, a license was granted by the Federal Service for Environmental, Technological and Nuclear Supervision for the operation of Belyarsk-3 until 31 March 2020. A comprehensive survey was also undertaken at Balakovo-2 to evaluate the actual state of the unit and determine the remaining life of its components, and the pre-design phase for the LEP Investment Project was elaborated.

In 2010, working documentation was developed for extension of operating life at eight units (Balakovo-1, Kalinin-1, Kola-4, Novovoronezh-5, Smolensk-1, 2 and Kursk-3, 4).

SAFETY OF NPP OPERATION AND DECOMMISSIONING

NPPs are operated and decommissioned based on Russian and international nuclear safety requirements.

The management of NPPs is based on:

- a unified technological and economic policy with most emphasis unexceptionally placed on ensuring safety;
- employing appropriately trained, self-disciplined and responsible personnel committed to safety culture principles;
- decision-making relying on a proven practice, integrated approaches and economic practicability;
- the declared responsibility of Rosenergoatom Concern for NPP safety as the operator, which is in no way confined by the independent status of the organizations that support NPP operations at all lifecycle stages, and by the powers of the national nuclear regulatory authorities.

For the NPP operation:

- each NPP is licensed (licenses from the Federal Environmental, Industrial and Nuclear Supervision Service for operating each of its units and licenses for other NPP operations from federal supervising and regulatory authorities);
- it is confirmed, in accordance with the unit and plant operation technology as approved by the federal safety regulators, that the buildings, structures, systems and components have been built and are operated as designed, and nonconformities, if any, have been revealed and done away with;
- all NPP commissioning operations shall be performed as confirmed by the NPP acceptance certificate;
- the top NPP officials are assigned the responsibility for NPP safety and security, with the entirety of rights, human resources, funding and logistical support required to ensure safe NPP operation provided;
- NPP operating and repair personnel are trained and retrained on a scheduled basis and tested for the ability to act individually and collectively during normal operations and in emergencies;
- adherence to radiation safety standards under sanitary and radiation safety regulations is ensured, with the onsite and offsite radiation situation, personnel exposure doses and radioactive release values monitored continuously;
- the Concern's central administrative staff, the NPP personnel and the personnel of supporting organizations are kept permanently ready for action as envisioned by the "Plan of personnel protection activities in case of an accident at the NPP" through drills in simulated conditions of design, beyond-design and severe accidents;
- scheduled emergency response drills of personnel and comprehensive emergency response exercises.

NPPs operate warning alarm systems for personnel of all supporting organizations, federal nuclear regulators and local public.

The operator systematically audits and assesses the safety level of all units. The audits in the reporting year have shown the target safety and reliability level to have been maintained at all NPPs with measures being taken to further raise it.

NPP life extension in Russia

Plant	Unit	Reactor type	Commissioning date	Design life	Extended life, years
Balakovo	1	VVER-1000	28.12.1985	28.12.2015	
	2	VVER-1000	08.10.1987	08.10.2017	
	3	VVER-1000	25.12.1988	25.12.2018	
	4	VVER-1000	04.11.1993	04.11.2023	
Beloyarsk	3	BN-600	08.04.1980	08.04.2010	15
Bilibino	1	EGP-6	12.01.1974	12.01.2004	15
	2	EGP-6	30.12.1974	30.12.2004	15
	3	EGP-6	22.12.1975	22.12.2005	15
	4	EGP-6	27.12.1976	27.12.2006	15
Kalinin	1	VVER-1000	09.05.1984	09.05.2014	
	2	VVER-1000	03.12.1986	03.12.2016	
	3	VVER-1000	16.12.2004	16.12.2034	
Kola	1	VVER-440	29.06.1973	29.06.2003	15
	2	VVER-440	08.12.1974	08.12.2004	15
	3	VVER-440	24.03.1981	24.03.2011	25
	4	VVER-440	11.10.1984	11.10.2014	
Kursk	1	RBMK-1000	19.12.1976	19.12.2006	15
	2	RBMK-1000	28.01.1979	28.01.2009	15
	3	RBMK-1000	17.10.1983	17.10.2013	
	4	RBMK-1000	02.12.1985	02.12.2015	
Leningrad	1	RBMK-1000	21.12.1973	21.12.2003	15
	2	RBMK-1000	11.07.1975	11.07.2005	15
	3	RBMK-1000	07.12.1979	07.12.2009	20
	4	RBMK-1000	09.02.1981	09.02.2011	20
Novovoronezh	3	VVER-440	27.12.1971	27.12.2001	15
	4	VVER-440	28.12.1972	28.12.2002	15
	5	VVER-1000	31.05.1980	31.05.2010	31.12.2010*
Rostov	1	VVER-1000	30.03.2001	30.03.2031	
	2	VVER-1000	18.03.2010	18.03.2040	
Smolensk	1	RBMK-1000	09.12.1982	09.12.2012	
	2	RBMK-1000	31.05.1985	31.05.2015	
	3	RBMK-1000	17.01.1990	17.01.2020	

* As of 31.12.2010, the program to prepare the unit for the life extension during the preventive maintenance outage of 2010-2011 was nearing completion.

The results of special-purpose regulatory inspection and audit missions (involving international experts) give extra evidence of the safety and reliability level of NPPs in operation meeting the requirements of Russian and international safety regulations and standards.

The NPP load availability factor in 2010 was 83.78% (against 83.63% in 2009).

The following units were brought into pilot commercial operation at an increased power level: Balakovo-3 (104% of Nnom), Kola-4 (107% of Nnom) and Kursk-2 (105% of Nnom).

NPP DECOMMISSIONING

NPP decommissioning is based on requirements that ensure:

- performance of operations in a manner that is safe to personnel, the public and the environment;
- radiological safety of handling fresh nuclear fuel, SNF and radioactive waste with these being appropriately accounted for and kept in safe storage;
- mandatory radiation monitoring for re-commercialized materials and components.

The role Rosenergoatom Concern has been assigned in the centralized management of NPPs suggests engaging in constructive dialogue and interactions with the parties concerned, primarily with the federal nuclear regulatory authorities.

WANO

WANO (World Association of Nuclear Operators) is a nongovernmental organization. Rosenergoatom Concern and Atomflot are Russian members of WANO. WANO is based in London and its Russian center is situated in Moscow.

The mission of WANO is to raise, to as high level as possible, the safety and reliability of NPPs worldwide via joint efforts on assessing, comparing against so far the best accomplishments and improving operations through mutual support, exchange of information and feedback on positive experience.

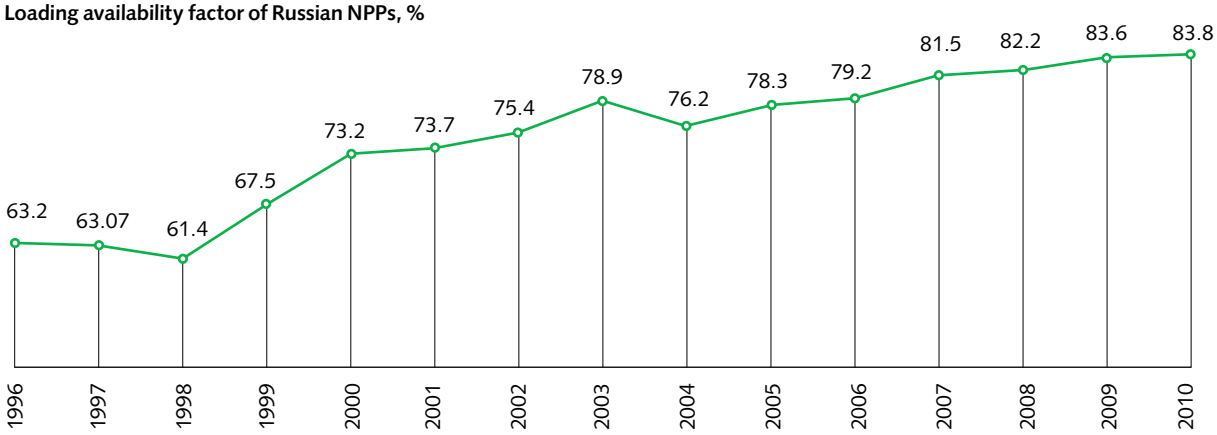
WANO programs

Peer reviews (external in-service audits)	Operating experience	Vocational and technical training	Technical support missions	Unit performance indicators
Audits are undertaken with participation of international experts. In Russia in 2010, audits were conducted at the Kalinin NPP, at the Rostov NPP and at Atomflot with repeated audits undertaken at the Smolensk NPP, at the Leningrad NPP and at Atomenergoremont and pre-startup audit at the Kalinin NPP. Representatives of Russia took part in partner audits at NPPs in other countries as experts.	In the reporting year, 985 reports were prepared by WANO on events at NPPs (20 reports were submitted by WANO's Russian members).	WANO's Russian center conducted nine workshops in 2010, of which two were held in Russia.	In 2010, ten technical support missions were conducted in Russia for raising safety and eliminating drawbacks identified by partner audits.	In the reporting year, data of all Russian power units were gathered and analyzed, and 10 of WANO's indicators were calculated with results submitted to WANO's members.

On 31 January - 2 February 2010, WANO's 10th General Assembly was held in Delhi, India. This gathered 350 heads of energy companies in 40 countries of the world. The General Assembly discussed WANO's programs and measures improving safety and reliability of nuclear power plants.

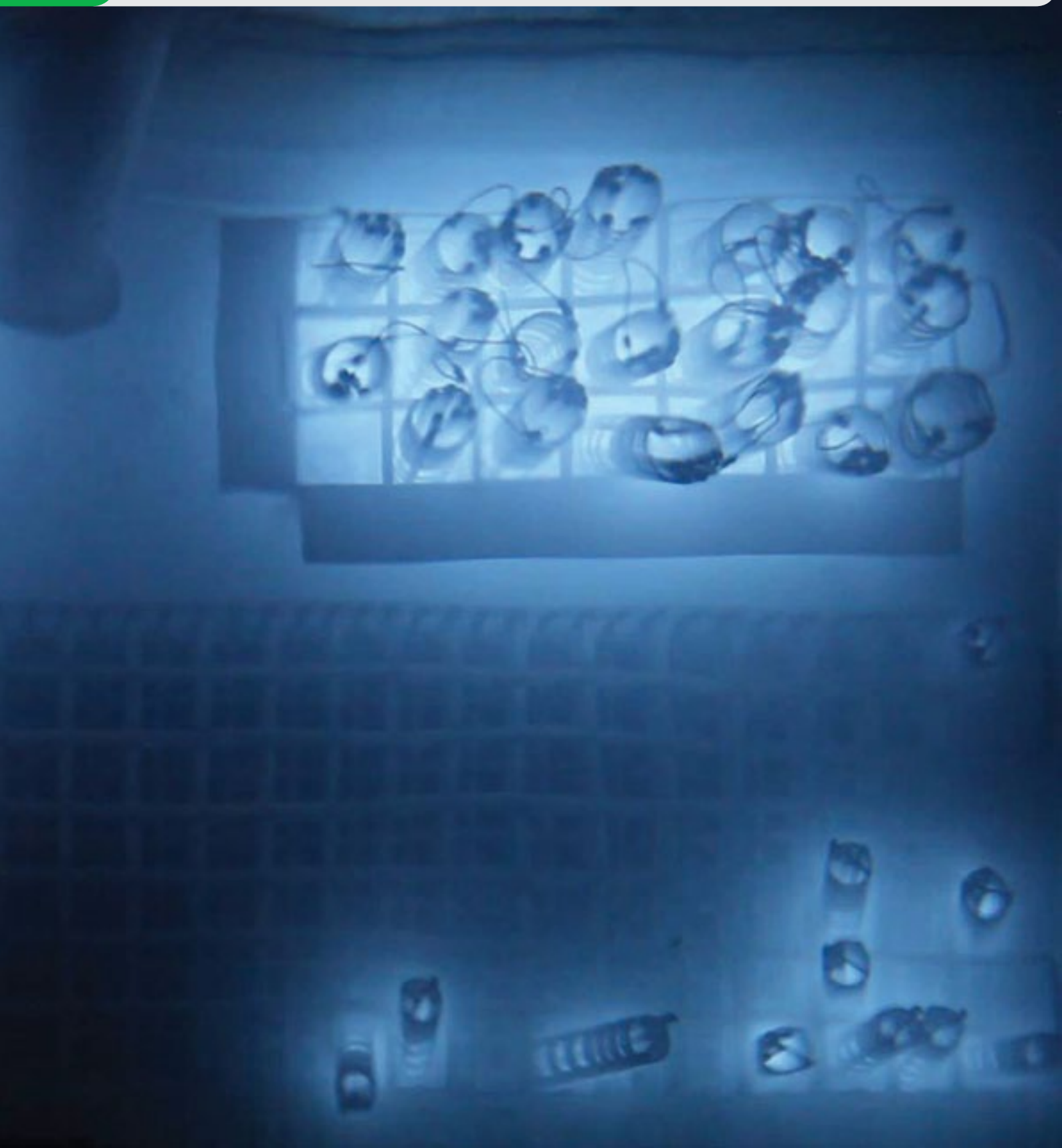
On 1-3 June 2010, a conference of technical heads of operators, and technical directors and chief engineers of NPPs convened by WANO and by the Institute of Nuclear Power Operations was held in Atlanta, USA. The major topics of the conference were: "The Task of the NPP Management Worldwide Is to Increase the Efficiency of Production" and "NPP Safety during Repairs."

Loading availability factor of Russian NPPs, %



3.3.

SCIENTIFIC AND TECHNICAL COMPLEX



PETR SHCHEDROVITSKIY

Deputy Director General for Strategic Development, Director of Directorate for Scientific and Technical Complex

"Russia possesses a technological advantage: we retained competitiveness in the nuclear industry. We try to provide the transfer and introduction of innovative technologies to the economy at large.

We have a great number of projects at the stage of commercialization. They can be elaborated and introduced into mass industry. The markets for nuclear technologies based on radiation management are comparable in their scale with the market of the nuclear power industry. Entering new markets and creating new products using radiation technologies is one of the priority tasks of ROSATOM."

Stages of technological development

Stage I	Stage II	Stage III	Stage IV
1918–1942 Basic research	1943–1988 Conception, development and stabilization of the nuclear industry, nuclear arms race	1988–2005 Maintaining position	c 2005 Defining a new agenda of development
1921 Radium Laboratory within the Academy of Sciences	1949 First test of Russian atomic bomb	2006 Federal Target-oriented Program "Development of Russian Nuclear Power Complex" program adopted	2007 BN-800 project started – the largest fast neutron reactor worldwide
	1954 The world's first nuclear power plant of 5 MW capacity started up (Obninsk)		
1940 Discovery of spontaneous uranium fission	1964 The world's first VVER-1 reactor of 210 MW capacity started up		
	1986 Introduction of new safety standards for NPP operation		
Goals			
1920–1930	1940–1980	1990–2000	2010
Research of nuclear technology capability	Use of nuclear technologies for military (building a nuclear shield) and civil purposes (NPPs, ice-breakers). Formation and development of scientific and technical bases for nuclear industry, creation and development of education for nuclear industry specialists	Preserving the accumulated potential in market conditions and industry deregulation	Ensuring energy safety, defense capability, leadership on international markets and technological leadership

Technological achievements became possible thanks to state priority attention to the nuclear industry and allocation of sufficient funds

A priority target of ROSATOM is innovative development of the nuclear industry by enhancing its scientific and technological potential and expanding the sphere of nuclear technology applications in various economic fields.

In 2010, total investments in science grew by 30%. Renovation of traditional technologies consumed 28% of the allocated funds, 61% was spent on new breakthrough technologies on traditional markets and 11% was invested in technologies for new markets.

The growth of labor productivity in the scientific and technical complex (STC) amounted to 26%. In 2010, total earnings for STC enterprises increased by 22% (in relation to 2009), and by 2015 this growth of earnings is planned to be doubled. The output increase for high-tech and improved products and services was 4.43% (in comparable prices) in 2010.

The year of 2010 was a starting point for the Federal Target Program "Nuclear Power Technologies of the New Generation in 2010–2015 and until 2020." The frame of this program requires the implementation of a comprehensive scope of work allowing the transition of the nuclear power industry to a new technological platform using fast neutron reactors and closed fuel cycle.

Main stages of the Federal Target Program "Nuclear Power Technologies of the New Generation in 2010-2015 and until 2020"

KEY TECHNOLOGIES

2012	2015	2017	2018	2019	2020
Basic design of lead-bismuth fast reactors	**Basic design of the 4th generation reactor** **MOX fuel –** brought to rated power **High density fuel –** module draft design	**Dry reprocessing –** pilot demonstration complex **Large benchmark testing complex –** renovated complex	**Prototype of a lead-bismuth fast breeder** **High density fuel –** Commercial module **Multipurpose fast neutron experimental reactor (MBIR),** Phase One	**Prototype of a 4th generation reactor** **MBIR** Commissioning as part of the project	**SNF dry reprocessing:** basic requirements for designing a commercial reprocessing complex for SNF of fast reactors

Financing of the ROSATOM scientific and technical complex in 2010 as per the Federal Target Program, mln RUB

	Federal budget	Extrabudgetary sources	Total
FTP "Nuclear Power Technologies of the New Generation in 2010-2015 and until 2020"	3,170.0	1,339.8	4,509.8
FTP "National Technological Basis for 2007-2011"	372.0	329.0	701.0
FTP "Development of Nanoindustry Infrastructure in the Russian Federation for 2008-2010"	310.0	34.1	344.1
FTP "Research and Development in Priority Areas of Scientific and Technical Complex"	134.2	–	134.2
Total	**3,986.2**	**1,702.9**	**5,689.1**

3.3.1. BASIC SCIENCE DEVELOPMENT

CONCEPT OF MODERNIZATION AND DEVELOPMENT OF THE EXPERIMENTAL BASIS FOR THE NUCLEAR POWER INDUSTRY AND BASIC SCIENCE IN 2010-2020

The main goal of the "Concept of modernization and development of the experimental basis for the nuclear power industry and basic science in 2010-2020," adopted in 2009, is to renovate and develop the experimental basis by optimization of the quantity of test benches, minimization of expenses for their effective and safe operation and to satisfy the industry's needs in experimental research as fully as possible for the present and future.

Optimization will help to avoid duplication and will make use of international cooperation as an opportunity for using foreign test benches for the solution of industry tasks as well as to involve foreign researchers in experiments carried out in Russia and increase research employing computer modeling. In 2010, ROSATOM conducted a survey to determine the needs of the experimental units for renovation and modification of their test benches, and creation of new benches. Proceeding from their requests, the Corporation estimated the scope of investments for 2011-2012 necessary for enhancing safety and efficiency of experimental units. In 2011, Rosatom is planning to allocate 971 million rubles for the above purposes.

In 2010, Rosatom provided scientific support for projects to design advanced NPPs as well as develop and operate the nuclear fuel cycle.

The reporting year contained problem-oriented fundamental research and surveys in the field of nuclear power (this area of knowledge lays the scientific foundation for the physics and energy of the future, providing better understanding of the nature of nuclear forces). Research on the fundamental properties and structure of matter leads to the emergence of unique new technologies and is exceptionally significant for the technological progress at large, particularly in such fields as information technologies, fast electronics and data processing, energy saving and superconductivity.

KEY RESULTS IN THE DEVELOPMENT OF BASIC SCIENCE IN 2010

In the D0 experiment (FermiLab, USA), RSSC-IHEP got an indication of an exceptionally significant scientific result. Scientists found that the fission of B-mesons (containing b-quarks) with emission of positive and negative muons results in the generation of more matter (negative muons) than anti-matter (positive muons). This difference is 40 times greater than the predictions of the standard model, indicating the existence of new, previously unknown laws of the microcosm. The probability that the observed effect is the result of an experiment error is less than 0.1%.

In the GEMMA-1 experiment, RSSC-IHEP finalized measurements of the neutrino magnetic moment (NMM) at Kalinin-2. The experiment's goal was to test the hypothesis that a neutrino has an anomalous large magnetic moment and to establish the limits of applicability of the Standard model. Data processing results (compiled for 4 years of measurements) allowed the limits of $\mu_\nu < 3.2 \cdot 10^{-11} \mu_B$ to be established. This is the best result achieved worldwide in more than 30 years' history of similar experiments.

A study was carried out on the effect of volumetric beam reflection in a crystal with various axial orientations of bent crystals, earlier discovered by RSSC-IHEP, for display and collimation for proton beams of high energy (50-65 GeV).

New crystal beam reflectors were designed. The efficiency of high energy beam collimation (GeV) for accelerator U-70 amounted to 90%.

For the first time in the world, SSC IPPE obtained laser radiation using a multi-element laser assembly under subcritical nuclear pumped laser conditions controlled by the neutron flux of a BARS-6 pulse reactor.

INTERNATIONAL PROJECTS IN BASIC SCIENCE

PROJECT "FAIR"

On October 4, 2010, in Wiesbaden, Germany, nine countries (Finland, France, India, Poland, Romania, Russia, Slovenia and Sweden) signed the International Convention on the Construction and Operation of the Accelerator Facility for Antiproton and Ion Research (FAIR). Seven more countries are planning to join the Convention (Austria, China, Italy, Slovakia, Spain, the UK).

FAIR is a project to build a new generation accelerator facility with no analogy in the world, opening unique new dimensions for research of the most timely issues of modern science. The peculiarity of FAIR is generation of high intensity primary and secondary stable and radioactive nuclei as well as antiproton beams exceeding the intensity of existing beams by 100-10,000 times.

Outstanding issues in STC activity

One of the main issues is insufficient structuring of directions of technological development and responsibility for its implementation.

A way toward a solution is STC reform, which is currently being carried out. The reform will provide specialized management centers (e.g., the Center of Reactor Technologies for Fast Breeders).

Another problem is delays in receiving the required approvals from the Federal Property Management Agency to issue shares in a number of ROSATOM enterprises, leading to delays setting up shared ownerships.

One more serious issue is the age and proficiency structure of the STC personnel: the age of 17% of the employees is less than 30, 58% of the employees are over 50, 80% of PhD holders are over 50.

The participation of Russia in FAIR will enable our scientists for a long time to gain new insights into the structure and properties of matter and high energy in substance, necessary for laying a scientific and technological foundation for a new-generation nuclear power industry and exploration of perspective ways for utilizing nuclear energy.

More than 500 scientists from 25 leading scientific centers in Russia participated in designing a new accelerator complex and preparing experiments using ion and antiproton beams, as well as designing and producing new detectors.

FRAMEWORK AGREEMENT FOR INTERNATIONAL COLLABORATION ON RESEARCH AND DEVELOPMENT OF GENERATION IV NUCLEAR ENERGY SYSTEMS

In compliance with RF Government Directive No. 1050-p as of 30 July 2009, ROSATOM joined the Framework Agreement (FA) for International Collaboration on Research and Development of Generation IV Nuclear Energy Systems. The financing sources related to FA implementation are Rosatom Corporation funds.

In July 2010, ROSATOM signed an agreement to collaborate on the design of sodium-cooled fast reactors in the frame of the Generation IV International Forum (GIF) and is preparing to sign R&D agreements with the foreign participants on the following issues:

- improving nuclear fuel;
- safety and operation of reactor plants;
- equipment designs and power converters;
- demonstration of a global fuel cycle for burning minor actinides.

3.3.2. RESEARCH AND DEVELOPMENT

ROSATOM R&D investments in 2008-2010, mln RUB

	2008	2009	2010
Federal budget	4,000.0	3,579.0	7,062.6
Extra-budgetary funds	7,410.0	6,487.0	7,064.6
Total	**11,410.0**	**10,006.0**	**14,127.2**

One of R&D effectiveness criteria is external investments in the projects, including by private companies.

The EuroSibEnergo company (a Rusal subsidiary) is investing more than 8 bln RUB in the pilot project to design a SVBR-100 lead-bismuth fast breeder.

ROSATOM cooperates with Rusnano in seven fields, more than half of them being financed by private investors.

RESULTS OF FTP "NATIONAL TECHNOLOGICAL PLATFORM IN 2007-2011"

ROSATOM is participating in the federal target program "National Technological Platform in 2007-2011," implementing the section "Nuclear Power Technologies of the New Generation." In 2010, the Corporation issued 14 technological regulations, documents, codes and methodological materials for nuclear power industry enterprises and other sectors of the economy. The Corporation manufactured 15 pilot specimens of products, facilities, stands, and materials for nuclear industry and other sectors of the economy. In addition, it submitted 11 patent applications, developed and handed over two technologies to be used in other industries, and received six patents.

In this context, technology and equipment to generate powerful pulse electron beams for surface treatment of turbine generator blades for nuclear power plants and aircraft engines, providing an increase of blades erosion resistance by more than 1.5 times, heat resistance by more than 2 times, and salt corrosion resistance by more than 4 times, was developed.

A new technology was developed, followed by the manufacture of a pilot batch of nanostructured porous tungsten parts for the needs of the defense and nuclear complex.

An important component of facilitating effective innovation activity is the creation of infrastructure and mechanisms for treating intellectual property. The total number of effective patents of ROSATOM organizations is 2,300. The average increase in patents is 200 per year. In particular, the number of patents entered in the open registrar of patents and useful models of the Russian Federation that was published in 2010 amounted to 400.

RESULTS OF FTP "DEVELOPMENT OF NANOINDUSTRY INFRASTRUCTURE IN THE RUSSIAN FEDERATION IN 2008-2010"

The main result of implementing the federal target program "Development of Nanoindustry Infrastructure in the Russian Federation in 2008-2010" is the creation of a complex for manufacturing pilot batches of nanomaterials and associated products for realizing nuclear power technologies of a new generation.

In 2010, VNIINM prepared for commissioning a complex with an area of 5,666.7 m2 for manufacturing pilot batches of nanomaterials and associated products with a capacity of 18.1 tons. This complex provides the following: pilot batches of reactor tubes – up to 1,500 m per year; fast-hardened magnetic powders and plastomagnets – up to 10 tons per year; composite Cu-Nb wires – 8 tons per year; beryllium foil – 1.2 kg. per year; nonaluminum powders and associated porous products – 500 kg. per year; filtering elements with nanostructure – 1,000 pieces per year. The commissioning date of this complex is 31 March 2011.

In the reporting year, ROSATOM in collaboration with the Russian Nanotechnologies Corporation continued developing and implementing innovative projects in the field of nanotechnologies, following the cooperation agreement between ROSATOM and Rusnano as of 5 March 2008. In 2010, six joint projects were highly appreciated by the Supervisory Board of ROSATOM. One project (the Ulyanovsk Center of Nanotechnologies - SSC NIIAR) won the first prize in an open Rusnano contest to select projects to set up nanotechnology centers. The total cost of these joint projects was 21.52 billion rubles.

RESULTS OF FTP "RESEARCH AND DEVELOPMENT IN PRIORITY AREAS OF THE SCIENTIFIC AND TECHNICAL COMPLEX"

The goal of the federal target program concerning ROSATOM is to bring the tunnel of the proton accelerator facility to an ecologically safe condition. This accelerator facility is being built by IHEP. By the end of 2010, the tunnel was ready for installing engineering and process systems to ensure a long-term accident free state.

Results of scientific and technical activities (RSTA) to be put on the RSTA State Unified Registrar (federal budget)

	2009	2010
Number of patent applications submitted	17	6
Number of know-how developed (formal approval procedure in progress)	17	11 (25)
Number of patents received (formal approval procedure in progress)	2	5 (18)
Databases and computer programs	7	7

Potentially workable RSTAs for solving common industry tasks

	2009	2010
Patents	1	12
Number of applications for a useful model	8	11
Put under custody by enterprises (know-hows)	11	15

RESULTS OF FTP "HIGH-TECHNOLOGY CUSTOMS INSPECTION EQUIPMENT"

High-technology customs inspection equipment developed by ROSATOM allows industrial-scale manufacturing of customs inspection complexes and large-size bulk cargo customs radiometric inspection sets in the frame of the terrorism countering program.

In addition to customs control, these complexes and sets are important for ensuring security of essential facilities and venues including the Winter Olympics in Sochi. This equipment allows up to 25 large-size containers per hour to be checked with a level of detail of less than a centimeter.

As a countermeasure against terrorism, ROSATOM carried out comprehensive research of the operating prototype of a muon tomography unit capable of covering a surface of 3x3 m2. The software developed for the tomography provides reliable registration of a high-density image for an object exposed for a few minutes in natural space radiation.

A scintillation walking portal has been put into operation to control the unauthorized taking away of radioactive materials.

TECHNOLOGIES FOR WATER DESALINATION, CLEAN-UP AND TREATMENT

Technologies for water desalination, clean-up and treatment developed in the nuclear industry can be used in nearly all other industries and public utilities. The main advantage of the Corporation as a supplier of goods and services in this area is that it comprises enterprises of the entire process chain: from drinking water and industrial-purpose water treatment through household and industrial wastewater and NPP radioactive waste clean-up.

The technology has been introduced at more than 100 facilities; it is good for household and industrial use and based on photochemical mechanisms of oxidization under the influence of vacuum ultraviolet.

3.3.3. NUCLEAR MEDICINE

Nuclear medicine is one of the key area for the development of high-tech medicine in Russia. Nuclear medicine technologies are based on using the properties of radioactive and stable nuclides to diagnose and treat various diseases. ROSATOM is developing innovative technologies and produces radioisotopes and medical equipment.

Main projects:

- commercial production of Russian equipment for nuclear medicine in the frame of the FTP "Development of the Pharmaceutical and Medical Industry of the Russian Federation until 2000 and in Further Perspective";
- joint manufacturing of medical equipment with foreign partners;
- equipping positron-emission tomography centers;
- production of Technetium-99m generators in compliance with "good manufacturing practice" requirements;
- manufacturing radiopharmaceuticals for positron-emission tomography centers in Moscow.

In the reporting year, NIIEFA tested an experimental unit of the Ellus-6M medical electron accelerator, specified the documentation for manufacturing a sample for commercial production, and developed a draft design of the Ellus-20M accelerator for 3-D conform beam therapy in multi-static and rotary modes in oncology clinics.

Proton beam therapy (PBT) for breast cancer and its technology (methodology) are documented by RSSC ITEF and are currently ready for registration by the Federal Environmental, Industrial and Nuclear Supervision Service. In 2010, this technology underwent initial testing by ITEF on three patients with breast cancer. The total number of patients with different malignant tumors receiving PTB treatment in 2010 was 56.

RSSC IHEP produced a pilot batch of APRM-1 portable X-ray units. After their laboratory testing, additional requirements were developed for GaAs micro-assemblies supplied by NIIPP (Tomsk). Following the replacement of scanning devices for a modified version with improved detectors, the updated X-ray unit was delivered for continuing medical and technological tests.

ROSATOM's share on the market for separated isotopes and radiopharmaceuticals, as well as the technological foundation for nuclear medicine, is 50-100%.

3.3.4 INNOVATIONS

ACTIVITIES WITHIN THE FRAMEWORK OF THE PRESIDENTIAL COMMISSION FOR MODERNIZATION AND TECHNOLOGICAL DEVELOPMENT OF THE RUSSIAN ECONOMY

Projects within the framework of the Presidential Commission for Modernization and Technological Development of the Russian Economy

Field	Project
Nuclear technologies	Development of a Standard Design for Optimized and Informatized VVER Technology (VVER-TOI) New Technological Platform: Closed Nuclear Fuel Cycle with Fast Neutron Reactors Controlled Nuclear Fusion
Space and telecommunications	Development of a Transport and Power Generation Module Based on a Megawatt-class Nuclear Propulsion Installation
Energy efficiency and energy saving	Innovative Power Industry
Strategic computer technologies and software	Development of Supercomputers and Grid Technologies
Medical equipment and pharmaceuticals	Production of New Radiopharmaceuticals and Network of High-Tech Medical Services

PROJECT "DEVELOPMENT OF A STANDARD DESIGN OF OPTIMIZED AND INFORMATIZED VVER TECHNOLOGY (VVER-TOI)"

The project is aimed at enhancing the competitiveness of Russian exports and investments in NPP construction management in Russia and abroad.

The main task is optimization of technical and economic parameters of the power units to improve integral economy for the user/owner at all stages of the NPP lifecycle (decrease of prices, timeframe for construction, operation costs) with the help of up-to-date 3D/6D design technologies.

The project does not intend to introduce changes in VVER technology, as this could lead to a large scope of redesigning and additional safety analysis. Technical optimization will consist of minimal rational targeted solutions allowing a maximal integrated effect to be achieved.

The project will be implemented using ROSATOM own funds.

The results achieved for the reporting year are as follows:

- The Design Center of VVER Technology (a division of Atomenergoproekt) was set up to integrate competencies in design, engineering and safety assessment of NPP power for VVER technology;
- The Architect-Engineer of VVER Technology (a division of VNIIAES) was set up to provide requirements for the Standard Design;
- The conceptual design of VVER-TOI and Terms of Reference (TOR) were developed for the VVER-TOI Standard Design.

The scope of project work scheduled for 2009-2010 was 100 % implemented. As of 31 December 2010, the degree of the project completion was 42%.

PROJECT "NEW TECHNOLOGICAL PLATFORM: CLOSED NUCLEAR FUEL CYCLE WITH FAST NEUTRON REACTORS"

The aim of the project is the development of a new technological platform of nuclear power to solve existing problems of the nuclear fuel cycle connected with inefficient use of natural uranium potential (today NPP efficiency is about 1%), as well as the problems of accumulation of highly radioactive waste and transuranium elements. The closed fuel cycle will enable multiple recycling of fissile materials.

This technology will make it possible to overcome the resource limitation of the modern nuclear power industry oriented to U-235 consumption, and will not allow a buildup of significant amounts of SNF.

Funding of the project "New Technological Platform: Closed Nuclear Fuel Cycle with Fast Neutron Reactors" in 2010, mln RUB

Federal budget	Extra-budgetary sources	Total
3,169.98	1,407.9*	4,577.88

* The project is funded by FTP "Nuclear Power Technologies of the New Generation in 2010-2015 and until 2020." In 2010, Rosatom invested 50 mln RUB in developing the infrastructure and the project management system.

Results for 2010:

- RF Government Directive No. 50 as of 3 February 2010 approved the FTP "Nuclear Power Technologies of the New Generation in 2010-2015 and until 2020";
- FSE "Glavexpertiza of Russia" (the main expert control agency) on 12 October 2010 approved the design documentation for the production of mixed uranium-plutonium oxide fuel (MOX project);
- technical requirements for BN-1200 NPP and approved TOR for the fast breeder reactor installation were developed;
- pilot batches of initial powder materials for high-density fuel were produced;
- materials for a multipurpose fast experimental reactor (MBIR) pilot project were produced;
- universal technology for pyrochemical processing of high density fuel and experimental verification of its main processes was developed;
- tests of EP 823 steel confirming the possibility of using it as new structural material for fuel rods and fuel assemblies for fast breeder reactors with a lead coolant were carried out;
- two world-class technologies were developed: technology for manufacturing of chromium radiation resistant steel for fast breeders with enhanced heat resistance properties and a range of more than 700 C, and technology for high-temperature saturation of synthesized mineral-like sorbents by long-lived radionuclides extracted from highly radioactive waste. This technology make a solution possible to safety issues for storing long-lived radionuclides until they achieve a safe level of activity.

THE "CONTROLLED NUCLEAR FUSION" PROJECT

Anticipating a world deficit of power generation, this project is aimed at harnessing a new source of energy – the energy of thermonuclear synthesis. The project is based on Russian innovative technologies and cooperative results of the international ITER project. The start of commercial generation of electricity by fusion in Russia is planned by 2050.

Funding of the project "Controlled Nuclear Fusion" in 2010, mln RUB

Federal budget	Extra-budgetary sources	Total
4,601.07	49.50	4,650.57

Results for 2010:

- a commercial batch of superconductor strands (about 30 t) to be used for an ITER magnetic system (suppressing high temperature plasma in a thermonuclear reactor) was manufactured;
- a concept for a thermonuclear neutron source was developed and a feasibility study performed;
- a full-scale prototype of a double-sided vacuum and a pilot specimen of a standard gyrotron for an ITER reactor was developed (a gyrotron is used for microwave heating of plasma in the nuclear fusion installation).

THE "DEVELOPMENT OF A TRANSPORT AND POWER GENERATION MODULE BASED ON A MEGAWATT-CLASS NUCLEAR PROPULSION INSTALLATION" PROJECT

The project's purpose is to develop a nuclear power reactor with the capacity of about 1 MW for new space vehicles of high power efficiency. The project lays the basis for realization of long-term space programs (flights to distant planets, expeditions to Mars, construction projects on the Moon, etc.), and point the way toward development of new space vehicles, including special mission spacecrafts.

Results for 2010:

- approval of TOR of the reactor design for a space vehicle, structural reactor layout, process of manufacturing pilot batches of fuel;
- manufacture of pilot batches of fuel and fuel rods for reactor tests;
- creation of an integrated database for project management (FSUE SSC Keldysh Center, RKK Energy, NIKIET), the system Windchill was chosen as the unified medium for project data and work management.

THE "INNOVATIVE POWER INDUSTRY" PROJECT

The project is based on application of unique materials – high temperature superconductors. It is planned to design and set up pilot manufacturing facilities for a wide range of high-efficiency electrical equipment for effective control of generated electricity distribution and reduction of materials consumption. These developments are in demand in related industries, such as power electronics, cryotechnology, vacuum technology, etc.

The project is being developed in three areas: technologies of flexible strip superconductors (HTSC-2) and high-temperature volumetric superconductors (the main task for the superconductor industry), superconducting limit switches (SLS) against short circuiting in the grid, and kinetic energy storage systems with superconducting magnetic suspension.

Results for 2010:

- laboratory-scale technologies for the continuous production of buffer and superconducting film coating for HTSC-2 with a coating length of about 1 m were developed, a pilot vacuum unit for application of buffer coating layers on HTSC-2 by the ion assistance method was manufactured;
- technical and design solutions for making a pilot specimen of 3.5 kV SLS were developed; grid operating modes for developing a conceptual SLS design were studied; pilot specimens of 3.5 kV SLS were made followed by testing of the last two modifications in conditions simulating real grid operation; a pilot design of 35 kV SLS was produced; an SLS element of enhanced power was manufactured and studied;
- a KNE 0.5 MJ module was manufactured and bench-tested.

THE "DEVELOPMENT OF SUPERCOMPUTERS AND GRID TECHNOLOGIES" PROJECT

The project aims are:

- development of a basic array of domestic supercomputers and compact supercomputers;
- development of design and simulation technologies for supercomputers using basic software;
- massive introduction of domestic supercomputer technologies at high-tech enterprises.

In 2010, the project involved 35 organizations of ROSATOM, the Ministry of Education and Science, the Russian Academy of Sciences, and industrial enterprises of some high-tech industries. Fifteen project participants were provided remote access to the computational resources of the supercomputer center by the experts of RFNC VNIIEF.

Results for 2010:

- 21 small-size supercomputers (computation capacity is 1012 operations per sec.) were supplied to 11 enterprises in the aviation, automobile, nuclear and other industries, including complete sets of the domestic system and applied software. 140 workstations were equipped for virtual design and simulation modeling ("virtual" aircraft, NPP, automobile, missile, etc.) at such enterprises as OKBM Afrikantov (Nizhniy Novgorod), Atomenegroproekt (St. Petersburg), OKB Gydropress (Podolsk), FKP NRC RKC (Peresvet), KB ChimAutomatics (Voronezh), GNP RKC CSKB Progress (Samara), OKB Sukhoi (Moscow), Kamaz JSC (Naberezhnye Chelny), etc. The supply of supercomputers to the above enterprises increased the number of supercomputers in Russian industry by 30%;
- part of a high-efficiency petaflop-class supercomputer complex was put into operation.

In 2010, design modeling was performed on a supercomputer of a number of practical tasks. In particular, it helped OKBM Afrikantov substantiate hydrodynamic and strength characteristics for the equipment and components of such nuclear installations as VBER-300, RITM-200, GT-MGR, BN-800, etc.; for Sukhoi Company modeling was done for a jet fuel system; for Kamaz, modeling was performed for the aerodynamics of the KAMAZ-5490 truck.

THE "PRODUCTION OF NEW RADIOPHARMACEUTICALS AND NETWORK OF HIGH-TECH MEDICAL SERVICES" PROJECT

The project is aimed at developing a complex for production of radionuclide molybdenum-99 to satisfy the needs of practical medicine (80% of world diagnostics is performed using pharmaceuticals based on molybdenum-99).

Results for 2010:

- a reactor technology was developed to extract and build-up molybdenum-99;
- a radiation control system for the production facility was introduced;
- a process line to produce targets designed for irradiation in a reactor with further extraction and build-up of molybdenum-99;
- the first stage of a molybdenum-99 production facility was finalized;
- a long-term contract was signed with MDS Nordion for certification and sales of molybdenum-99 produced in Russia;
- a transportation and logistics scheme was developed to supply molybdenum-99 abroad;
- the zero-cycle of the second stage for the molybdenum-99 production facility was completed.

On December 22, 2010, the first manufactured batch of molybdenum-99 was supplied to Canada to the MDS Nordion company.

INNOVATIVE DEVELOPMENTS IN RELATED INDUSTRIES

The Karpov NIFKHI developed a new class of corrosion resistant composite materials for extreme anthropogenic conditions (awarded the Gold Medal at the 8th International Anticor and Galvanoservice Exhibition. This enterprise also developed a new technology for manufacturing radiation- and super-resistant sealing and anti-friction materials with record-high parameters designed for application in extreme loads, high and low temperatures, chemically aggressive media, and radiation fields (awarded the Grand Prize and Gold Medal at the 10th International Showroom in Moscow).

The NIIEFA completed installation and commissioning tests of a UEL-10D electron accelerator designed for translucence of heavy machinery parts by deceleration emission beam to control their quality by radiography methods. The accelerator was put in operation at the Izhorskiye Zavody. The Gidromet company developments "Volumetric thermo-electric nanocomposite materials based on bismuth and antimony chalcogenides" and "Optical radiation resistant crystals for registering ionized rays" were awarded by certificates and gold medals by the 11th International Forum "High Technologies of the 21st century – 2010."

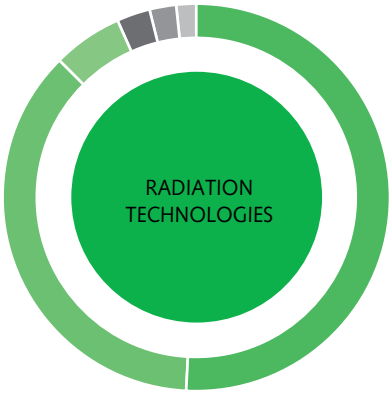
3.3.5. THE "RADIATION TECHNOLOGIES" PROGRAM

The "Radiation Technologies" program was initiated in 2010 in the frame of the Strategic Initiative "Formation of the third business core of ROSATOM in the field of radiation management."

Main concentrations of the Program:

- nuclear medicine (production of isotopes and radiopharmaceuticals, manufacture of medical equipment, development of ROSATOM engineering competencies for "turnkey" solutions in the field of nuclear medicine);
- ecology (development of innovative technologies for reprocessing hazardous medical and solid household waste followed by their commercialization, water treatment and desalination);
- irradiation centers (manufacture of equipment and engineering solutions for irradiation centers, integrated decision-making for the radiation treatment of products, setting up a network of specialized irradiation service centers);
- inspection systems (development of inspection and detection technologies, building manufacturing facilities to produce inspection and detection systems, comprehensive safety systems and NDM control systems).

New fields of nuclear technology



Total amount of radiological technologies market in 2010 – 70 BLN USD.

Average growth rate – 15 %

Forecast for 2020 – 250-300 bln. USD

ENVIRONMENT

$35 BLN
- Treatment of discharge gases
- Domestic solid waste reprocessing
- Decontamination
- RW and SNF
- Drain water treatment

DISINFECTION OF FOOD PRODUCTS AND GERMINATING CAPACITY

$2 BLN
- Grain disinfection
- Food products treatment to extend storage time
- Improving germinating capacity

NUCLEAR MEDICINE

$25 BLN
- Isotopes and RPC
- Imaging and therapy equipment
- Engineering
- Medical services

STERILIZATION

$1.4 BLN
- Sterilization of medical products
- Treatment of RPC
- Blood treatment

SAFETY SYSTEMS AND NDM CONTROL

$4 BLN
Equipment based on methods of:
- tomography
- introscopy
- gamma defectoscopy
- X-ray

INDUSTRIAL IRRADIATION

$1.1 BLN
- Finishing materials
- Heat-shrinkage pipes
- Enhancement of cement strength
- Polymer properties change

3.4.

NUCLEAR AND RADIATION SAFETY COMPLEX

AUTOMATED RADIATION MONITORING SYSTEM (ARMS)

On-site ARMS operate in the host regions of 24 ROSATOM enterprises. The total number of detectors of on-site ARMS within the industry-wide system is 311. In addition, 150 detectors monitor gamma-radiation dose rates across the territory of Russia.

Website http://www.russianatom.ru/ publishes real-time radiation situation information received from 189 ARMS detectors located in 17 enterprise host regions.

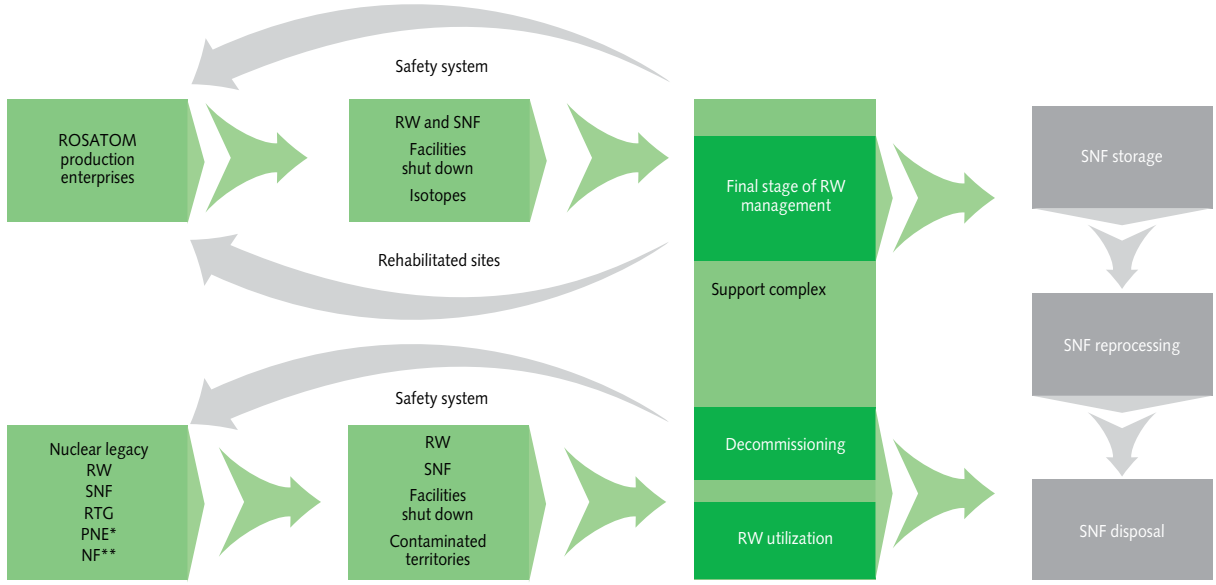
NPPs Chemical combines 16 Number of detectors

YURI MEDVED

Deputy Director General, Director of Directorate for Nuclear and Radiation Safety

"Safe operation of nuclear facilities is ROSATOM's first priority. We possess up-to-date and reliable technologies to prevent any contingencies and are continuously improving methods to ensure nuclear and radiation safety at the nuclear facilities of the Corporation in Russia and abroad."

Nuclear and Radiation Safety Complex
NRS Complex Activity



* PNE – peaceful nuclear explosions
** NF – nuclear facilities

3.4.1. NUCLEAR AND RADIATION SAFETY POLICY

Nuclear and radiation safety (NRS) is a strategic goal of ROSATOM. Comprehensive safety enhancement activities for the personnel, population and environment were carried out in the framework of the ROSATOM Long-Term Activity Program (LTAP) for 2009-2015.

LTAP envisages improving the state guarantee system for the safe use of nuclear power as well as providing a state system of RW and SNF management, and decommissioning of nuclear facilities, including solution of inherited and delayed problems.

The main goal of the federal target program "Nuclear and Radiation Safety for 2008 and until 2015" incorporated in LTAP is to ensure nuclear and radiation safety in Russia in relation to RW and SNF handling, decommissioning of nuclear and radiation hazardous facilities and improving the systems required for managing and supervising nuclear and radiation safety. The FTP changes introduced by the RF Government Directive No. 890 as of 12 November 2010 were necessary for the concentration of funds and management resources to solve NRS key problems.

Provision of day-to-day accident-free operation of nuclear facilities at all stages of their lifecycle is the prime objective in attaining this goal. The current status of NRS is considered satisfactory according to Federal Environmental, Industrial and Nuclear Supervision Service assessments. The number of deviations at Russian nuclear power plants has been reduced by 2.5 times in the last 10 years. The number of deviations followed by reactor scrams from the critical state is one-half average world indicators.

Key Results in the NRSC Complex for 2010

Tasks	Results
1. Provision of appropriate safety level	The achieved safety level has been maintained.
2. Creation of NRS systems	
2.1. Unified State System for RW Management (USS RWM)	The Federal Law "On Radioactive Waste Management" was adopted by the RF State Duma in the first hearing. A program to develop a unified state strategy for RAW was approved in the part related to ROSATOM and its organizations.
2.2. Unified State System for SNF Management (USS SNFM)	A positive review statement has been obtained for the pilot demonstration center for RW reprocessing. Approval has been obtained for the "Methodology of full price" for SNF management with account of its complete life cycle and making it possible to calculate management expenses. A draft document "Target model of SNF management" was developed.
2.3. Corporate decommissioning system	A pilot demonstration center was set up at the Mining and Chemical Combine and Novovoronezh NPP.
3. Decommissioning of nuclear submarines (NS) and surface ships, and remediation of coastal technical bases	Seven NS were disposed of. SNF was moved out of temporary storage facilities at the coastal maintenance bases (Saida and Andreeva Bays, Gremikha naval base)

3.4.2. INTERNATIONAL COOPERATION IN NRS

In 2010, ROSATOM jointly with the Ministry of Natural Resources and Ecology and Federal Environmental, Industrial and Nuclear Supervision Service made thorough preparations for the 5th Meeting for the Contracting Parties of the Convention on Nuclear Safety. The 5th National Report was submitted to the IAEA Secretariat and placed on the IAEA website.

The IAEA safety assessment missions are a viable mechanism for enhancing nuclear safety. In 2010, preparation of organizational measures to implement recommendations of the 2009 IAEA mission on assessing national regulation of nuclear and radiation safety in the Russian Federation was started.

IAEA missions are conducted in Russia on a regular basis to assess the safety of NPP operation (OSART). In January 2010, an OSART mission was at Balakovo NPP, which confirmed that all recommendations issued in 2008 had been implemented.

ROSATOM representatives take an active part in IAEA Technical Committee sessions on development of safety standards for transportation of nuclear materials (TRANSSC), RW safety (WASSC), nuclear safety (NUSSC) and radiation safety (RASSC). Special attention is also paid to development of Basic Safety Standards (BSS DS379). In 2010, ROSATOM experts participated in the development of international documents on physical nuclear security and in seminars and meetings on countermeasures against nuclear terrorism and illegal trafficking of nuclear and radioactive materials in the frames of the IAEA Plan for physical nuclear security for 2010-2013.

In 2010, international cooperation was carried out in the framework of the Program of the Northern Dimension Environmental Partnership. Using funds of the Partnership, the Corporation carried out several nuclear and environmental projects. In 2010, the Assembly of Contributors additionally prepared and approved project proposals for US$70 million.

In the frames of the cooperation with international organizations that operate nuclear power plants, Corporation representatives participated in an exercise at Penly NPP, France, in the seminar "Plans for accident precaution measures in the context of atmospheric anomalies" (France), and in a training course on TRANEM accident response conducted by the Hungarian Atomic Energy Agency as a task set by the European Commission.

At Smolensk NPP, an integrated accident response exercise was attended by more than 30 observers from the IAEA and foreign companies.

3.4.3. NUCLEAR AND RADIATION SAFETY IN 2010

RESULTS OF FEDERAL TARGET PROGRAM (FTP) "NUCLEAR AND RADIATION SAFETY IN 2008 AND UNTIL 2015"

Most significant results of 2010:

- the 1st stage of a combined sewerage system for discharge of cleaned water to the left-bank channel of PA Mayak was constructed;
- the wet storage facility for spent nuclear fuel of VVER-1000 reactors at MCC was reconstructed to result in a larger storage capacity of up to 8,400 tons;
- SRW storage facilities of a total capacity of 10,000 m3 were constructed in RosRAO branches in the cities of Saratov, Yekaterinburg, Sosnovy Bor and Khabarovsk;
- seven nuclear and radiation hazardous facilities were decommissioned and 18 NRHFs were prepared for decommissioning;
- SNF of research reactor VVR-2 at the Russian Research Center Kurchatov Institute was transported to PA Mayak;
- SRW was retrieved from the temporary storage facility of the chemical and metallurgical plant at SCC;
- 10 RTGs removed from navigation facilities of the Northern Sea Route on the Kara Sea shores were dismantled (a total of 780 RTGs were decommissioned, of them 66 RTGs were decommissioned in 2010);
- ROSATOM departmental systems and the Ministry of Industry and Commerce of the Russian Federation were interfaced with Unified State Automated Radiation Monitoring System (ARMS);
- the regional ARMS of Murmansk and Arkhangelsk Regions were integrated;
- four automated radiation monitoring systems (ARMS) and four local crisis centers were established at shipbuilding enterprises (Sevmash, Ship Repair Center Zvezdochka, Shipyard Nerpa and Far East Shipyard Zvezda).

RESULTS OF SUBPROGRAM "INDUSTRIAL-SCALE DISPOSAL OF NUCLEAR SUBMARINES, NUCLEAR-POWERED SURFACE SHIPS, AND FLOATING MAINTENANCE BASES AND REMEDIATION OF COASTAL MAINTENANCE BASES IN 2005-2010"

The following works were carried out in 2010:

- seven NS were disposed of (four of them at the expense of international technical assistance);
- three-compartment unit of damaged NS serial No. 175 was made and prepared for placement in an isolation facility;
- the unit of a discarded NS No. 900 was placed in dry dock SD-10; work was started to prepare the unit for retrieval of the removable reactor core with liquid-metal coolant;
- SNF was removed from reactors of five disposed nuclear submarines (three of them at the expense of international technical assistance);
- 4 floating maintenance bases were disposed of;
- disposal of one surface nuclear-powered ship is in process.

Work was continued to enhance the safety of coastal maintenance bases used for temporary storage of SNF and radwaste from nuclear submarines and surface ships, including the following:

- seven reactor compartments of discarded nuclear submarines prepared for long-term storage were placed on the site of the long-term reactor storage facility in Saida Bay (a total of 40 compartments have been placed for long-term storage);
- for the first time, SNF was shipped off from the temporary storage area in Andreyev Bay (six containers TK-18);
- a batch of non-conditioned SNF was removed from the former coastal maintenance base in Gremikha (a total of 92% of previously accumulated SNF was removed);
- six trainloads of SNF, including one trainload sponsored with international technical assistance were shipped off;
- 217 m^3 of liquid radwaste was reprocessed; 1,190 m^3 of solid radwaste was conditioned;
- construction of a long-term RW storage facility in the Northwest Region was finished;
- a startup complex of LSF for RW of discarded nuclear submarines was finished at Cape Ustrichniy (Maritime Territory);
- 5.3 tons of SNF from nuclear submarines were reprocessed.

In accordance with instruction by the Russian Government No. SI-P7-5900 as of 15 October 2009, ROSATOM produced a draft of new subprogram "Industrial-scale Disposal of Nuclear Submarines, Nuclear-Powered Surface Ships, and Floating Maintenance Bases and Remediation of Radiation Hazardous Facilities in 2011-2015 and until 2020" as part of the Federal Target Program "Industrial-scale Disposal of Armaments and Military Equipment of the Nuclear Complex in 2011-2015 and until 2020."

NUCLEAR AND RADIATION SAFETY OF NUCLEAR POWER FACILITIES

The radiation situation around NPPs in 2010 was at the level of the natural background.

In the recent years, the number of reportable events at NPPs has stabilized at a level of 30-40 events per year. In 2010, 29 operational events at NPPs were rated Level 0 as per the INES scale (no safety significance), 14 deviations were not subject to the rating criteria.

Information of retired nuclear submarines

Nuclear submarines, pcs	Total	Northern region	Pacific region
Retired	198	120	78
Disposed	190	117	73
At the disposal stage	3	2	1 (damaged)
Pending disposal	5	1	4 (including one damaged)

Three deviations rated Level 1 as per the INES were reported at Balakovo-4, Leningrad-4 and Kursk-1. These deviations did not result in changes in the radiation situation or other significant safety issues.

No deviations rated higher than INES Level 1 were reported, confirming the high level of safety of Russian NPPs.

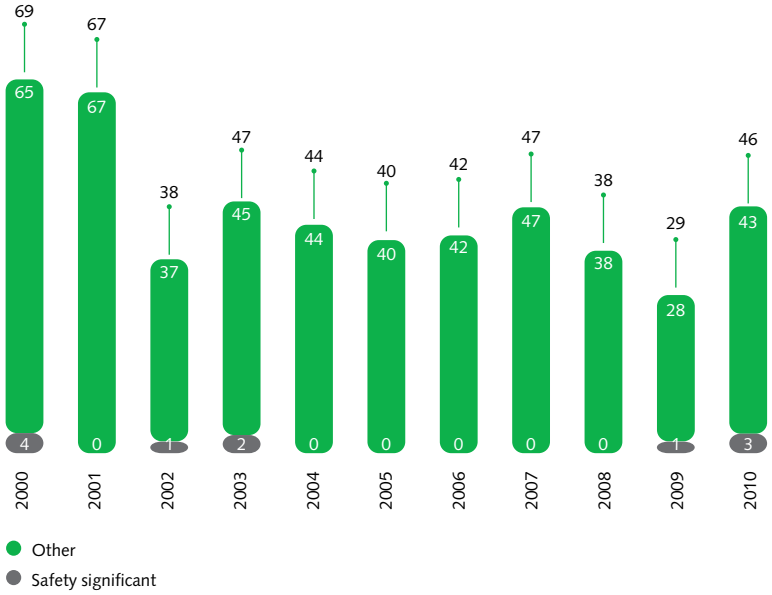
All deviations in NPP operation are subject to a thorough examination involving specialists from design, engineering and research organizations who develop corrective measures. At the present time, a lot of attention is given to low level events or so called "shop-level failures," which can be precursors of larger-scale deviations in a reactor operation as a whole. A high level of NPP safety is ensured by defense-in-depth, which comprises reactor self-protection mechanisms, multiple safety barriers, and multilevel redundancy of safety trains. Both active (requiring personnel action and power supply) and passive (not requiring personnel action and power supply) safety systems are implemented.

For a chain reaction to be quickly terminated, it is necessary to absorb emitted neutrons (as a rule, the absorber is boron carbide). Absorber rods are inserted into the core, neutron flux stops, and the reaction slows down and terminates. To ensure insertion of control rods into the core in any situation, at Russian NPPs they are located above the reactor and are held there by electric magnets solenoids. This guarantees insertion of control rods even in the event of loss of power supply at the power unit: electric magnets will be de-energized and the rods will drop into the core under gravity (without personnel action). This is one of the differences between the Russian design from the U.S. one, which was used in Japan at Fukushima-1, where the rods were inserted from below.

Most Russian NPPs have two coolant circuits that ensure heat transfer to the air without external water supply sources. The two-circuit arrangement is much safer than the one-circuit arrangement used in Japan, because all radioactive media are inside the containment, and the primary circuit does not contain steam, so the risk of fuel exposure and overheating is substantially lower. In addition, VVER reactors have four steam generators and multi-loop heat removal systems.

Complying with the single failure criterion and probable undetectable failure principle, Russian NPPs with VVER reactors have three independent safety trains, each of which can perform

Number of operational events at Russian NPPs



the function of the entire system. Safety systems are designed to eliminate a maximum design basis accident involving a rupture of the maximum diameter primary coolant pipeline. There are multiple water inventory sources: first, water will be supplied from back-up tanks installed at the power unit; if this water is not sufficient, there are three additional reservoirs to supply more water. The power supply to all back-up pumps is provided independently: each pump is powered by a designated diesel generator. All diesel generators are located in separate buildings to prevent a simultaneous failure of all generators. Any of these trains (if other trains fail) ensures sufficient heat removal.

The defense-in-depth comprises not only a means of preventing accidents, but also a means of management of beyond design basis accident consequences, which ensures confinement of radioactive substances inside the containment. These are a hydrogen removal system (with passive recombiners); primary system overpressure protections; heat removal through steam generators; containment heat removal and corium confining device (so-called "core catcher"). The containment heat removal system ensures long-term heat transfer in any accidents, including complete plant blackout. As for the core catcher, it ensures confinement of the corium, preventing it from escaping the containment in any scenario. The core catcher was used for the first time at Tianwan NPP in China built to a Russian design (new project AES-2006 also includes a core catcher). In fact, this is a cold crucible located under the reactor, which is to receive and contain solid and liquid corium. Its functions are to protect the reactor cavity from thermal mechanical impact of the corium, to reduce releases of hydrogen and radionuclides into the containment, and to ensure heat removal from the corium to the cooling water. The core catcher guarantees that molten fuel will remain stable in the heat-resistant pot, so that corium subcriticality will be retained. Besides, the core catcher contains the so-called "sacrificial material" – a special material composed of iron and boric acid oxides, which allows immediate suppression of the reaction.

NUCLEAR AND RADIATION SAFETY AT NUCLEAR FUEL CYCLE ENTERPRISES

Neither accidents nor instances of exceeded safe and permissible nuclear safety limits were registered at ROSATOM NFC facilities in 2010. Nuclear and radiation safety is satisfactory.

In the reporting year, nuclear and radiation safety enhancements included:

- modernization of the gas centrifuge unit at ECP with groundwork for equipment of several more units;
- modernization of emergency alarm system (EAS) designs at nuclear-hazardous sections in MSZ, SSC NIIAR, MCC, NCCP, RRC IPPE, and a design of EAS SCR for the equipment of safe segmenting of SNF from AMB reactors of Beloyarsk NPP for subsequent packing of the segments into storage tubes and their shipment to PA Mayak for reprocessing;

– nuclear safety justification was carried out for:

– the pilot demonstration center for VVER-1000 spent fuel assembly reprocessing at MCC;
– production of MOX-fuel for BN-800 at MCC;
– the storage facility of the guaranteed uranium reserve sufficient for one fuel load of a VVER-1000 reactor at the International Uranium Enrichment Center in Angarsk;
– transportation of nuclear submarines SNF from the sites of SevRAO.

In 2010, 17 operational events were reported at NFC facilities. Eleven deviations took place at PA Mayak, ECP, DalRAO and Zvezdochka Shipyard. All events were rated "below scale" as per the INES.

Six deviations took place in operation of production reactors in 2010. Three of them are rated as plant-level deviations (below scale as per the INES) and three cases were rated Level 0 as per the INES.

Two of the deviations at production reactors were reported at a reactor of PA Mayak: failure of emergency protection (scram) as a result of faults of pumps and an event resulting from a control rod drop.

The ADE-2 production reactor at MCC experienced four short-time unscheduled shutdowns. All shutdowns occurred due to coolant flow reduction in some channels. As per requirements of the "Provision on the Procedure for Investigation and Accounting of Operational Events at Nuclear Fuel Cycle Facilities" (NP-047-03), these abnormal situations were investigated by plant committees, and necessary corrective actions were implemented.

NUCLEAR AND RADIATION SAFETY OF RESEARCH NUCLEAR INSTALLATIONS

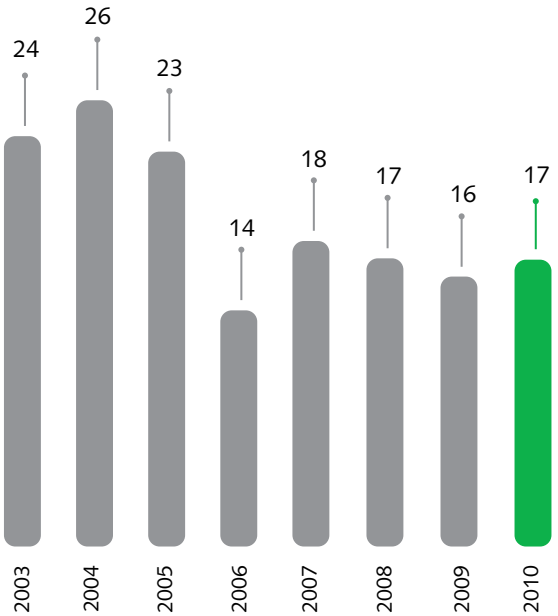
Of 85 research nuclear installations (RNIs) in Russia, 53 are in operation, two are under refurbishment, eight are under care and maintenance, 19 are being decommissioned, and three are being constructed.

The number of RNIs covered by the information system of the industry-wide center for collection and analysis of Russian RNI safety-related information (SSC NIIAR) in 2010 was reduced by one installation, i.e., critical facility STRELA (SSC IPPE, Obninsk); it was taken off the the register of the Federal Environmental, Industrial and Nuclear Supervision Service. The decommissioning process started for PKS bench SPIMash (LMZ-VTUZ), which had been mothballed.

In 2010, 13 operational events were reported by 20 facilities operating RNIs in Russia. Of them, 11 occurred at facilities of ROSATOM, and two at facilities of other agencies. Twelve of 13 deviations were rated Level 0 as per the INES (no safety significance), 1 event (P04 category) Level 1 (deviation from permissible operation mode – anomaly). On March 24, 2010, a VVER-ts reactor was shut down (Karpov NIFHI) as a result of operational deviations of the control and protection system. The event is related to faults of two out of three CPS power escalation rate monitoring channels (ZPT No.1 and ZPT No.3), which determined the rating of the deviation as category P04 as per NP-027-01 and Level 1 as per the INES. A corrective action was taken: an inspection of power supply units BNV2-19 and BNV2-20 of power measurement channels and power escalation rate measurement channels.

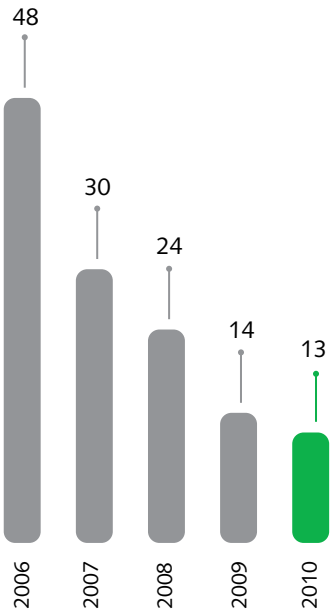
The total number of operational events has decreased over five years, and in the last two years has stood at a level of 3.5 times lower than that of 2006.

Dynamics of operational events at NFC facilities, 2003 – 2010



CONTROL AND MONITORING SYSTEMS
United national automated radiation monitoring system in the Russian Federation
United national system for prevention and elimination of emergencies with radiation consequences, including physical infrastructure of specialized forces for elimination of radiation accidents
National system for control and accounting of nuclear material, radioactive substances and radioactive waste
Automated system for continuous monitoring of nuclear and radiation hazardous facilities (cargoes) and materials, including during shipment by all modes of transport
System for monitoring and accounting of individual exposure doses
Physical protection system of nuclear and radiation hazardous facilities
Facility-level subsoil resources monitoring system

Number of operational events at RNIs in Russia in 2006-2010



3.4.4. PHYSICAL PROTECTION OF FACILITIES

One of the important tasks related to ensuring safe operation of nuclear and radiation hazardous facilities (NRHF) is to enhance and upgrade their physical protection. The Corporation pays great attention to antiterrorist protection of NRHFs, ensuring their reliable protection and development of state-of-the-art physical protection systems.

In accordance with the Plan of Measures for implementing the Basic State Policies to ensure public safety and protect critical and potentially hazardous facilities from natural and man-induced threats and terrorist acts, the program "Enhancement of physical protection of nuclear materials, nuclear installations and nuclear material storage facilities until 2015" is being implemented. The program envisages comprehensive control over achieving the goals set forth to protect industry facilities and effectively distribute and use financial resources.

In 2010, work to update assessments of vulnerability and physical protection effectiveness were carried out for 10 facilities. Introduction of Vega-2 software for assessments of physical protection system efficiency at nuclear facilities continued; 11 inspections were carried out.

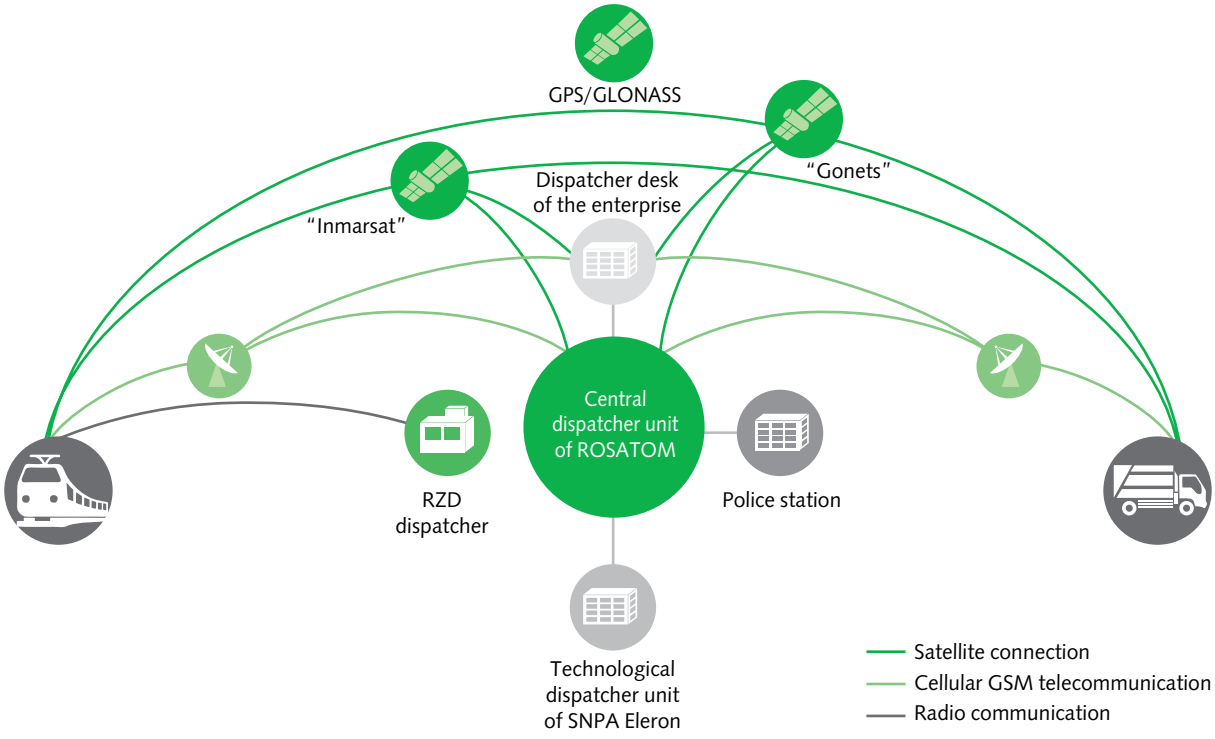
The main link in the physical protection system of nuclear facilities are security departments, which perform the entire set of tasks from routine personnel access control at security checkpoints through response to and termination of unauthorized acts of potential perpetrators.

Integrated engineering complexes are implemented at all nuclear facilities to ensure reliable physical protection.

Much attention is given to developing new up-to-date technical means of physical protection complying with the strictest standards and permitting the modern capabilities and equipment of potential perpetrators to be addressed adequately.

At the same time, the equipment of security departments is being upgraded to ensure optimal service conditions and effective response in case of emergency. The organizational structure of security departments and the professional training system for security staff is being improved. Industry-wide special education centers offer extended basic retraining courses for security staff. A comprehensive information system for monitoring and enhancing the physical protection system is gradually being implemented at nuclear industry facilities.

Physical protection of NRHFs of ROSATOM is carried out in cooperation with the Ministry of Internal Affairs and Federal Security Service of the Russian Federation. Nuclear industry facilities periodically organize joint exercises and drills, including those related to emergency response, where operating headquarters, security services, paramilitary and military security divisions master coordinated actions. The service conditions of security staff comply with established requirements.



3.4.5. SAFETY OF RADIOACTIVE MATERIALS TRANSPORTATION

ROSATOM prepared a draft Russian Government Decree on introducing changes in the Decree of the Russian Government No. 456 as of 19 June 2007 "On approval of the rules of physical protection of nuclear materials, nuclear installations and storage facilities of nuclear materials."

The "Program for the Development of an Automated Safe Transportation System for 2011-2015" was adopted to enhance efficiency, control and safety of materials transport.

The safety of radioactive materials (RM) transportation is ensured by step-by-step introduction of the automated safe transportation system (ASTS).

In this context, ASTS introduction provides for equipping RM conveyances with security, communication and navigation means, and for extending the dispatcher stations network for monitoring status and location of the conveyance means en route.

In accordance with the ASTS development program, a new dispatcher station was commissioned, seven special railway RM transportation platforms were equipped with ASTS, and two pilot monitoring systems were developed and manufactured for RM transportation by trucks (for this purpose, two dispatcher stations were set up and 15 trucks were equipped with ASTS).

To enhance RW and SNF transportation safety by sea, a project to equip the container ships Serebryanka and Rossita with ASTS was developed and agreed on with the Russian Marine Register of Shipping.

3.4.6. EMERGENCY RESPONSE PREPAREDNESS

FIRE SAFETY

In the reporting year, the following fire safety activities were implemented:

- improvement of the industry regulatory and legal basis of fire safety;
- increasing the fire stability of sites and enterprises in compliance with regulations in effect;
- technical upgrading of outdated automatic fire detection systems, fire-extinguishing equipment and fire alarms;
- introduction of modern fire protection technologies into fire protection systems of higher risk facilities;
- training of personnel to act in case of fire;
- fire safety informational support at nuclear industry facilities with account taken of new procedural, institutional and economic relations.

Taking into account the difficult fire hazardous situation of August 2010, the President of Russia by his Directive imposed a state of emergency in seven subjects of the Russian Federation hosting ROSATOM organizations. The most complicated situation was in the territory of RFNC VNIIEF (Sarov, Nizhniy Novgorod).

In order to protect the population and sites, the Corporation and the EMERCOM took measures for extinguishing wildfires (in parallel, other enterprises were inspected for preparedness of the force and capabilities to respond in case of fire).

Jointly with the Federal Forestry Agency, Ministry of Natural Resources and Environment and EMERCOM, ROSATOM prepared a coordinated decision on felling forest stands along the perimeter of critical nuclear sites.

In the reporting year, there were five fires at nuclear enterprises (as many as in 2009) However, they did not inflict any large material damage, and there were no casualties or injured personnel.

THE FUNCTIONAL SUBSYSTEM FOR PREVENTION AND ELIMINATION OF EMERGENCIES IN ROSATOM ORGANIZATIONS

A subsystem for prevention and elimination of emergencies (SPEE) integrates coordination planning, management, funds and material reserves, communication and notification systems and information support.

The Department of Nuclear and Radiation Safety and organizations that issue licenses and permits are the SPEE controlling body authorized to solve tasks of protection of the personnel, population and territories of the subordinate organizations against natural and man-induced emergencies.

The SPEE coordinating authority at the industry level is the Commission for Prevention and Elimination of Emergency Situations and Fire Safety of ROSATOM; at the facility level it is the commissions for prevention and elimination of emergencies and fire safety at facilities of the organizations and their branches.

On a daily basis, SPEE is managed by the ROSATOM Situation and Crisis Center (SCC) (federal level), crisis centers or duty dispatcher services of organizations (site level), including the Crisis Center of Rosenergoatom, industry-wide dispatcher service the Transport Control Center of Atomspetstrans, duty dispatcher units of emergency technical centers and organizations subordinate to ROSATOM.

Information is communicated to the information and accident management centers within the unified state system for prevention and elimination of emergencies: Federal Medical and Biological Agency, Federal Service of Hydrometeorology and Environment Monitoring, and Nuclear Safety Institute of the Russian Academy of Sciences.

Communication is permanently maintained with national competent authorities of foreign countries and the IAEA Incident Emergency Center.

The SPEE forces include:

- warning units performing monitoring of the environment and situation at potentially hazardous facilities and sites:

  – ROSATOM SCC (monitoring and fast response service),
  – on-site automated systems for radiation monitoring,
  – environmental protection laboratories in organizations,
  – radiation safety services and health physics services,
  – central laboratories of the plants and enterprises;

- emergency response forces consisting of permanently available federal-level units, fulltime and volunteer fast response teams of the enterprises and plants.

The federal-level units of permanent availability include: the Emergency Technical Center of ROSATOM (St. Petersburg) and its branches: Novovoronezh, Tomsk, Moscow engineering and technical center of robotics technology, EPRON underwater emergency and rescue center in Selyatino, Moscow Region, as well as fast response teams based in Sarov (Nizhniy Novgorod Region) and Snezhinsk (Chelyabinsk Region) and a separate paramilitary mine-rescue unit in Krasnokamensk (Chita Region).

As of 31 December 2010, 12 professional and 41 volunteer fast response teams (FRT) were formed and permanently available, having been licensed for emergency and rescue activities. The central certification commission of ROSATOM licensed 29 FRTs in 2010, 9 being professional and 20 volunteer FRTs (3 of them underwent periodical certification to renew their licenses and 17 FRTs were licensed for the first time).

EXERCISES AND PRACTICAL ACTIVITIES TO ENHANCE ACCIDENT RESPONSE READINESS

The reporting year saw 17 exercises and more than 300 drills carried out as part of training programs for regional and specialized FRTs.

In 2010, NPP fast response teams and means were inspected in the course of comprehensive emergency exercises at Bilibino NPP and Smolensk NPP involving the NPP support group, and also during Rosenergoatom's inspections of Kursk and Rostov NPPs to test their preparedness to localize and eliminate natural and man-induced emergencies.

INDUSTRY-WIDE AUTOMATED RADIATION MONITORING SYSTEM

Radiation monitoring data are transmitted to ROSATOM SCC from local ARMS situated in 24 host areas of the Corporation. The total number of local monitoring ARMS points within the corporate system is 311.

The website http://www.russianatom.ru/ displays ARMS data in real time to inform the population of Russia about the radiological situation at 18 enterprises operating radiation hazardous facilities. In addition, ROSATOM SCC monitors gamma radiation dose rates from 150 detectors located across Russia.

The seismic and geodynamic situation at NPPs is monitored by the relevant equipment. Seismic monitoring equipment is installed at Kalinin, Novovoronezh and Balakovo NPPs.

If required, ROSATOM organizations can carry out special monitoring (conditions of hydraulic facilities, potential radionuclides migration on sites where RW is disposed and accumulated, etc.).

CONTINUOUS AUTOMATED MONITORING SYSTEM FOR NUCLEAR AND RADIATION HAZARDOUS FACILITIES AND FREIGHT

In 2010, work was done to improve the automated system for continuous monitoring of nuclear and radiation hazardous facilities (NRHF) and freight, including during shipments by all modes of transport. The monitoring system was needed for the timely detection and prevention of any natural, anthropogenic and man-induced hazards (including terrorist attacks) related to NRHF and freight.

INSPECTIONS OF RADIATION-HAZARDOUS FACILITIES AND DEVELOPMENT OF THE AUTOMATED INFORMATION SYSTEM

In 2010, under a Cooperation Agreement between ROSATOM and the Federal Agency of Mineral Resources, the Center for Monitoring of Mineral Resources (MMR) carried out a survey of the Corporation's organizations and enterprises. The survey was carried out at RosRAO (Leningrad branch), LPA Almaz, PIMCU, MSZ, DalRAO, Kirovo-Chepetsk branch of RosRAO, KCCC, UECC, SCC, NPA RI, Novovoronezh NPP and Beloyarsk NPP.

The inspection was also performed at facilities, such as the radium production waste storage facility in Vodny (Republic of Komi), tailings dumps of the uranium mines at the Ust-Angarsk Uranium Deposit (Krasnoyarsk Territory), six civil nuclear test sites in Yamal-Nenets and Khanty-Mansiysk areas, etc.

The NRHF monitoring areas included surveys of surface atmosphere, surface and ground water systems.

The results of analyses obtained by the enterprises and the independent surveys of the MMR Center allow the current radiological situation to be estimated as satisfactory.

In 2010, work continued to develop the industry-wide analytical information system (AIS), which would make it possible to systematize data and optimize the analysis of information obtained. It can also support geo-information technologies and can be integrated with applied software packages for computer modeling. The AIS first stage was introduced in the reporting year to connect 31 users at 11 enterprises (PA Mayak, MSZ, SSC - IPPE, Novovoronezh NPP, PIMCU, DalRAO Branch No. 1, Beloyarsk NPP, UECC, VNIIKhT, NPA RI and SCC).

Subsurface monitoring helped to substantiate work on NRHF remediation at PA Mayak, SCC, and tailings dumps of the uranium mines in Ust-Angarsk and the Kirovo-Chepetsk branch of RosRAO.

3.4.7. NRS SYSTEMS

RW MANAGEMENT

RW GENERATION AND TREATMENT

As of 31 December 2010, the amount of accumulated SRW was 69.0 mln t and that of LRW 426.5 mln m³.

Accumulated SRW as of 31.12.2010, mln t

Total	**69.0**
Low-level radioactive waste (LRW)	67.8
Intermediate-level radioactive waste (IRW)	1.1
High-level radioactive waste (HRW)	0.088

Accumulated LRW as of 31.12.2010, mln m³

Total	**426.5**
Low-level radioactive waste (LRW)	424.5
Intermediate-level radioactive waste (IRW)	1.99
High-level radioactive waste (HRW)	0.082

RW in storage as of 31.12.2010

	SRW, mln t	LRW, mln m³
Generated	1.36	3.04
Placed in storage	1.36 (100 %)	2.73 (89.8 %)

DEVELOPMENT OF A NATIONAL SYSTEM FOR MANAGEMENT OF THE RADIOACTIVE WASTE (NS RW)

In January 2010, the State Duma of the Russian Federation approved a bill "On the Management of Radioactive Waste" in the first reading. Following the approval of the bill, the Corporation adopted a Program to establish a national unified system for RW management specifying the obligations of ROSATOM and its organizations. The objective of the Program is to establish and introduce a legal, financial and management framework for a national RW management system and to prepare priority infrastructure facilities by 2015.

The results of NS RW development for 2010:

- an Investment Commission for NS RW was set up within the frame of the ROSATOM Investment Committee;
- RosRAO acquired SevRAO and DalRAO (RosRAO, a specialized company dealing with RW management in the country, was set up in 2008 at the Leningrad Specialized Enterprise as a management company for all specialized enterprises). The main area of its activity is receipt and reprocessing of RW, its transportation, site remediation, radiation surveys and monitoring;
- regional surveys of potential sites for building RW repositories were conducted;
- approval of local strategies for a number of key enterprises (SSC IPPE, MCC, PA Mayak, Leningrad and Novovoronezh NPPs), their investment programs in RW management were adjusted to comply with the principles of NS RW;
- ROSATOM developed a methodology to determine tariffs for services of the NS RW Operator and calculated basic tariffs for RW disposal depending on RW specification.

SNF MANAGEMENT AND DECOMMISSIONING OF NUCLEAR AND RADIATION HAZARDOUS FACILITIES

NATIONAL SNF MANAGEMENT SYSTEM

Basic documents regulating SNF management are:

- federal laws in the field of nuclear power and protection of the environment; Federal Law No. 317-FZ "On the State Atomic Energy Corporation ROSATOM"; federal codes and standards; Joint Convention (IAEA);
- an industry-wide concept of SNF management determining the development of storage facilities and SNF radiochemical reprocessing, and optimization of the reprocessing rates and the use of recycled nuclear materials.

Results of 2010:

- a "Target Model of the SNF Management System" was developed to determine basic facilities and resources for the SNF management system and its stages of construction;
- a document "Methodology for Determining Prices for SNF Management Services" was approved;
- a Draft program "SNF Infrastructure and Management in 2011-2015 and until 2030" was developed.

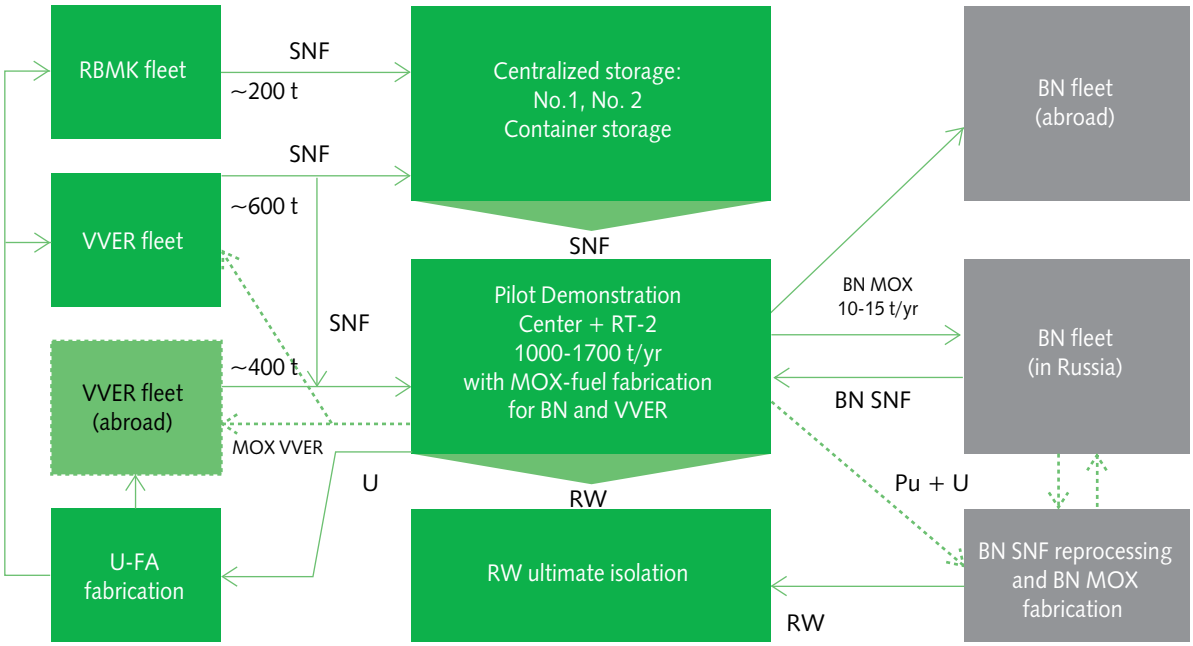
Further work on adopting the federal law on the SNF management tends to be complicated as the division of responsibilities between ROSATOM and the Russian Government is not clear yet. To successfully solve the SNF problem and to get rid of the "nuclear legacy," funding should be significantly higher than the RUB145.31 billion planned for the implementation of the FTP "Nuclear and Radiation Safety in 2008 and until 2015."

DECOMMISSIONING OF NRSF

According to the industry-wide concept for decommissioning of nuclear facilities, radiation sources and storage facilities adopted in 2007, there are three main options of decommissioning: elimination/dismantling, ultimate isolation facility and NRSF conversion.

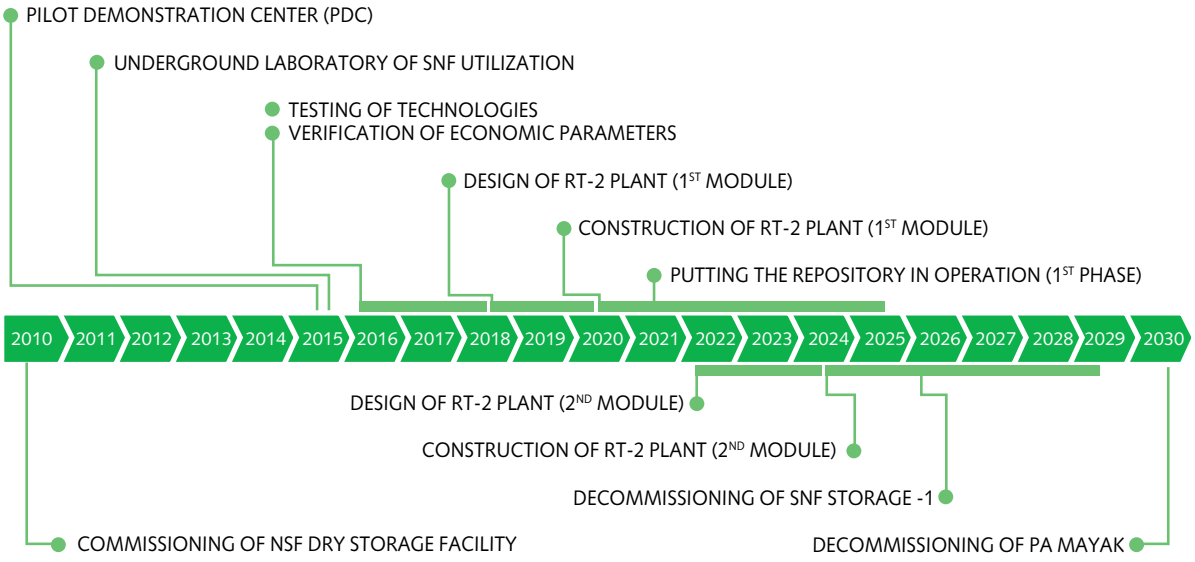
Of 1,000 facilities in the RNSF database, 60 facilities are at the preparatory stage or being decommissioned. In the framework of the FTP NRS until 2015, it is planned to decommission 44 facilities, by 2020 54 more facilities, and by 2025 another 57 facilities.

Model of SNF management system for 2025-2030



DEVELOPMENT OF INFRASTRUCTURE FOR SNF MANAGEMENT IN 2010

Plans for development of infrastructure for SNF management until 2030



Development of the infrastructure of SNF management: results for 2010

FSUE MCC	Installation work has been done under the FTP "Construction of SNF dry storage facility for RBMK-1000 and VVER-1000 (SNF SF-2)" and pilot tests began for the 1st building of SNF SF-2 (Bld. 3a). In 2011, it is planned to obtain an operating license for SNF SF-2 and ship the first 8 TUK-109 loaded with RBMK-1000 fuel rod bundles from Leningrad NPP to MCC. A state expert review was conducted to evaluate the PDC project under FTP "Development of a pilot demonstration center (PDC) for SNF reprocessing using innovative technologies"; an end-to-end test of the process under basic technology was conducted with the use of actual NSF in "hot cells" of NPA RI; and a set of works was carried out to develop a project draft and basic designs of PDC and its equipment; these were followed by a positive statement on the PDC project issued by the State expert review. For 2011 it is planned to start developing working documentation for PDC construction and to begin construction and installation work.
FSUE PA Mayak	Under FTP "The safe management of SNF of RBMK-1000 reactors. Substantiation of reprocessing," input data were prepared for assessing the possibility of reprocessing of damaged RBMK SNF at PA Mayak. Also planned for 2011 is a "pilot" shipment of 8 RBMK fuel assemblies from Leningrad NPP to PA Mayak with subsequent reprocessing.

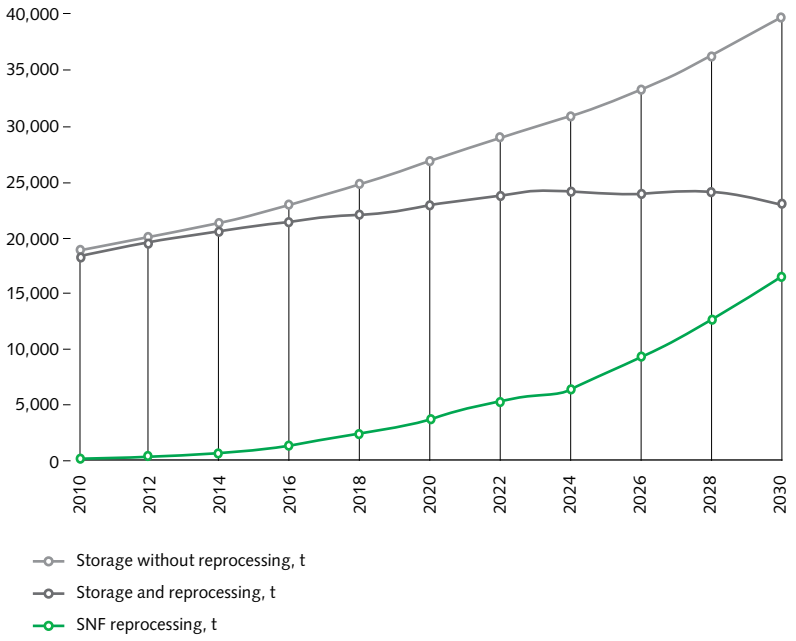
By the end of 2010, more than 230,000 tons of SNF had been accumulated worldwide, including: in the USA – more than 65,000 tons, and in Russia – more than 19,000 tons.

Amount of SNF in at NPP on-site storages, SNF hold-up pools and storage facilities

Amount of SNF in NPP on-site storages SNF holding pools and storage facilities, thnd. t	01.01. 2010	31.12. 2010
Total	**12.73**	**13.19***
including "nuclear legacy"	12.72	13.03

* As of 31.12.2010, the centralized SNF storage facility at MCC held 6,050 t of SNF of VVER-1000.

Dynamics of SNF VVER-1000+RBMK-1000 accumulation



Disposal of accumulated SNF: results for 2010

FSUE SSC IPPE	Preparatory work was completed for SNF shipment to PA Mayak for reprocessing; a set of regulatory and licensing documentation was produced; in 2011 it is planned to ship the first batch.
SSC NIIAR	The SNF shipment for reprocessing was as planned; the TUK-32/1,2 transportation cask was certified for transporting two-tier SFAs of MIR and SM reactors; an engineering design and part of the working documentation were prepared for the equipment to be used in moving SNF of the BOR-60 reactor to the dry storage facility. The following is planned to be accomplished in 2011: a "pilot" two-tier shipment of MIR and SM SNF in TUK-32/1,2 containers (at least 400 fuel bundles a year); completion of working design documentation for the equipment to be used in moving BOR-60 SNF to dry storage and start of its manufacturing.
Beloyarsk NPP	Design of the section for SNF fragmenting and packing in storage tubes was completed; technology for fragmenting and transportation of AMB SNF for reprocessing was developed. For 2011 it is planned to develop the working documentation for the creation of the section for fragmenting and packing in containers at PA Mayak and to manufacture pilot sets of equipment.
Bilibino NPP	Two sub-projects were started in 2010: "Development of a process chain and on-site transportation and handling flowchart for SFA retrieval from SNF dry pools, their packaging, and loading into the long-term storage casks or TUK (reloading container) for SNF of EGP-6 reactors of Bilibino NPP" and "Selection of an option for a pilot facility of RW and SNF subsurface isolation overlaid by permafrost near Bilibino NPP site."

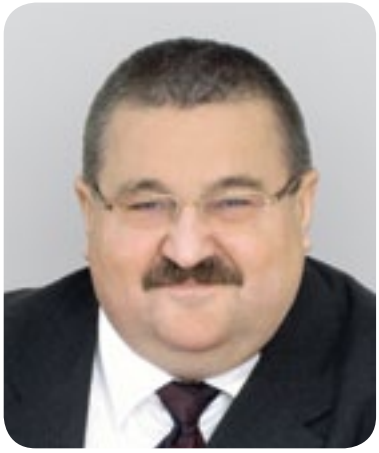
DECOMMISSIONING OF NUCLEAR AND RADIATION HAZARDOUS FACILITIES

NRHS decommissioning: results for 2010

FSUE MCC	On April 15, 2010, the last ADE-2 production reactor was shut down for subsequent decommissioning.
ChMP JSC	In frames of the program for decommissioning of the nuclear installation (Shop 10) at ChMP, the nuclear installation was completely decommissioned to the "greenfield" state. The amount of SRW resulting from this decommissioning process was 1,680 m^3 (794 t), the amount of building refuse (not related to SRW) was 11,500 m^3. An application was submitted to Rostechnadzor to withdraw Shop 10 from regulatory control and supervision.
SCC JSC	At the SCC site, a pilot demonstration center as a prototype of a service (engineering) company was set up in frames of the decommissioning program of the uranium-graphite reactor to master the technical process, management schemes, consultancy and transfer of experience in decommissioning of uranium-graphite production reactors.
Novovoronezh NPP	A pilot demonstration center was set up at Novovoronezh NPP aimed at decommissioning of shut down VVER-440 reactors. The pilot project for decommissioning Novovoronezh-1,2 passed state review and public hearings.
VNIINM JSC	The "Reagents" process building was decommissioned and dismantled on the VNIINM site. Preparatory work started on decommissioning research building "B" and "U" facility (test bench base for the USSR radiochemical industry).

3.5.

THE NUCLEAR ICEBREAKER COMPLEX



VYACHESLAV RUKSHA

Director General of FSUE Atomflot

"The nuclear icebreaker fleet supports Russia's presence in the Arctic and enhances the transport, economic and ecological effectiveness of the Northern Sea Route by transporting transit loads between European and Asian ports. The main short-term objective of the fleet is to extend the life-times of existing nuclear reactors. In addition, ROSATOM is ready to start building new nuclear icebreakers of the LK60 design, which will allow Russia to strengthen its positions in the Arctic in the coming decades."

3.5.1. NUCLEAR ICEBREAKER FLEET

Russia possesses the most powerful icebreaker fleet in the world and has unique experience in designing, building and operating icebreakers. The goal of the nuclear icebreaker complex (NIBC) is to maintain stable navigation along the Northern Sea Route and provide access to the remote areas of the Far North and Arctic shelf.

The NIBC consists of four nuclear icebreakers with two-reactor nuclear power installations with 75,000 horsepower capacity – Rossija, Sovyetskiy Soyuz, Yamal, and 50 Let Pobedy; two icebreakers with single-reactor power installations of 50,000 h.p. – Taimyr and Vaigach; and a nuclear-propelled container ship Sevmorput with a reactor installation of 40,000 h.p. The service fleet includes two floating maintenance bases – Imandra and Lotta, motor ship Serebryanka used to transport liquid radioactive waste, and radiation monitoring vessel Rosta-1. Three nuclear icebreakers – Lenin, Arktika, and Sibir – and two floating maintenance bases – Lepse and Volodarskiy – are moored.

The managing company for the complex is Atomflot (federal state unitary enterprise).

Main activities of Atomflot are as follows:

- steering ships along the Northern Sea Route and to the freezing ports of Russia;
- providing support to research missions studying hydrometeorological sea conditions and exploring mineral resources in the Arctic shelf next to the northern coast of Russia;
- supporting ice rescue operations;
- arranging holiday cruises to the North Pole, islands and archipelagos in the Central Arctic;
- providing general and special maintenance services for the N-Fleet;
- providing safe management of nuclear materials and radioactive waste.

The main objective of the enterprise is to maintain at least three icebreakers in operating status and to ensure safe handling of FW and SNF.

FSUE "Atomflot" adopted an environmental policy aimed at the ecologically safe use of atomic energy by a civil nuclear fleet and implementing its activity for peaceful and defense purposes while ensuring the preservation of the unique ecosystem of the Arctic region, maintaining its integrity and self-regulation and providing environmental safety in the Northwest Region of Russia.

3.5.2. ACTIVITY RESULTS OF 2010

STEERING OF SHIPS

During the navigation season of 2010, steering of ships along the Northern Sea Route was carried out by three icebreakers: Rossiya, Yamal, 50 Let Pobedy and two shallow-draught icebreakers: Taimyr and Vaigach. The icebreakers were at sea for 782 days (101% compared with 2009).

The most outstanding Arctic event in 2010 was the steering of the large-capacity tanker Baltika (SovkomFlot company) along the Northern Sea Route accompanied by the icebreakers Rossija, Yamal and 50 Let Pobedy. It was the first time in Arctic history that a ship of more than 100,000-ton displacement loaded with 70,000 t of gas condensate could cover the whole national coastline carrying freight from Murmansk to China. It took her 23 days to get from Murmask to the port of Ningbo. This result should be considered a record, as it would take more than 50 days to get to China using the southern route (through the Suez Channel).

Another significant event was the evacuation of drifting polar station "North Pole-37" by the icebreaker Rossija. The research station was set up on the ice on September 7, 2009, with the mission of complex research of the ocean, atmosphere and ice. In March 2010, the ice floe with the station on it turned out to be in a compression band and broke into two parts. After analyzing the situation, it was decided to evacuate the station. The icebreaker Rossija fulfilled this mission coming from Murmansk. On June 6, 2010, the polar explorers and the station equipment were taken from the ice floe.

IMPLEMENTING THE INVESTMENT PROGRAM

The reporting year showed that investment projects implemented were worth RUB276.1 million.

The amount of RUB133 million was drawn to perform work within the frame of the FTP "Nuclear and Radiation Safety in 2008 and until 2015" ("State Capital Investments" section). Upgrades were made at the SNF refueling complex (Murmansk coastal fuel loading facility) and SRW management process line.

Renovation of production assets funded by international assistance program was worth RUB26.1 million.

These funds were invested in the construction, modernization and renovation of the checkpoint, in the security system of the fuel storage facility, the floating maintenance base (FMB) Imandra, the motor ship Serebryanka, and the Central Control Board providing communication between the FMB Imandra and Atomflot. ROSATOM invested RUB25 million of its own funds for the renovation of production assets.

In 2010, RUB70 million were spent to buy training equipment for personnel training.

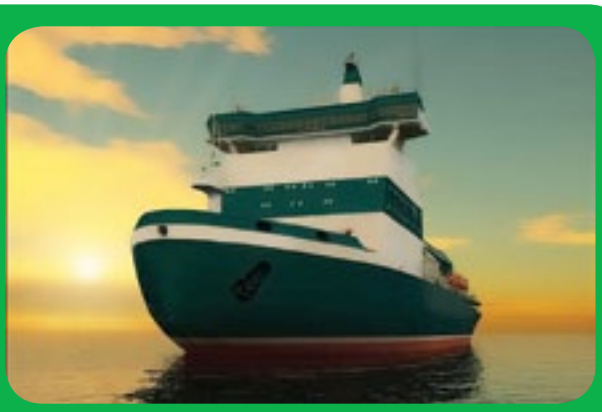
Atomflot spent RUB22 million of its own funds for R&D programs. In 2009, it started to justify extending the radiation resource of the icebreakers' reactor vessels with the aim of extending the RPV lifetime of the operating icebreakers to 200,000 hours. The completion of this work is scheduled for 2014.

PERFORMANCE AND FINANCIAL RESULTS

Main performance indicators of Atomflot

Indicator*	2009	2010
Profit, mln RUB	985.5	1,248.0
Federal funding allocated for keeping facilities associated with the use of nuclear power, mln RUB	1,800.0	1,500.0
Prime cost, mln RUB	1,878.4	1,489.4
Gross profit, mln RUB	–885.8	–241.4
Net profit, mln RUB	–926.0	–551.8
Productivity, mln RUB/person	1.26	1.37
Reduction of fixed capital expenditures, %	–	10.26
Transportation of accumulated RW, % of the accumulated volume	–	10.4
Implementation of safety criteria	no deviations	no deviations

* The indicators' growth is due mainly to an increase in profit (by 193 mln RUB) for delivering commercial services.



Building new icebreakers

Following the FTP "Development of the transport system in Russia for 2010-2015," ROSATOM is currently completing the design of a new-generation nuclear icebreaker. The funding for building a leading universal icebreaker is RUB17 billion (through 2015).

3.5.3. GOALS 2011

- participation in projects for remediation of the coastal maintenance bases located in Andreeva Bay and Gremikha Village, and in the transportation of RW in the northwest area;
- laying up the nuclear icebreaker Arktika in mooring for future disposal;
- extending the lifetime of the icebreakers Vaigach and Taimyr;
- starting the reconstruction of the biological cleanup station;
- renovation of the infrastructure for RW management within the frame of FTP "Nuclear and Radiation Safety in 2008 and until 2015";
- putting in operation the new service ship Rossita;
- taking required measures for maintenance of the ships and coastal infrastructure;
- implementing measures to introduce up-to-date security means for nuclear and radiation-hazardous facilities.

4 SUSTAINABLE DEVELOPMENT ACTIVITIES

The total amount of the expenditures on social programs for the employees is

10.07 bln rubles

In comparison to the previous year the discharge of the contaminated water by the Corporation enterprises decreased to

3.9 mln m³ (5,1 %)

In Russian cities work

10 nuclear industry information centers

8 of them were opened in 2010

The amount of the funds allocated in charitable purposes attained

1.08 bln rubles

4.1.

SUSTAINABLE DEVELOPMENT MANAGEMENT

4.1.1. SUSTAINABLE DEVELOPMENT IN THE GLOBAL NUCLEAR SECTOR

The need for the commitment of nuclear sector companies to the concept of sustainable development was publicly mentioned for the first time in 1997 in the IAEA report "Sustainable Development and Nuclear Energy." Quote: "The global challenge is the development of strategies to assist in the establishment of a sustainable energy future, less dependent on the fossil fuels. Nuclear energy could make an important contribution to sustainable development."

The report notes a number of specific issues where the nuclear power's contribution to sustainable development is of major importance:

- limited impact on the environment (reduction of greenhouse gas emissions, low use of natural energy resources);
- low waste quantity (compared to energy produced);
- wide range of applications (sea/marine and space transport, energy supply to remote territories, medicine, etc.).

"Sustainable development is development that meets current needs, without compromising the ability of future generations to meet their own needs."

The UNO World Commission on Environment and Development

In addition, the report mentions matters of highest public concern:

- radiation's effects on human health;
- ensuring the NRS and reliability of accident prevention systems;
- nonproliferation of nuclear weapons.

Since the beginning of "the nuclear renaissance," the subject of sustainable development and some of its aspects (lifecycle management of facilities, ensuring public acceptance of nuclear power development, development of a radioactive waste management infrastructure, etc.) came to be actively discussed by the international community. A number of companies (URENCO, AREVA, BHP Billiton) have begun to publish reports on sustainable development, therefore increasing their openness and transparency.

Events at the Fukushima-1 NPP in the spring of 2011 brought into focus a number of sustainable development issues: nuclear and radiation safety, including ensuring it at the stage of the NPP design; the transparency of the nuclear sector companies' activity; the effect on the environment, etc.

4.1.2. ROSATOM'S APPROACH TO SUSTAINABLE DEVELOPMENT

Nuclear technologies determine the level of the civilized development of a state and society in many ways. In this sense, the development of nuclear power technologies is a prerequisite for the sustainable development of Russia.

ROSATOM's approach to sustainable development is based on the traditional concept of sustainable development used by the international community, as well as on a number of goals specific to the activity of nuclear sector companies.

(The sustainable development agenda is presented in the form of a list of priority topics related to sustainable development in the section "Development Strategy.")

The safe and reliable operation of nuclear and radiation-hazardous facilities is an absolute priority of ROSATOM's activity. Safe operation of facilities is supported by the results of systematic reviews conducted by Russian supervisory authorities, international organizations, as well as the lack of serious deviations as per the international INES scale.

The Corporation pays great attention to the creation and development of technologies and infrastructure for radioactive waste and spent nuclear fuel management. There is a well-established process for adoption and approval of federal laws on the management of radioactive waste and spent nuclear fuel. Corporation organizations and enterprises participate widely in the construction and improvement of spent nuclear fuel storage and reprocessing facilities. The implementation of the project "New Technological Platform: Closed Nuclear Fuel Cycle and Fast Reactors" will allow the return of almost all of the recycled spent nuclear fuel into the nuclear fuel cycle in the future.

The management of ROSATOM recognizes the presence of ecological problems in the industry, especially so-called "nuclear legacy" problems of the past economic and defense activity of the industry, and follows the principle of solving them as soon as possible, without burdening future generations with the above-mentioned problems. The enterprises of the Corporation also actively participate in elimination of the "nuclear legacy" by introduction of new technologies for radioactive waste and spent fuel management.

As a global player on nuclear energy markets, ROSATOM actively cooperates with the IAEA and other international organizations and participates in initiatives aimed at strengthening the nonproliferation regime.

The Corporation has entered the 21st century as one of the global technological leaders in the nuclear industry. The strategic objectives of the Corporation are aimed at the maintenance and strengthening of these relations through development of innovative technologies and expanding its presence in key nuclear and related markets. The technological development of the Corporation contributes to the improvement and modernization of the Russian economy and its transition to the innovative model of development.

The main innovation project of ROSATOM is the development and commercial introduction of a new technological platform (fast neutron reactors and transition to the closed nuclear fuel cycle) that will significantly improve environmental safety and the economic efficiency of nuclear power. Another promising area is the creation of a fusion reactor, which in a few decades will provide humanity with an almost inexhaustible energy source for development.

ROSATOM is implementing a full range of services related to design, siting, construction, operation and decommissioning of nuclear power plants. The quality of engineering services is clearly testified to by the large number of projects for NPP construction being realized in Russia and abroad. Currently, the VVER-TOI project is under development, which will allow a reduction of the construction time and costs of new power units.

When designing and building a nuclear power plant, comprehensive work is carried out in the domains of safety assurance, study of potentially hazardous natural and man-induced factors and probabilistic safety analyses. In accordance with legislation, it is mandatory to carry out an environmental impact assessment of nuclear power facilities before the construction phase.

The Corporation is expanding the scope of application of nuclear technologies. Emission control technologies are actively used in medicine for development of high-precision diagnostic equipment and preparations, as well as for the treatment of various diseases. Radiation technologies significantly increase agriculture efficiency and food quality, which makes an important contribution to global efforts to ensure a decent standard of living on the planet.

A strategic goal of the Corporation is to improve its performance. To achieve this goal, more efficient use of available resources is of primary importance; thus, the nuclear industry is implementing a number of projects, including: financial management and IT efficiency improvement projects, a risk management project, the "ROSATOM Production System," and an energy conservation and energy efficiency improvement program.

ROSATOM is making a significant contribution to the creation and equitable distribution of economic value in the Russian Federation, supporting domestic producers of goods and services, creating new jobs in the nuclear sector and encouraging creation of new jobs in related industries.

ROSATOM's activities embrace millions of nuclear industry workers and their families. The Corporation is a responsible employer, guaranteeing decent material incentives and benefits to its employees. In addition, a wide range of social and goodwill projects are being realized for personnel support and development and the socioeconomic development of host regions.

An occupational safety management system has been implemented at the enterprises of ROSATOM. Activities were carried out, as specified by collective agreements, to improve working conditions and occupational safety, and reduce occupational injuries and diseases.

The Corporation is introducing the AWSIRA system (Automated Workstation for the Individual Risk Assessment), which allows employees to know their individual radiological risk. A commission on the occupational health and industrial safety is active and development of an industrial safety management system of the nuclear sector is being organized.

The rights of the Corporation's employees are ensured by mechanisms of the social partnership realized through close collaboration with the Russian Trade Union of Nuclear Power and Industry Workers and the Russian Union of Employers of Nuclear Industry, Power and Science.

The Corporation pays a great deal of attention to minimization of its impact and effect on the environment and the protection of natural ecosystems. A set of activities is being carried out to introduce technologies that allow a gradual reduction of releases and discharges of harmful substances and waste accumulation. Nuclear power plants do not release any greenhouse gases and in general ROSATOM is an active supporter of and adherer to global greenhouse gas emission reduction and the transition to an economy based on renewable energy sources.

Securing public support for nuclear power development is a strategic objective of the Corporation. ROSATOM management seeks to achieve a public consensus, both in Russia and in the world, on the functioning and development of nuclear power and industry facilities. For this purpose, it uses education, information and communication projects to build up understanding by the various stakeholders of the essence and goals of the reforms going on in the nuclear sector.

Energy efficiency management

Energy efficiency is one of priority goals of Russian economy development. The Federal Law No. 261 "On Energy Conservation and Energy Efficiency Improvement and Amendments to Some Legislative Acts of the Russian Federation" was signed on November 23, 2009; according to the law, the decrease in energy consumption over the next five years should be not less than 15% of the amount actually consumed in 2009 (with annual reduction of at least 3%). ROSATOM undertook enhanced obligations for 2010: to save 5% of energy resources. The actual savings were 7.44%.

During the fiscal year, "The motivation mechanism for organizations to save energy" and "Techniques for cost savings calculation due to energy consumption reduction" were developed. The principles of this technique are presented on the website of the Coordination Center, which is responsible for the project to include the enterprises and organizations of the Corporation in the implementation of the ROSATOM Activity Strategy through 2020. The organizations develop a correction factor for energy saving on their own, taking into account production characteristics and additional factors influencing its consumption.

On April 15, 2010, the Government of the Russian Federation approved the ROSATOM program of energy conservation and energy efficiency improvement.

During the fiscal year, the decision was made to establish, on the principles of parity (between ROSATOM and INTER RAO UES), the Energy Efficiency Center of INTER RAO UES Ltd., with the main task of distributing high technologies in energy saving and developing mechanisms to attract investments to energy saving technologies on the Russian market.

4.2.

HR MANAGEMENT

TATIANA KOZHEVNIKOVA

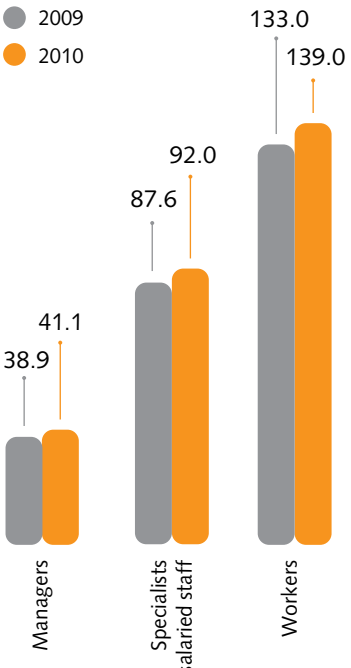
Deputy Director General for Personnel Management

"In the current global economy, the main asset of any company is its human capital, i.e., the highly qualified specialists capable of creating new ideas and technologies and successfully bringing new products to the market. We are well aware that high quality of human capital is a necessary condition for the technological development of ROSATOM and the creation of an innovative economy in Russia."

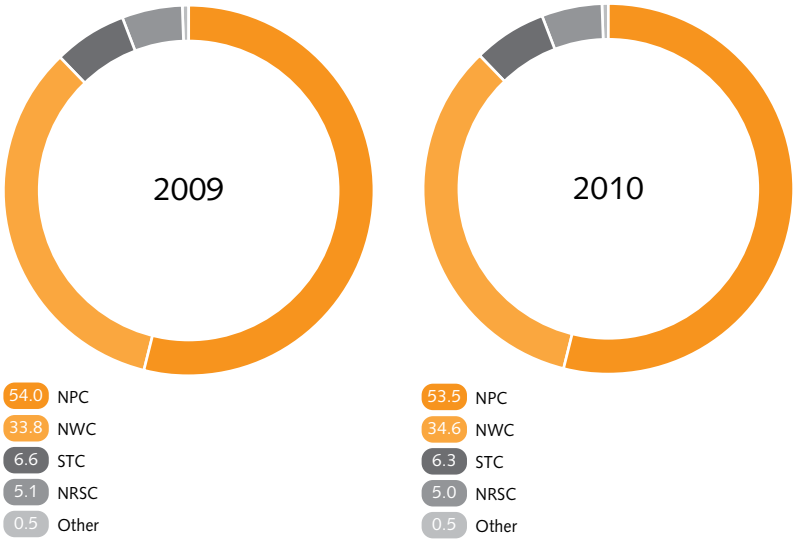
4.2.1. MAIN CHARACTERISTICS OF PERSONNEL

The average number of employees of ROSATOM in 2010 was 272,090 persons, including: managers – 41,050 persons (15.1%), professionals and salaried personnel – 92,030 persons (33.8%), workers – 139,010 persons (51.1%).

ROSATOM average staffing numbers by categories, thnd. persons



Average staffing numbers of ROSATOM by activity, %

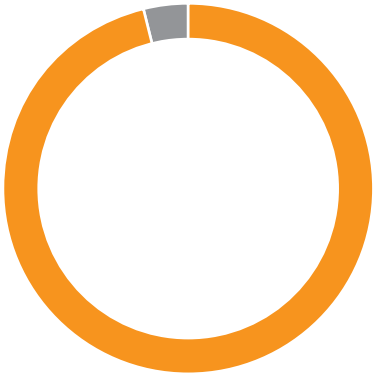


The average age of employees in the industrial and production group is 43 years; the average age of managers is 48 years. In the last four years, the average age of employees has been reduced: in the reporting year, the percentage of professionals under the age of 35 was 27.2%, in 2009 it was 26.5%, and in 2008 25%.

The percentage of employees with higher education is 42.8%. This significantly exceeds the same index among the economically active population of the Russian Federation (29.0%, according to the Federal State Statistics Service for 2010). The number of PhDs is 4,500 persons (1.7% of the total number of employees).

The number of employees dismissed during the fiscal year was 43,470 persons (of whom 13,900 persons were dismissed as a result of optimization activities). Staff turnover, excluding dismissals as a result of optimization activities, was 10.9% in 2010.

Share of employees in the industry sector in 2010



4.2.2. WAGES AND SOCIAL POLICY

PERSONNEL COSTS

In 2010, the total amount of staffing costs was 160.66 billion rubles, that is, 14.5% more than in 2009. Costs per employee increased to 596,600 rubles (21.5% higher than in 2009).

ROSATOM guarantees decent and adequate remuneration for work: in 2010, average monthly wage costs per employee increased in comparison with 2009 by 9.3% and reached 35,430 rubles. An average salary in the Corporation is 26.4% higher than on average in Russia. (According to the Federal State Statistics Service, the average monthly wage in Russia in December 2010 was 28,300 rubles per month.)

According to the Sector-wide Agreement on Nuclear Energy, Industry and Science in 2009-2011, for ROSATOM employees listed in the common unified remuneration system (about 83% of all Corporation employees), the minimum monthly salary for a worker of the first rung is being gradually increased to a level not lower than the cost-of-living of the working-age population in the Russian Federation in the territory where the relevant organization or enterprise is present. In 2010, wages in the key organizations and enterprises of the Corporation greatly exceeded the cost of living in host regions. The minimum wage rate of a worker of the first rung at PA Mayak (Chelyabinsk Region) was 29.6% greater than the cost-of-living, at Kursk NPP (Kursk Region) it was 4.5% greater, at NIKIMT Atomstroy (Moscow) 17% greater, at Chepetsky Mechanical Plant (Udmurt Republic) 19.4% greater, and at OKBM Afrikantov (Nizhniy Novgorod Region) 42.4% greater.

NON-FINANCIAL INCENTIVES

A system of non-financial personnel incentives based on departmental badges of distinction has been introduced in ROSATOM. Prompt encouragement relevant to labor achievements contributes to the creation in the employees of a sense of involvement in the achievement of corporate objectives, increases interest in improving work performance, and in the functioning of the enterprise and the Corporation in general. A major tool for encouragement and motivation of teams and individual employees is recommendation of the most distinguished of them for national and government awards.

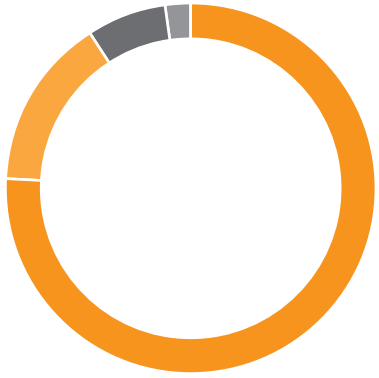
203 workers received national and government awards in 2010. More than 2,700 employees were awarded the "Academician I.V. Kurchatov,""E.P. Slavsky," "Academician A.P. Aleksandrov,""For Merits in the Development of the Nuclear Icebreaker Fleet" and "ROSATOM Certificate of Merit and Honor" badges, and about 10,000 workers were awarded "Veteran of Nuclear Energy and Industry" badges of honor and distinction for their work.

SOCIAL PROGRAMS

In 2010, within the frames of the Common Social Policy of ROSATOM and its subordinate organizations and enterprises, a standardization process of social programs was started. Eight main social programs were approved:

- voluntary health insurance;
- health resort treatment for employees and organization of rest and recreation for employees' children;
- insurance program against accidents and diseases;
- assistance to employees in purchasing permanent housing;
- non-state pension provision;
- support for veterans and retired employees;
- organization of sports and cultural activities;
- catering arrangements for employees.

ROSATOM expenditures for personnel in 2010, %



The total amount of social costs for workers in 2010 was 10.07 billion rubles (excluding social facilities maintenance costs), which is 8.2% higher than in 2009.

The amount of social costs per employee in 2010 (exclusive of social facilities maintenance costs) was 37,020 rubles.

The main mechanism of assistance in purchasing housing is support of the long-term credit programs (compensation to the employee of a part of the expenses for reimbursement of interest on credit for improving living conditions at a rate of 50 to 100% of the interest rate). In order to ensure credit availability and assist in the housing purchase, young professionals can be provided with special-purpose loans for the down payment for the credit (the amount of the special-purpose loan is from 20 to 50% of the cost of the housing purchased). The corporation reached an agreement with several major banks to provide nuclear industry employees with mortgage housing credit on favorable terms.

In 2010, a standard was approved with the aim of establishing the joint liability of the employer and employee for the ensurance of an acceptable living standard of the employee after retirement. An employee may participate in the state pension co-financing program or in accumulation of an additional pension through the non-state pension fund only. An employee may participate in both programs; in this case, the organization makes contributions at its own expense to the individual retirement account of the employee in the non-state pension fund.

Main areas of social policy

Corporate social programs	Amount of financing in 2010, bln. RUB	Results in 2010
Voluntary health insurance	1.14	The voluntary health insurance system covers 182,200 employees.
Health resort treatment for employees and organization of rest and recreation for employees' children, incl.:	1.19	
health resort and rehabilitation treatment of employees	1.04	50,000 employees underwent health resort and rehabilitation treatment, among them: – 21,800 employees in health resort institutions, – 28,200 employees in departmental health and recreation resort/therapy centers.
health resort treatment and resort of children	0.15	Health resort treatment and recreation were organized for 12,300 children of employees.
Voluntary insurance against accidents and diseases	0.11	The voluntary insurance against accidents and diseases covers 99,100 employees.
Assistance to employees in purchasing permanent housing	1.70	More than 1,500 employees improved their housing conditions, more than half of them were young professionals.
Non-state pension provision	1.97	The non-state pension provision program covers about 66,000 persons (more than 24% of employees). The non-state pension is distributed via NPF to 17,570 pensioners. The average size of the non-state pension is 1,500 rubles per month. One-time aid and support related to retirement was given to more than 6,500 persons, the average payment being 105,700 rubles.
Support for veterans and retired employees	2.5	Support was in the form of the material aid payments, acquisition of VHI policies, payments of health resort treatment costs (5,100 retired employees underwent health resort treatment).
Other	1.46	Comprises various social benefits, including material aid, compensation of food costs, public transport fare payment, organization of sports and cultural activities, etc.
Total	**10.07**	

Health and safety issues considered in the Sector Agreement

The Sector Agreement on the Nuclear Industry, Energy and Science for 2009-2011 pays much attention to occupational safety and labor protection issues. Under the agreement, employers implement a number of actions, including to:

– provide the financing of the activities aimed at the improvement of working conditions and safety, at a rate of not less than 0.5% of the production cost;
– develop integrated plans for occupational safety (OS agreements), taking into account the opinions of the elected bodies of the primary trade union organizations, which should be an integral part of the collective agreements, and finance work for their implementation;
– notify the sector trade union and primary trade union organizations about every group accident at work, severe accident and fatal accident, as well as about occupational accidents at work (including those with no harm to the health of workers) and provide them with material on the above-mentioned accidents;
– perform training for members of committees (commissions) on labor protection/occupational safety and authorized persons (trustee/agent) in occupational safety, at the expense of organizations, usually together with managers and professionals of the organizations.

Within the scope of the sector trade union, the following activities are carried out:

– to explain and raise awareness about the implementation of occupational safety responsibilities by the staff;
– in order to protect the rights and interests of workers regarding working conditions and labor safety issues, to compensate harm caused to their health at work and to oversee and monitor the creation of healthy/sound and safe working conditions at every work place.

4.2.3. LABOR PROTECTION

LABOR PROTECTION ORGANIZATION

The Occupational Safety and Labor Protection Management System has been introduced at the enterprises of ROSATOM. Activities specified in collective contracts have been implemented for the improvement of working conditions and safety and reduction of the occurrence rate of industrial injuries and occupational diseases. There is a sector of the Commission for the Occupational and Industrial Safety and Labor Protection, and the development of the sector management system of the industrial safety has been organized. A sector training center for occupational and industrial safety and labor protection has been established on the basis of the CICE&T non-state educational institution for continuing vocational education.

OCCUPATIONAL INJURIES

The nuclear industry has traditionally been among the safest in Russian industry in terms of occupational injuries. According to the annual reporting system of the Federal State Statistics Service, the occurrence rate of occupational injuries per 1,000 workers in the nuclear sector (accident frequency rate) is 0.69, which is three times lower than the average rate in Russia (according to 2010 data, the accident frequency rate is 2.20). In the reporting year, the level of occupational injuries in the sector declined significantly as compared to 2009.

The injury rate (accident frequency rate) at NWC enterprises decreased in one year by almost three times (from 1.25 in 2009 to 0.45 in 2010), isolated industrial accidents occurred in branches of Rosenergoatom Concern; in general, this shows a stable low level of injuries in the industry. 181 industry injuries were reported at ROSATOM enterprises in 2010 (in 2009, 255 cases).

Fatal accidents occurred at Priargunsky Industrial Mining and Chemical Union (underground mining works), Angarsk Electrolysis and Chemical Complex (chemical burn), Mining and Chemical Combine (RTA), Machine-Building Plant ZIO-Podolsk (injury from shop transport).

OCCUPATIONAL DISEASES

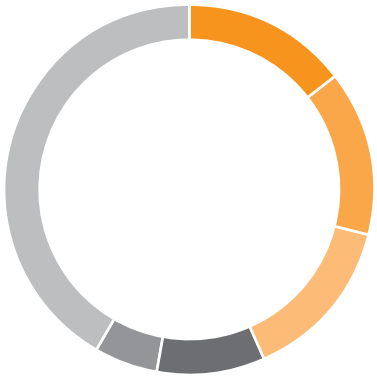
In 2010, 37 nuclear sector employees were revealed to have occupational diseases (in 2009, 25 employees). The greater part of the occupational diseases were chronic respiratory diseases and diseases of noise-vibration etiology. The most common factors that create discomfort and adverse health conditions are a high noise and vibration level at the workplace and high gas and dust content in the air of the work area.

STAFF RADIATION EXPOSURE

Organizational, technical, sanitary and hygienic activities associated with implementation of "Radiation Safety Standards (NRB-99/2009)" and "General Sanitary Rules of Radiation Safety (OSPORB-99/2010)" were carried out at the enterprises of the nuclear industry in 2010.

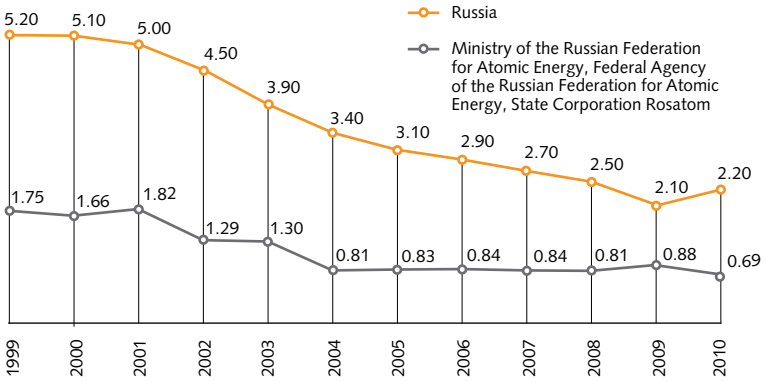
In 2010, 70,219 persons were subject to individual radiation monitoring (in 2009 – 70,286 persons, in 2008 – 71,508 persons).

Distribution of severe and fatal industrial injuries in 2010, %

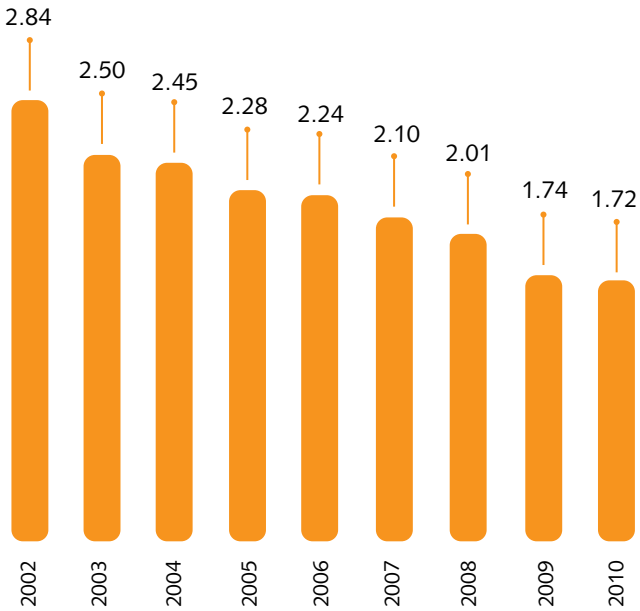


- 14.5 Fall down of various objects to the injured
- 14.4 Fall down of the injured from the height
- 14.4 Impacts of moving and other objects, parts, machinery
- 9.4 Electric injury, thermal injuries
- 5.5 Traffic accidents
- 41.8 Other

Dynamics of the industrial injury rate in the nuclear sector and in Russia



Changes in average annual staff radiation exposures, mSv

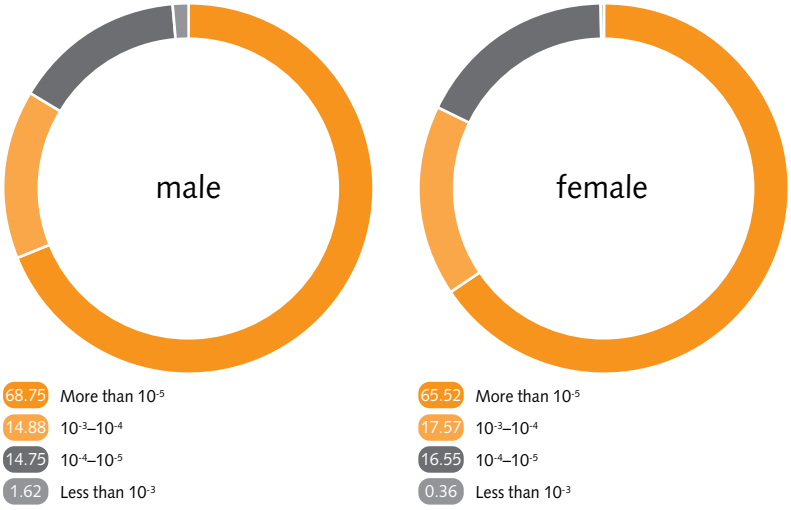


In 2010, staff radiation exposure continued to decrease: the average annual effective exposure dose was 1.72 mSv (1.74 mSv – in 2009).

The percentage of employees who received an annual radiation dose of less than 1 mSv is 53.8%. An annual effective radiation dose of more than 20 mSv (but less than 50 mSv) was received by four persons (three at the State Scientific Center NIIAR, one at PA Mayak). In the last five years, the number of people with an effective dose in the range of 20-50 mSv has been significantly reduced (from 30 to 4).

In 2010, no exposures in excess of the maximum permissible dose limits stated by radiation safety standards were reported.

Division of radiation risk among men and women included in the IRDM, %



INDIVIDUAL RADIOLOGICAL RISKS OF PERSONNEL

The introduction of the Automated Workstation of Individual Risk Assessment (AWSIRA) in version 5.0 continued at the enterprises of the nuclear sector during the reporting year. The AWSIRA system allows assessment, directly at the enterprises in accordance with the international standards, of the individual radiological risk of occupational radiation exposure to solve issues related to optimization of the radiological protection of personnel and measures to limit the risk and inform the staff of existing individual risk.

After processing individual data of 58,630 people (83.5% of the persons included in individual radiation dose monitoring (IRDM)) with the Automated Workstation of Individual Risk Assessment, it was revealed that 843 persons have a high (compared to the norm stated in NRB-99/2009) individual lifetime risk of 10^{-3} $year^{-1}$ (in 2009. 755 of 52,440 people had a high risk), which is 1.4% of all staff.

For the first time, individuals of the group A with individual radiation risk more than 10^{-3} $year^{-1}$ (according to item 2.3 RSS-99/2009) were included in the 10-RTB-5 statistical reporting form. The greater part of employees (83%) are within the area of negligible risk (less than 10^{-4} $year^{-1}$).

4.2.4. PERSONNEL MANAGEMENT STRATEGY

ROSATOM personnel management is aimed at the achievement of a strategic goal, i.e., to improve the effectiveness of Corporation activity.

The main tasks of personnel management are:

- full provision of highly skilled personnel;
- creation of a training and development system business leaders;
- effective training and development of personnel;
- an effective system of reward and motivation;
- labor productivity increase;
- increased effectiveness of personnel management services in the organizations of the Corporation.

UNIFIED REMUNERATION SYSTEM

In 2010, ROSATOM began replicating the common unified remuneration system (CURS) in nuclear industry organizations (in 2009, CURS was introduced in the Corporation and management companies of the subsidiary holding structures).

CURS was designed to ensure uniformity of sector personnel policy, including a unified job level system, which was made the basis of development of the material incentive mechanism.

The basic principle of the new remuneration system is the strengthening of the relationship between an employee's reward, including managers', and individual efficiency and KPI realization. (KPIs for the top management of ROSATOM are formed with a focus on strategic objectives achieved and KPI for the Corporation set by the Supervisory Board, and therewith the strategic objectives set by the organizations and enterprises are transformed into KPI charts for the specific managers.) The CURS mechanism is based on unified forms of payment and salary calculation algorithms that allow to introduce more effectively automated payroll systems, budgeting, accounting and reporting.

In 2010, more than 225,000 employees of 45 nuclear industry organizations were transferred to the new remuneration system, individual KPI charts of the common corporate standard were introduced for 1,380 managers of organizations.

When introducing CURS in 2010, special attention was given to the use of modern communications mechanisms to inform employees of any changes or alterations to the observance of social partnership principles and high legal discipline.

In the reporting year, an audit of CURS was carried out, which appraised it highly for its comparability with advanced practices of Russian and international companies.

In July 2010, a survey of employees concerning the new remuneration system was conducted at eight companies that adopted CURS at the beginning of the year, which showed a high level of positive or neutral attitude (more than 80% of respondents).

COMMON SYSTEM OF PERSONNEL PERFORMANCE AND EFFICIENCY EVALUATION

In 2010, the introduction of a staff performance and efficiency evaluation system continued:

- a methodology for the evaluation of staff efficiency and labor potential, on the basis of performance, skills and professional and technical knowledge evaluation, within the frames of the "RECORD" evaluation procedure (which allows for the creation of an individual development plan for each employee) was developed;
- training and information programs (articles, booklets, guidelines, instruction by internal training specialists and trainings conducted at the Corporation and its companies) were organized;
- in the reporting year, 1,457 employees of ROSATOM passed the efficiency and labor potential evaluation for 2009 (145 employees up to and including the level of department heads, and 1,312 employees of the companies up to and including the level of deputy director general), that is, 0.5% of the average number of staff;
- an efficiency and labor potential evaluation for 2010 of 690 employees of ROSATOM up to and including the level of department heads, and 6,000 employees of ROSATOM companies of the first three administrative levels up to general director, inclusive, began. The evaluation ended on 28 February 2011. The evaluation is performed on the basis of SAP (IAPMS).

Relation of payments to managers of the Corporation and results of activity

Payment of an annual bonus to managers of the Corporation and its organizations is based on KPI implementation evaluation. In 2010, KPIs were set for all managers up to the level of department heads, as well as level 1 and 2 managers of the Corporation's organizations.
Besides production and economic indicators, indicators were established that represent performance in the area of sustainable development (e.g., lack of accidents of Level 2 or higher, according to the INES; no cases of personnel irradiation in excess of 50 mSv per year; proportion of professionals under the age of 35; bringing social programs of organizations into accordance with the principles of the Common Social Policy of ROSATOM).
The KPI implementation evaluation procedure includes: provision of reporting materials and discussion and evaluation of KPI implementation with the direct supervisor. The managers' evaluation of KPI implementation is approved by the general director of the Corporation. The evaluation of KPI implementation by the general director is approved by the Supervisory Board of ROSATOM.

For 2011, it is planned to evaluate not less than 35% of nuclear sector managers with the "RECORD" evaluation procedure.

PERSONNEL RESERVE AND SUCCESSION POOL

The personnel reserve programs are aimed at realizing the professional potential of employees of ROSATOM and its organizations, thus reducing dependence on the labor market, ensuring career progress and development of employees' skills and competences. The Common Efficiency Evaluation System is the basis for identifying employees having high potential; further, these employees are selected as candidates for a skill pool at three levels: the Corporation pool ("ROSATOM Gold Reserve"), the division reserve and reserve of specific organizations. For each member of the skill pool, an individual training plan is developed, which includes involvement in key industry-wide projects.

In 2010, the first phase of the "ROSATOM Gold Reserve" program was completed, with 27 persons selected in 2009 participating. Thus, 16 persons (60%) of the said number got new job positions. At the end of 2010, a new selection and recruiting process took place, with 22 employees enrolled in the "ROSATOM Gold Reserve."

In order to ensure succession in the organizations' management and improve the certainty of successful implementation of long-term projects, succession plans for the general director's position of the organization and Corporation department heads were developed. The strategic reserve of the divisions is 120 persons. The operational reserve for administrative positions of 86 nuclear industry companies is more than 150 employees.

In 90% of cases, where an organization manager for whom a succession plan is developed was absent, duties were entrusted to deputies selected from the successors.

TRAINING OF EMPLOYEES AND INVOLVEMENT OF YOUNG PROFESSIONALS

The personnel training system of ROSATOM includes training within higher and secondary vocational education programs and training, retraining and advanced training as a continuing professional education process, including the nuclear industry institutes for continuing education and training (ICE&T).

In 2010, 10,730 nuclear industry employees received training in ICE&T. The average number of teaching hours per employee was 23.25. The cost of services provided by ICE&Ts was 285 million rubles. In 2010, the regional network was expanded: nine branches of the CICE&T Non-state Educational Institution for further vocational education at NPPs and a Urals Branch in Yekaterinburg were inaugurated.

In order to establish a uniform training, retraining and advanced training system within the nuclear industry and to create a common ROSATOM educational environment, three ICE&T (in Moscow, St. Petersburg and Obninsk) were merged in 2010 into the CICE&T non-state educational institution for further vocational education, the mission of which is to improve the competence and skills of nuclear sector employees and to ensure its safe, sustainable development and competitiveness on the global nuclear technologies market. Also, it was decided to establish a ROSATOM Corporate Academy, whose main activity will be the development of managerial and administrative skills.

In 2010, the Corporation developed:
- a guide for administrative skills development;
- a catalog of programs for the administrative/managerial level, comprising programs for improvement of corporate skills and functions (specified according to "RECORD" evaluation results);
- personnel training regulations;
- scheduling, organization and evaluation of training;
- methods of English language training for Corporation employees.

Based on the requirements of these documents, the market of training services suppliers was monitored and a list of priority organizations for training program implementation in 2011 was compiled.

ACTIVITY OF THE NATIONAL NUCLEAR RESEARCH UNIVERSITY MOSCOW ENGINEERING PHYSICS INSTITUTE (NNRU MEPHI)

To ensure realization of ambitious plans for nuclear industry development, it is necessary to train specialists of the relevant specialties, in a yearly number of 3,500-3,900 through 2020. In accordance with the Decree of the Russian Government No. 915-r of July 13, the Corporation, together with the Ministry of Science and Education of the Russian Federation, is implementing the "Establishment and Development of the National Nuclear Research University MEPhI (NNRU MEPhI)" program. The share of ROSATOM co-financing of NNRU MEPhI in 2010 was 400 million rubles (in 2009, 300 million rubles).

Results achieved in the reporting year:

- a university network structure was established (the Volgodonsk engineering and technical branch was established; as of 31 December 2010, the university's branch network comprised 25 structural divisions located in the host regions of the Corporation);
- 500 rooms in hostels were commissioned after capital repairs; education aids and scientific equipment for laboratories and classrooms were procured;
- educational programs were upgraded and improved;
- a NNRU MEPhI Career Center was set up to involve and select the best students.

In 2010, the International Center of Nuclear Education and Personnel Training for countries developing nuclear power was established at the Obninsk branch of NNRU MEPhI. The first groups of foreign students from Vietnam and Jordan began their studies at the preparatory faculty. Citizens of Mongolia and Egypt did internships and advanced training. In total, during the reporting year, 85 foreign citizens did their training at the Center.

To attract prospective students, NNRU MEPhI carries out wide-scale educational and vocational guidance among senior schoolchildren (ROSATOM-sponsored academic competitions, the "Junior" contest, teaching physics and mathematics in colleges and schools, practice for pupils at the educational institutions of NRNU MEPhI, a course in physics filmed for the Bibigon TV channel consisting of 12 lectures, etc.). In addition, NNRU MEPhI works with school teachers of physics and mathematics to develop and improve their skills.

COOPERATION WITH HIGHER EDUCATION ESTABLISHMENTS

The Corporation cooperates with 30 specialized nuclear-related higher education establishments. The main cooperation mechanisms are targeted contracted training, scholarships for Corporation students, educational and reference material contests, and competitions to identify promising students.

Nuclear-related educational establishments have founded the Russian Nuclear Innovation Consortium, which coordinates nuclear-related education in higher education establishments that have respective chairs (N.E. Bauman MSTU, MPEI, etc.).

In 2010, 2,500 persons did internships in the organizations of the Corporation; of this number, 1,300 persons were invited to work (more than 500 of them with a diploma from NNRU MEPhI). In 2010, in total, 1,740 young professionals with higher education degrees in 200 specialties were employed (along with 2,025 persons who received secondary vocational training).

In 2010, ROSATOM won first place in a rating by business partners of Russian higher education establishments (organized by the Russian Union of Rectors) in the following categories: "The largest investor in higher education," "The largest contribution to assisting and supporting gifted students and young teachers" and "The largest youth employer."

An overall amount of expenses of the Corporation on education in 2010 was 628.9 million rubles (2,300 rubles per employee).

The correlation between expenditures allocated for support of nuclear-oriented universities and number of employed young specialists is 290 thousand rubles per person.

4.3.

ROSATOM HOST REGIONS

Host regions
More than 700 municipalities located in 36 regions of Russia, including 10 CATF and 10 NPP satellite-cities

Involved population
3.3. mln people:
employees (272,000 people)
members of their families (1 mln people)
residents of municipalities (2 mln people)

NPP satellite-cities

City	Population, thnd. people	Russian Federal Subject	Branch of Rosenergoatom	Number of staff, thnd. people
Udomlya	31.9	Tver Region	Kalinin NPP	3.8
Polyarniye Zori	13.0	Murmansk Region	Kola NPP	2.6
Kurchatov	47.1	Kursk Region	Kursk NPP	5.2
Desnogorsk	31.1	Smolensk Region	Smolensk NPP	4.6
Novovoronezh	34.8	Voronezh Region	Novovoronezh NPP	3.1
Zarechny	27.2	Sverdlovsk Region	Beloyarsk NPP	2.2
Sosnovy Bor	87.2	Leningrad Region	Leningrad NPP	5.1
Volgodonsk	170.8	Rostov Region	Rostov NPP	1.9
Balakovo	187.3	Sverdlov Region	Balakovo NPP	3.9
Bilibino	6.3	Chukotka Autonomous District	Bilibino NPP	0.3

Closed administrative territorial formations (CATF or "closed" cities)

City	Population, thnd. people	Russian Federal Subject	Branch of Rosenergoatom	Number of staff, thnd. people
Zheleznogorsk	102.2	Krasnoyarsk Region	Mining and Chemical Combine	7.7
Zarechny	62.1	Penza Region	M.V. Protsenko PA Start	7.8
Zelenogorsk	68.4	Krasnoyarsk Region	PA Electrochemical Plant	5.7
Lesnoy	52.5	Sverdlovsk Region	Elektrokhimpribor	9.8
Novouralsk	95.1	Sverdlovsk Region	Ural Electrochemical Plant	8.6
Ozersk	98.4	Chelyabinsk Region	PA Mayak	12.3
Sarov	88.3	Nizhniy Novgorod Region	RFNC-VNIIEF	18.8
Seversk	113.7	Tomsk Region	Siberian Chemical Combine	10.8
Snezhinsk	50.6	Chelyabinsk Region	RFNC-VNIITF	9.1
Trekhgorny	34.3	Chelyabinsk Region	Instrumentation Plant	4.7

4.4.

ECONOMIC IMPACT

Economic effects of the Corporation are manifested as:

- contributions to generation and distribution of economic value;
- contributions to development of the related industries;
- tax payments to budgets of different levels;
- creation of new jobs;
- assistance to and support of local manufacturers and suppliers;
- investments in infrastructure and services provided for the public interest;
- support of development strategies of CATFs, NPP satellite-cities and ROSATOM enterprises.

4.4.1. CONTRIBUTIONS TO GENERATION AND DISTRIBUTION OF ECONOMIC VALUE

A picture of the general economic effects of ROSATOM in the reporting year is presented in the table of the economic value generation and distribution among the stakeholders. Accumulated value is distributed among the suppliers and contractors (within the frames of the operating costs), capital assets providers (in the form of interest payments to creditors), employees of the Corporation and its affiliated organizations (wages and social expenditures), government (as taxes), local communities, and regional and municipal authorities (as social investments and charitable contributions and taxes). A part of the accumulated value remains in the Corporation (retained value, which includes funds allocated for business development).

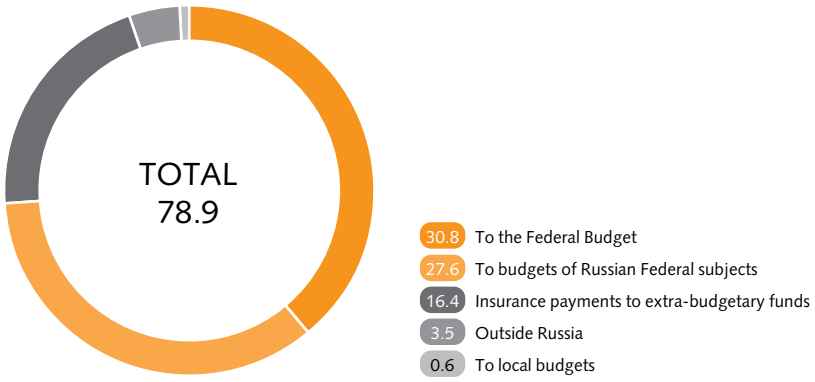
Rosatom Direct economic value generated and distributed, bln RUB

Component	2009	2010
Generated economic value	**458.2**	**552.3**
revenues (sale proceeds, as well as proceeds from financial investments and assets sales)	458.2	552.3
Distributed economic value	**381.8**	**378.9**
operating costs (payments to suppliers and contractors, materials purchase costs)	216.7	210.5
wages and other payments and employment benefits	99.4	102.6
payments to the capital assets providers	13.8	10.0
gross tax payments (exclusive personal income tax, VAT)	50.8	54.0
investments in communities, including donations	1.1	1.8
Retained economic value	**76.4**	**173.4**

4.4.2. TAX PAYMENTS TO BUDGETS OF DIFFERENT LEVELS

Organizations and enterprises of the Corporation significantly influence the process of formation of the revenue side of budgets in their host regions. In 2010, budgets of all levels (including contributions to the extra-budgetary funds) received 75.4 billion rubles, which is 48.6% more than in 2009 and 64.3% more than in 2008. In addition, in 2010, ROSATOM organizations paid 3.5 billion rubles of taxes subject to payment outside the Russian Federation. The total amount of tax revenues in 2010 was 78.9 billion rubles.

Taxes paid by ROSATOM and its organizations in 2010, bln RUB



4.4.3. CREATION OF NEW JOBS AND SUPPORT OF DOMESTIC MANUFACTURERS AND SUPPLIERS

Construction and commissioning of NPP units creates new jobs: a number of specialists (workers) are hired from local residents who live within 100 km. of the construction site. In addition, every employee involved in NPP construction, in fact, facilitates employment of 10-12 more specialists in related industries (metallurgy, machine engineering, etc.). Thus, the Corporation significantly improves public employment, including among local population, in the host regions.

Number of involved organizations and employed workers at construction of NPPs in 2010

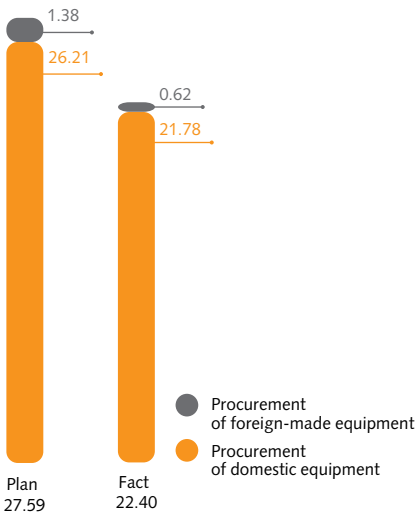
NPP	Number of key involved organizations	Employed workers, total	Including: engineers	workers
Kalinin-4	32	4,708	921	3,787
Rostov-3,4	46	4,079	432	3,647
Novovoronezh II/1,2	36	4,448	976	3,472
Beloyarsk-4	31	2,997	440	2,557
Leningrad II/1,2	29	1,408	116	1,292
Total	**174**	**17,640**	**2,885**	**14,755**

ROSATOM is one of the largest consumers of goods and services of domestic manufacturers. At the federal level, the Corporation acts as a customer of equipment manufactured by domestic power engineering facilities. At the regional level, the Corporation implements a plan of procurement and purchasing from local suppliers, thus supporting the economic activities of other enterprises in the host regions.

The procurement system includes preferences for domestic manufacturers, as well as for suppliers and producers located close to the customer; the purpose is to minimize product delivery costs and transportation cost of equipment and resources.

For suppliers and manufacturers producing strategically important products for the nuclear industry development, the order award process was simplified. A list of such products with an indication of manufacturers and suppliers is available on the corporate website. The share of the purchases from local suppliers in regions of sizable activity exceeds 50% of all the purchased products. The volume of products purchased from the domestic manufacturers and suppliers in general in the nuclear industry exceeds 80%.

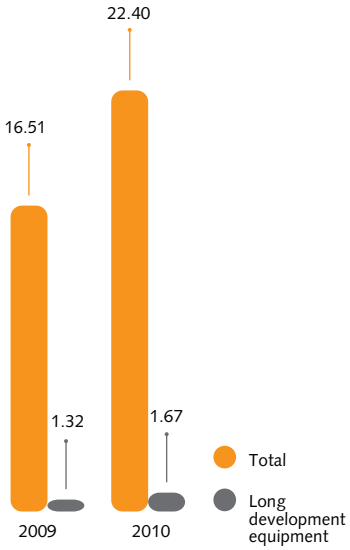
Structure of Equipment Procurement in 2010, bln rubles



Imported equipment is purchased according to the item groups, which either are not produced by Russian manufacturers or are spare parts for previously installed imported equipment. In particular, imported goods are purchased in the groups: valves/pipe fittings, thermal and mechanical equipment (ball cleaning system), electrical equipment, special laundering equipment, ion-exchange resins, and sodium metal.

In 2010, NPP equipment worth 22.4 billion rubles was purchased. This included purchases from Russian suppliers worth 21.78 billion rubles. Purchases of long-lead equipment amounted to 1.67 billion rubles in 2010.

Dynamics of equipment purchasing, bln RUB



4.4.4. INVESTMENT IN INFRASTRUCTURE AND SERVICES PROVIDED FOR THE PUBLIC INTERESTS

In most ROSATOM host cities, the housing and utility infrastructure was built 30-40 years ago and more than 60% of the main HCS utilities have exceeded their assigned lives.

The Corporation has initiated a development project to attract the long-term financing for infrastructure development. In the framework of this project, a system of requirements (financial, economic, technical) for obtaining investments for modernization of HCS utilities was developed. Project implementation is based on principles of joint participation of the Corporation and the cities in the modernization projects. On June 18, 2010, in order to provide funding for the project, an agreement concerning cooperation and collaboration between the State Atomic Energy Corporation ROSATOM and the State Corporation Bank of Development and Foreign Economic Affairs was signed.

4.4.5. SUPPORT FOR DEVELOPMENT STRATEGIES FOR CATFS, SINGLE-INDUSTRY CITIES AND ROSATOM ENTERPRISES

CATF administrations, in accordance with applicable legislation, under which the authority to establish and implement city strategies rests at the local level, produce long-term planning documents. The Corporation and the major employers in the cities provide assistance, including methodological, and participate in the coordination of city and major-employer development plans when generating CATF development strategies.

The goal of developments, started in 2009, is diversification of the economies of CATFs and single-industry cities, modernization of the infrastructure and improvement of the enterprises' competitiveness. Another important aspect is synchronization of the nuclear industry development strategy as a whole and development strategies of individual ROSATOM host regions.

When developing strategies, a priority is a cluster development, which allows significant improvement of enterprises' competitiveness (depending on the nature of an enterprise's activities, an innovative or industrial cluster is created).

In the reporting year:

- work was done to complete elaboration of a long-term development strategy and general plan for Novouralsk;
- work was done to complete a development strategy for Zheleznogorsk (it is planned to formulate a development concept for an innovation cluster of nuclear and space technologies);
- work was done to complete drafting of a Seversk development strategy; it is planned to create an innovation development program for the Tomsk-Seversk agglomeration;
- work was started to assess the CATF status for the cities of Novouralsk, Zarechny, Zelenogorsk, Seversk;
- a draft general plan for Zarechny was coordinated;
- an accommodation and settlement scheme for construction workers and employees of the Baltic NPP was developed.

The CATF Assosiation

The CATF Association started its activity in 1992 and comprises ten CATFs where NWC facilities and enterprises for the nuclear materials handling are located. The main activities of the Association are assistance in the social-economic development of CATF and stable and safe functioning of the Corporation's organizations located in CATF, as well as enhancement of legislation regulating the functioning of CATF.

One of the most important events in 2010 was the formulation of a joint action program by ROSATOM and the Russian Trade Union of the Nuclear Power and Industry Workers on preventing the growth of social tension related to reforms in major employers in CATF. The trilateral agreement, which provides for the creation of joint coordinating bodies in all CATF and development of coordinated actions, was signed on 24 March 2010.

Support of the closed territories and Corporation enterprises

Goals: Establishment of the conditions to improve the competitive abilities of the towns, economic diversification, development of infrastructure including involvement of federal funding.

PREPARATION	ARRANGEMENT	IMPLEMENTATION
Stage specifications: analysis of the situation, development of strategies, plans and programs Seversk: the strategy has been developed Zheleznogorsk: the strategy (is being developed) Novouralsk: the strategy (is being developed) Zelenogorsk: the strategy (is being developed)	Stage specifications: creation of organizational mechanisms for strategy implementation	Stage specifications: implementation of investment projects Types of clusters in the closed territories **Innovative:** • availability of developing research centers • opportunities for transfer of technologies • availability of the highest qualification personnel **Industrial:** • optimization and modernization of the production processes • deliberation of the industrial capacities and personnel • availability of land and energy resources

In 2011, it is planned to start a development strategy for Sarov, including formation of an innovation cluster.

In 2010, a cluster development concept for Dimitrovograd (Ulyanovsk Region) was developed; it specifies the main areas of utilization of existing scientific and industrial potential in civil nuclear technologies. In addition, a strategy for the long-term social and economic development of the city and a program for infrastructure and city environment development were produced. An amount of funding of the innovation cluster by the Corporation through 2018 will exceed 42 billion rubles (total investment will exceed 65 billion rubles). In the reporting year, the administration of Ulyanovsk Region launched a project on development of the city utilities infrastructure (with a cost of more than 6 billion rubles).

RESTRUCTURING OF MAJOR EMPLOYERS IN CATFS

ROSATOM organizations are carrying out restructuring of enterprises located in CATF in order to improve their performance and efficiency.

One example of restructuring is the "New Image" program of the Fuel Company TVEL. The program is aimed at implementation of a Corporation strategic initiative, i.e., "Maintenance of Global Leadership at the Front-End of the Nuclear Fuel Cycle" and strategic goal "Improving Operating Efficiency and Performance," and specifies tasks for substantial growth of labor efficiency, wage rates, EBITDA, as well as more effective use of production space. Within the Program, auxiliary and supporting production units, non-core assets, are removed from the structure of the Fuel Company's enterprises to serve as the basis for subsidiary companies; and social and cultural facilities are transferred to the books of the municipalities.

In 2010, in the course of Program implementation, 14 economic entities were established; services rendered by 21 non-core, auxiliary and support departments were transferred for outsourcing; 12 non-core assets were sold or leased; three subsidiary companies were liquidated. Twenty-one facilities were transferred to municipal or regional ownership (6 at UECC, 4 at PA ECP, 5 at SCC, 1 at CMP, 3 at AECC, and 2 at VPA Tochmash).

ATTRACTION OF INVESTMENTS TO CATF ECONOMIES

Local CATF authorities prepared proposals which implementation needs support on the part of federal executive bodies and ROSATOM. The idea behind the proposals is diversification of CATF mono-economies and attraction of investments to create new high-technology production units.

In order to attract investments, it is necessary to:

– include CATFs in state support programs, including formulation of proposals on identifying promising innovative projects for CATFs;

– use the experience and resources of foreign partners, competent in diversification of mono-economies of municipalities similar to CATFs;

– improve the regulatory and legal framework, also increase the investment attractiveness of CATFs (attractiveness can be increased through reasonable alteration of the special regime under which CATFs function, while maintaining a safe functioning level).

One example of attracting private investments to CATFs is the "Creation of a Scientific and Production Cluster" program ROSATOM-AFK System implemented in Sarov on private-public partnership principles. In the frames of the program, the System-Sarov technology park was set up at VNIIEF to house more than 20 companies (CJSC Intel, Nokia Siemens Networks Ltd., OJSC MTS, etc.) and create more than 200 new jobs. Further implementation of the Program will allow another 700 jobs to be created and introduce about 50 items of intellectual property to the market.

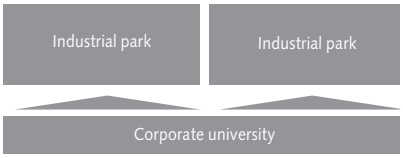
City of Zheleznogorsk: example of assistance to diversification of the closed territory economy

Population: 102 thousand people City-forming enterprise: FSUE Petrochemical plant, JSC Information Satellite Systems	Key city resources: • availability of high-qualified personnel • availability of infrastructure • opportunities for technologies transfer

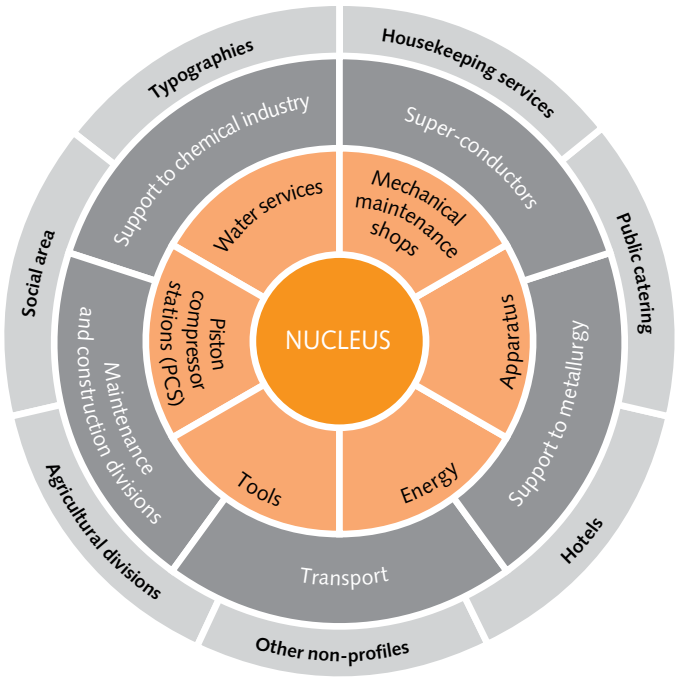
PROJECT IMPLEMENTATIONS:

2010 YEAR:
- performance of strategy analysis justification of cluster (innovative and industrial) possibility

2011 YEAR:
- session of strategy planning, discussion of the development opportunities with all the parties concerned
- achievement of agreement with management of Krasnoyarsk region on co-funding of the industrial park and youth village, preparation of the orders for federal tenders
- presentation of the clusters to the workgroup "Nuclear technologies" of the Presidential Commission for modernization and technical development of Russian economy



Restructuring within the scope of the program "New image"



Industrial and technological nucleus
- Improvement of labor efficiency
- Equipment upgrading
- Re-configuration of the facilities

Division within the process cycle
- Transformation into development-oriented businesses
- Specialization and load optimization
- Centralization
- Upgrading of specialized facilities

Supporting and general industry divisions
- Transformation into development-oriented businesses
- Specialization and load optimization
- Centralization

Possible options:
- Market outsourcing of services

Non-profile divisions
- Separation into daughter companies

Possible options:
- Transfer to the municipal (state) funds
- Sale
- Market outsourcing of services
- Lease
- Liquidation

4.5.

SOCIAL IMPACT

ROSATOM social influence factors are:

- implementation of the Common Social Policy and social partnership;
- social programs and projects realized in the host regions;
- resettlement programs (to solve some of problems of the "nuclear legacy" of previous defense and economic activities);
- charity.

4.5.1. SOCIAL PARTNERSHIP

The basic principles of the Common Social Policy of ROSATOM and its organizations, subordinate enterprises and their affiliated companies were adopted in 2009 (please refer to Section 4.2 "HR Management" for outcomes of the Common Policy in the reporting year). Also in 2009, the Sector Agreement on nuclear power, industry and science for the period of 2009-2011 was signed concerning the establishment of uniform labor, economic and social conditions for nuclear industry employees. This Agreement covers all organizations and employees of the nuclear industry and lays the foundation for collective labor contracts (in 2010, 88% of workers were employed under collective labor contracts).

On 15 July 2010, the Sector Agreement was amended to permit the introduction of a more effective policy in the area of social and labor relations.

The social partnership in the nuclear industry is realized through trilateral cooperation between ROSATOM, the Russian Trade Union of Nuclear Power and Industry Workers and the Russian Union of the Employers of Nuclear Industry and Science.

The Industry-wide Regulatory Commission for Social and Labor Relations, consisting of representatives of the Union of Employers and the Trade Union, was set up to regulate social-labor relations and coordinate the social and economic interests of the parties to the Sector Agreement, as well as to control its implementation.

In the reporting year, the Commission held five meetings to discuss the following issues: labor relations and wages, labor protection, health care, social protection, staffing policy, and introduction of a uniform labor remuneration system.

To explain the principles of implementation of the new remuneration system and prevent social tension, the Trade Union conducted several teach-ins in nuclear industry organizations, where Union representatives discussed the new remuneration system. Based on employee feedback, the planned system was altered to take into account specific features of the organizations.

In 2010, the Trade Union initiated the signing of an agreement between the Corporation, the Trade Union and the CATF Association. This Agreement should create a favorable environment for a stable social and economic situation in the period of structural reforms of the major employers in the cities.

The All-Russia Industry Union of Employers in the Nuclear Industry, Power and Science was established in 2001. As of 31 December 2010, the Union included 60 major nuclear industry organizations.

The Trade Union of Nuclear Power and Industry Workers was established in 1992 (however, trade union activities started in 1948).

As of 31 December 2010, it united 160 primary trade union organizations in 35 subjects of the Russian Federation and 308,900 people. In addition, 109,100 retired workers and 13,100 students are registered on the Trade Union's books. Total Union membership is 431,100 people.

4.5.2. SOCIAL PROGRAMS FOR THE AREAS OF PRESENCE

THE "TERRITORY OF ROSATOM CULTURE" PROGRAM

In 2010, within the framework of the Program "Territory of ROSATOM Culture," launched in 2007, more than 120 various events (art exhibitions, concerts, festivals, etc.) took place in the "closed" cities and NPP satellite cities. Musicians, poets, artists, and singers are frequent guests in these cities. The Program has two purposes: one is to bring the best performers and artists closer to the local public; the other is to support local creative groups through contests, gala events, master classes, etc. A number of specialized seminars were held for the staff of culture administration offices and educational institutions. They were devoted to the development of the municipal cultural, educational and social environment.

Under the aegis of the Agreement between ROSATOM and the State Hermitage Museum, several thematic exhibitions were held, such as "Embroidery Art" and "Amber in Antique Culture"; an ongoing students' project, "Volunteers from the Closed Cities in the State Hermitage" continued in the past year as well.

One of the most prominent events of the past year was the arts symposium "Nuclear Renaissance" devoted to the 65th anniversary of the nuclear power industry in Russia. The project united artists from Moscow and "closed" cities (36 people). Public open-air sessions took place in Novouralsk, Zelenogorsk, Zarechny and Sarov, where people could watch artists work. Beginners could attend master classes. About 40 pictures were painted, which were made into an exhibition that was displayed on the jubilee days and then toured the "closed" cities and NPP satellite cities.

The First Open Sculptors' Symposium – "The Poetry of Creation: Zarechny 2010" was held in Zarechny and gather ten sculptors from Moscow, St. Petersburg, Penza, Perm and Zarechny. In the course of one month, the artists made statues from big pieces of marble. It was a very demanding project that resulted in 10 striking sculptures that added beauty to the city streets and squares.

Another serious project was the Second Competition of Amateur and Professional Theaters based in the "closed" cities and NPP satellite cities. The competition took place in nine cities. Its jury consisted of well-known Russian actors, producers and cultural figures. The title of best professional theater in the nomination "The Best Drama Performance" was given to the Children's and Youth Theater of Seversk for its production of The Three Sisters. Other winners were the Ural Operetta Theater for Christmas Eve Night and the Puppet Theater for its Vanya the Dane show, both produced in Novouralsk. Given the largest number of winners, Novouralsk was declared "ROSATOM's Theater Capital." All winners received grants for future productions.

Social projects contest

	2006	2007	2008	2009	2010
Number of regions of Russia	1	7	16	17	16
Number of applications	38	150	219	182	85
Number of winners	12	49	57	48	56
Financing, mln RUB	12	37	65	39	46

CONTEST OF SOCIAL PROJECTS

In the reporting year, the ROSATOM Public Council initiated the fifth contest of social projects for NGOs and nonprofit organizations. The contest areas included social welfare and medical care, environmental protection, culture, education services, legal services, historical and scientific studies and archiving.

The 2010 winning projects were: "Ecological Health Improvement Summer Camp for Children Residing near the Techa River," "Green Planet 2010 International Children's Green Forum" and "Future Generation's Energy, a Russia-wide Contest of Research Works and Projects Developed by Teenagers."

The operator of the social projects contest was the Center for Support of Social and Ecological Initiatives in the Nuclear Industry.

HEALTH IMPROVEMENT AND SPORTS

The Corporation has always paid special attention to sports and health-improvement activities (about 20.4% of all employees go in for sports). In 2010, the Atom Sport Russian Sports and Physical Training Society organized about 60 sports events.

The "Atomiade" Summer Sports and Athletics Days of Nuclear Power and Industry Workers brought together about 10,000 contestants who competed in 14 sports. The "Atomiade" finals took place in Novouralsk.

Future generations' energy

The first all-Russian competition of research works and projects developed by high school students was held in 2010. The competition was assisted and supported by the Public Council of ROSATOM together with the National Nuclear Research University MEPhI. 120 high school students participated in the competition. They came from different regions hosting nuclear facilities. Seventy-two boys and girls were the finalists in the competition. They represented 17 regions of Russia. Finals took place in St. Petersburg. At the closing conference, the students presented their papers. The conference was divided into three topical sections: "A new look at the use of atomic energy," "Social and economic challenges of nuclear cities: today and tomorrow," and "Environment and human health in the host regions of nuclear facilities."
The winners and prize holders were invited to take part in the "Junior" competition, which is to be held by NNRU MEPhI.

Atom Sport is the organizer of the International Maxi-Marathon runs. In 2010, a maxi-marathon with runners from 13 countries took place in Spain. A badminton tournament was organized by Atom Sport in France. The International Mini-Football Championship among teams from nuclear industry organizations was held in Spain and the Corporation's combined team won the first prize. Sportsmen of the Corporation won 14 gold, 8 silver and 7 bronze medals in the International Workers' Sports Festival in Bulgaria. The Atom Sport team won second place in a ping pong championship held at the International Workers' Sport Games in China; it also took 4 gold, 2 silver and 3 bronze medals in the swimming competition.

The combined team of the Urals Region enterprises won first place. The "closed" city of Seversk hosted the ski-races for the L. Yegorova Prize, named in honor of the six-time Olympic champion who was awarded the Hero of Russia title. The "Polar Shot" International Inter-industry Winter Sports Days took place in Polyarniye Zory. The Fitness and Sports Society also organized competitions in volleyball, basketball, ping pong and other sports.

In 2010, several traditional tournaments devoted to outstanding sportsmen were held, for example, a memorial skiing competition named after the two-time Hero of Socialistic Labor B. Muzurkov; tournaments in badminton, ping pong and darts commemorating B. Brokhovich; a cross-country race for the S. Zolotukha Prize; chess competition for the N. Dollezhal Prize; and contests in gorodki (a traditional Russian form of outdoor bowling) for the of A. Kallistov Prize.

In October 2010, Atom Sport became affiliated with the International Workers' Sports Confederation. The Ministry of Sports, Tourism and Youth Policy of Russia named Atom Sport one of the leaders in social activities.

4.5.3. CHARITY

In 2010, ROSATOM organizations implemented about 350 charity projects. Donations amounted to 1.08 billion rubles. Traditional corporate charity includes:

- initiatives to support Russian historical and cultural heritage projects;
- initiatives in ecology and solving "nuclear legacy" problems left behind by past economic and defense activities;
- initiatives to support mass amateur sports, including children's sports;
- educational initiatives and projects launched by educational institutions;
- initiatives in the area of cultural and moral education of young people;
- patriotic initiatives and donations to various ceremonial events related to memorable dates;
- support of veterans, disabled people and those who are experiencing life difficulties;
- other assistance, including nonfinancial help.

To create a transparent and consistent system of interaction with the stakeholders as relates to charity activities, the ROSATOM Concept of Charity Activities and Interaction with Local Communities was adopted on 18 February 2010. This Concept defines some basic principles of philanthropic activity including:

- preferential support of charity initiatives that can promote generally valid social changes while meeting local challenges;
- preferential support of initiatives that offer the most effective solutions and are able to yield measurable results;
- dedicated nature and purposefulness of measures to address the most acute social issues;
- use of bidding mechanisms (where applicable) as the most fair way of distributing limited funds with maximum efficiency for local communities;
- encouragement of personal philanthropic acts, volunteer work and sponsorship.

In 2010, the powers of the Charity Council of ROSATOM were significantly extended. Since then, the Council's experts have been reviewing all philanthropic initiatives and projects proposed by the Corporation organizations and enterprises.

The main target for 2011 is to synchronize ROSATOM's interests with those of other charity agencies in the areas of ROSATOM's presence.

ROSATOM's (Techsnabexport) patronage of military units

Sponsorship support: RUB 14 million.

Patronage of the Russian Ministry of Defense's detachments is a traditional form of ROSATOM charitable activity. The sponsored units include the Tagil Missile Division, the Northern Fleet's Submarine Force and ballistic missile heavy cruiser Dmitry Donskoy.

In 2010, the following was accomplished:

–improvement of materiel support of military training (repairs of quarters, transfer of road vehicles, purchases of new books for libraries and new PCs, etc.);
–involvement in arrangements of summer camps for children of Northern Fleet servicemen (about 120 children of sailors and about 30 children of the military staff of the Central Test Site were sent to Black Sea resorts);
–organization of festivals, concerts and gala events on professional holidays;
–medical services (examination of submarine crews by specialists from the Federal Medical Biological Agency).

Rosenergoatom's "Orphanage" Humanitarian Program

This is a program to support children who live and study in nunneries or cloistered orphanages. The program helps to educate and socialize kids. It covers nine orphanages set up by the Russian Orthodox Church where more than 250 orphans live. In 2010, total financing amounted to 15 million rubles.

The program encompassed several major projects:

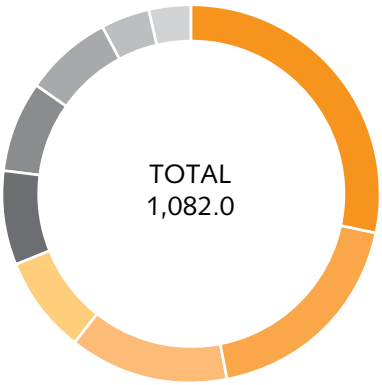
–"Personnel matters" (teach-ins and trainings for teachers);
–Demo lessons (excursions and multi-subject educational tours, for example, to the Solovky Islands, Lake Baikal or places associated with Pushkin, where the children can learn more about geography, history, literature, arts and sciences);
–"A Start in Life" (individually tailored tutorials for those who would like to continue their education in a university, and assistance finding employment);
–"Harmonious personality" (additional education, season tickets to concerts, museums, etc.);
–socializing events (events with involvement of external organizations and "new" adults; traditional Christmas festival, psychological team trainings, team tours, etc.).

As of 31 December 2010, papers were formalized and legal status gained for 110 children. All children in the sponsored orphanages have personal legal documents; the kids over 14 also have international passports.

Owing to the cofinancing agreement with the SOGAZ insurance company, 200 kids were able to get medical insurance and passed a complete medical diagnostic examination. Some children were taken to hospitals because of serious diseases that can be cured at an early stage and prevented from further development.

The main target for 2011 is to establish a consultancy center specializing in the human rights of children. This work is to be done together with the synodal department of social service and church charity of the Russian Orthodox Church. The center will also help nongovernmental institutions for the children without parents' care. The center will be staffed by qualified psychologists, lawyers and guardianship experts.

The structure of donations made by the State Corporation ROSATOM in 2010, mln rubles



308.9 28.5%	Russian historical and cultural heritage
202.0 18.7%	Environmental activities and dealing with "nuclear legacy" challenges
146.5 13.5%	Mass amateur sports, including children's sports
90.9 8.4%	Other types of support, including urgent medical care
85.7 8%	Support of veterans, disabled and indigent people
83.1 7.7%	Culture and moral education of young people
81.1 7.5%	Educational initiatives and support of educational projects
46.0 4.2%	Competitive charity
37.8 3.5%	Patriotic education and donations to ceremonial events related to memorable dates

4.5.4. HISTORICAL SCOUTING

Many organizations in the nuclear industry have had their own historical scouting teams that search for unknown WWII military casualties and missing soldiers. The most pro-active position in this sphere is taken by Rosenergoatom Concern: five nuclear power plants (Kalinin, Kursk, Leningrad, Novovoronezh and Smolensk NPPs) keep their own scout teams consisting of about 70 plant personnel.

In 2008, the Union of Historical Scout Teams of Russian NPPs was established. In 2010, the united team excavated in Zubtsevsky District of Tver Region where heavy fighting took place in 1941-1943.

Historical scouts from Kursk, Novovoronezh and Smolensk NPPs organized so-called lessons in courage in schools. They were held on the eve of the Day of the Defenders of the Fatherland and Victory Day. Scouts from Leningrad Region took part in recreations of events from prominent dates in the history of two Russian patriotic wars – the War of 1812 and the War of 1941-1945. The third interregional Memory Watch event was held at Kalinin NPP from August 24 to September 2, 2010.

The Historical Scouting Movement museum was opened in Desnogorsk in 2003. It was established by the scout team of Smolensk NPP. In 2010, work to set up such museums was in progress in Udomlya, Sosnovy Bor, Kurchatov and Novovoronezh. During the Victory Day celebrations, Smolensk and Leningrad NPP scouts organized a display of Historical Scouting Museum exhibits in the ROSATOM Moscow headquarters.

4.5.5. SOCIAL PROJECTS FOR "NUCLEAR LEGACY" PROBLEMS

In recent years, the Corporation has been closely involved in resettlement programs and land reclamation programs in Muslyumovo Village (Chelyabinsk Region) and Oktyabrsky Village (Transbaikal Territory). The programs are realized in cooperation with local authorities. Participation in the resettlement programs is a voluntary initiative of ROSATOM (all issues related to local territories are the responsibility of federal, regional and municipal authorities as a rule).

The Muslyumovo villagers' resettlement program has been carried out by Rosatom together with Chelyabinsk Region Government since 2006.

On the whole, 598 families were moved to new living places in the period from December 2006 till May 2011, of them 79 were moved in 2010. In this village there is an information center where local people can get legal advice or consultation on resettlement matters free of charge. The workers in this information center provide legal advice and support to local people in court hearings dealing with resettlement issues both within the framework of this program and under other federal or regional resettlement programs. In 2010, ROSATOM spent 210 million rubles on land reclamation in the Techa River flood area and Musluymovo village.

The program for Oktyabrsky villagers' resettlement has been carried out by ROSATOM together with the Transbaikal Territory government since 2007. In the reporting year, total financing of the program by ROSATOM amounted to 264.88 million rubles, including 11.85 million rubles from the federal budget allocated by the Federal Government for the Federal Target Program "A New Home" for 2002-2010. There are plans to build six multistory buildings in Krasnokamensk that will accommodate 747 families. In 2009, two houses were built (for 272 resettled families); in 2010 three houses were built for 324 families.

4.6.

ENVIRONMENTAL SAFETY

4.6.1. ENVIRONMENTAL POLICY

"The Bases of Environmental Policy" (Environmental Policy) of the State Atomic Energy Corporation ROSATOM has been in practice in ROSATOM since 2008, the aim of which is safe and sustainable development of industry organizations in order to ensure the achievement of the strategic goals of Russian Federation environmental policy: the preservation of natural systems, maintaining their integrity and life-supporting functions for the sustainable development of the society, improvement of living standards, improvement of public health and demography, and ensuring the environmental security of the country.

In the reporting year, a Comprehensive Plan for Environmental Policy Implementation for the Period until 2015 was developed and a list of ecologically significant organizations and enterprises comprising production divisions with potential sources of impact on human health and environment was implemented. The list contains 58 such organizations and enterprises (Appendix 7). In 2010, Methodological Guidelines were developed specifying requirements for the preparation of environmental reports and submission of information on licensing activities.

In 2010, 58 environmental reports were issued that present information on the activities of enterprises in the area of the environmental protection and environmental security, on the implementation of the Environmental Policy of the State Atomic Energy Corporation ROSATOM; the development and introduction of an environmental management system; industrial ecological monitoring results; interactions with state authorities, local authorities, public ecological organizations, scientific and social institutions; and the population.

The reports were presented to the ROSATOM Public Council and regional forums, published on the official Internet sites of the organizations and on the Corporation Public Council website and forwarded to bodies of the state power, local authorities and public organizations as well as to regional Public Informational Centers.

In 2010, work on the introduction and certification of management systems for their compliance with the requirements of international standards of the series ISO 9001, ISO 14000 and OHSAS 18001 was carried out. In Rosenergoatom, certification audits of the environmental management systems were carried out; ecological certificates of compliance with GOST R ISO 14001-2007 of the environment management systems of Kola NPP, Kursk NPP, Leningrad NPP, and Novovoronezh NPP were obtained; inspection audits of the Rosenergoatom headquarters, Balakovo NPP, Rostov NPP and Smolensk NPP were carried out, in the process of which expert auditors from the DQS management certification body gave high marks to the level of development and effective functioning of the Concern's environmental management system.

In JSC TVEL in 2010, five organizations underwent certification audits (UECC, SCC AECC, MPZ, CMP). Five organizations (ChMP, NCCP, KC, and PA ECP) received confirmation of certificate validity during supervisory audits. An important aspect of the environmental effectiveness of JSC TVEL was the development of unified STK-18 methodology "Environmental Aspects. Procedure of Identification and Assessment" for the identification of significant ecological aspects and risk assessment. Within the framework of an Integrated System of Quality, Ecology, Health Protection and Labor Safety Management of the Fuel Company, complying with the requirements of international standards ISO 9001, ISO 14001, OHSAS 18001, IAEA GS-R-3 and GS-G-3.1, in 2010, a Corporate system of health protection and labor safety management was developed and certified in JSC TVEL, MSZ, NCCP, ChMP, and KC. The corporate quality management system was developed to ISO 9001:2008 requirements; at the enterprises, certification of compliance with the said standard was performed. Work is being implemented to include the integrated management system of the enterprises that entered TVEL management as part of the establishment of the Fuel Company .

In 2010, a number of environmental indicators were improved. Due to the termination of the chemical etching operation for RBMK-1000 fuel rods at MSZ, releases of fluorides decreased by 50% and nitric acid by 8% . The introduction of a recirculated water supply at AECC led to a decrease of effluents by 5.1 mln m3 (37% to the volume of discharge in 2009). The replacement of cooling equipment at PA ECP with units operating with safe coolants and a decrease in the use of freons in process operations resulted in a three-time reduction of Freon-113 (0.16 t per year) and halving Freon-12 (4 t per year) emissions.

Russian NPPs make a significant contribution to combatting global warming. Thanks to them, the release of 210 million tons of carbon dioxide into the atmosphere is prevented annually.

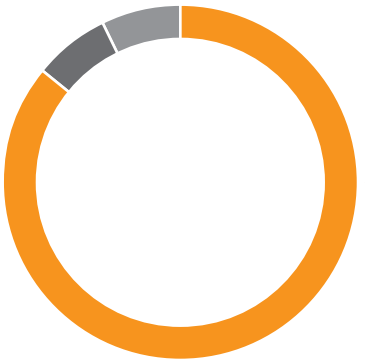
Source: website of the RF Ministry of Energy (http://minenergo.gov.ru/activity/powerindustry/powersector/structure/types/).

4.6.2. ENVIRONMENTAL IMPACT

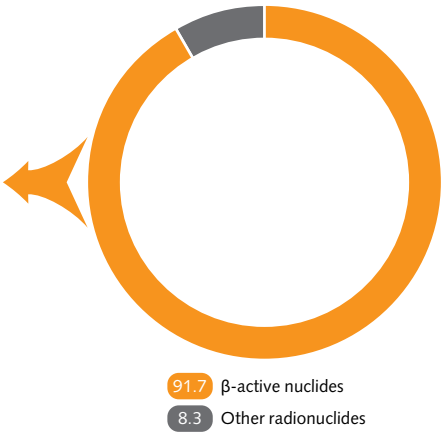
Radioactive effluent disposal in the basins of seas and oceans, mln m³

Baltic Sea (Atlantic Ocean basin)	Black Sea (Atlantic Ocean basin)	Azov Sea (Atlantic Ocean basin)	Caspian Sea	Pacific Ocean	Arctic ocean
24.48	4.86	114.51	37.3	12.74	74.16

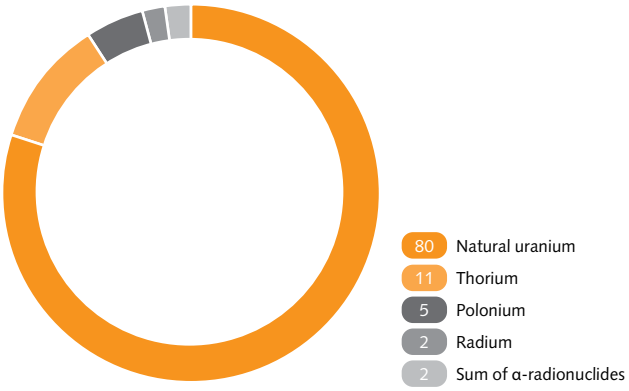
β-active nuclides



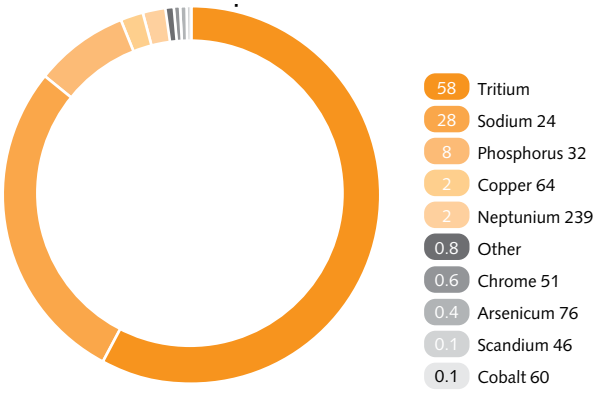
Structure of radionuclide activity



Contribution of α-emitting radionuclides to the activity of effluents discharged by Corporation organizations and enterprises in 2010, Bq



Contribution of β-emitting radionuclides to the activity of effluents discharged by Corporation organizations and enterprises in 2010, %

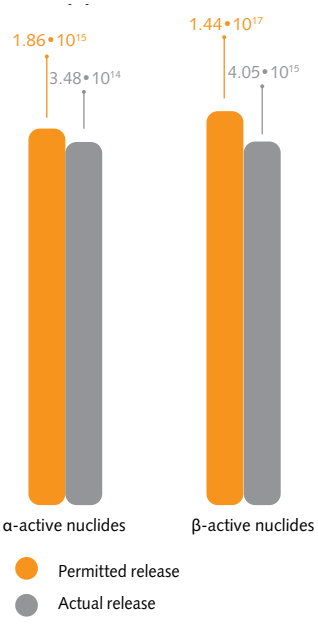


RELEASES AND DISCHARGES OF RADIONUCLIDES

In 2010, the radiation load on the environment was decreased. The summary activity of radionuclides emitted into the atmosphere by ROSATOM State Corporation enterprises amounted to $4.21 \cdot 10^{15}$ Bq, which is 16% less than in the previous year. The total activity was 91.7% dependent on β-emitting nuclides consisting of 86.0% inert radioactive gases (IRG) and 6.9% tritium. The decrease in β-emitting nuclide release was mainly due to a decrease in IRG at MCC (by 16.5%) because of the shutdown of reactor ADE-2 (in total, IRG releases decreased by 18.8%).

The α-active radionuclide emissions ($3.48 \cdot 10^{14}$Bq) by 95.1% consist of radon-222 coming from uranium-excavating productions. In comparison with the previous year, releases of α-emitting nuclides increased by 3.9% due to an increase in radon release at PIMCU. In the industry as a whole, the releases of α-emitting nuclides amounted to 15%, β-emitting nuclides – 3.0% of the permissible limit.

Correlations between the actual and permitted release of radionuclides by Corporation organizations and enterprises in 2010, Bq



In 2010, there were no radionuclide releases above the permissible limits at Corporation enterprises. The amount of discharged cobalt-60, strontium-90, zirconium-95+, niobium-95, ruthenium-103 and iodine-106, iodine-131, cesium-134, cesium-137 were 1% to 7% of the established limit.

The enterprises discharged 268.0 mln m^3 of waste water with activity of $4.43 \cdot 10^{13}$Bq into surface bodies of water. Compared to 2009, this water discharge grew by 13.8 mln m^3 (5.4%), activity decreased by $5.4 \cdot 10^{13}$Bq (by 2.2 times). At the same time, at some enterprises of the Corporation, waste water discharge decreased: at MCC and PA Mayak, discharges decreased by 37.6 mln m^3, at SSC IPPE by 1.4 mln m^3.

The discharge of α-emitting radionuclides ($3.17 \cdot 10^{10}$Bq) into the open hydrographic network is by 80.1% connected with natural uranium discharged by PIMCU.

Discharges of β-emitting radionuclides ($3.17 \cdot 10^{10}$Bq) into the open hydrographic network are comprised of: tritium 58.0 %, sodium-24 27.8%, phosphorus-24 7.9%; discharge of the most hazardous radionuclides does not exceed 2% of the summary discharge (including strontium-90 1.5%, cesium-137 0.04%).

In general, ingress of radionuclides with effluents into the open hydrographic network amounted to 50.5% in terms of α-emitting nuclides and less than 2% of β-emitting nuclides of the established limits.

WATER USE

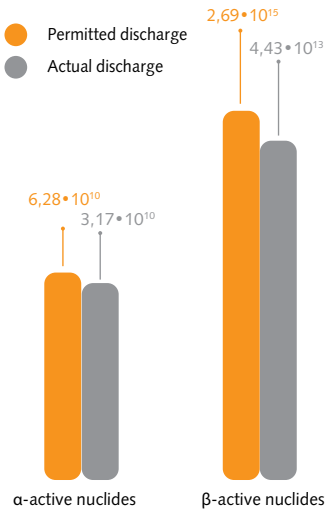
The nuclear industry is one of the major users of water resources; in 2010, its share in the summary annual water intake from Russian Federation natural water resources amounted to 10% (in 2009 about 10.5%).

Water intake by ROSATOM State Corporation organizations and enterprises in 2010

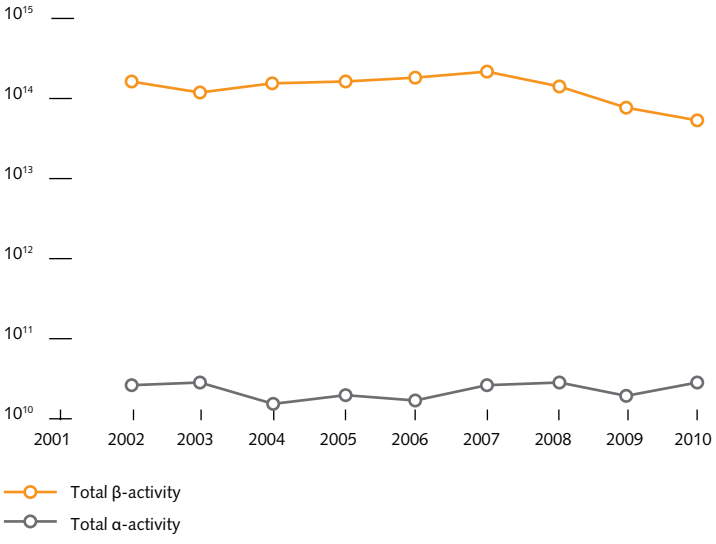
	Volume, mln m^3
Sea water	5,150.8
Fresh surface water	2,755.1
Underground water layer	97.3
Public water supply	0.7
Total	**8,003.9**

Fresh water intake from natural water sources (surface and underground) was 8,003.9 mln m^3, of them 7,791.0 mln m^3 were used for industrial purposes, including technical quality fresh water – 2,591.4 mln m^3, drinking water – 72.1 mln m^3, sea water – 5,127.5 mln m^3 (sea water consumption grew mainly due to the growth of sea water intake by Leningrad NPP, by 225.8 mln m^3).

Correlations between the actual and permitted release of radionuclides by Corporation organizations and enterprises in 2010, Bq



The dynamics of individual radionuclide emission by Corporation organizations and enterprises in 2001-2010, Bq



	2002	2003	2004	2005	2006	2007	2008	2009	2010
Tritium	6.55E+13	5.45E+13	4.61E+13	3.80E+13	3.75E+13	3.73E+13	2.30E+13	3.81E+13	5.01E+13
Sodium 24	1.34E+14	7.21E+13	1.45E+14	1.62E+14	1.83E+14	2.21E+14	1.26E+14	4.58E+13	1.22E+13
Phosphorus 32	1.92E+13	1.71E+13	2.24E+13	2.20E+13	2.50E+13	2.89E+13	1.36E+13	7.35E+12	3.52E+12
Stroncium 90	2.30E+12	1.85E+12	1.89E+12	1.59E+12	1.07E+12	1.05E+12	9.44E+11	8.60E+11	7.00E+11
Neptunium 239	1.21E+13	9.92E+12	1.12E+13	1.62E+13	1.74E+13	1.48E+13	9.17E+12	2.08E+12	8.25E+11
Summary α-activity	**3.33E+10**	**3.84E+10**	**2.09E+10**	**2.74E+10**	**2.34E+10**	**3.03E+10**	**3.29E+10**	**2.65E+10**	**3.27E+10**
Summary β-activity	**2.37E+14**	**1.59E+14**	**2.31E+14**	**2.44E+14**	**2.68E+14**	**3.08E+14**	**1.78E+14**	**9.83E+13**	**6.88E+13**

In total, 30.6 billion m³ of water were used at the enterprises, 22.8 billion m³ of them were recirculated and reused water. The water savings in the industry due to systems of recirculated and reused water supply amounted to 74.4% (without taking into account sea water – 89.4%), which is significantly more than for the energy sector of the country on average.

In the structure of the effluent discharge into the open hydrographic network in 2010, regulatory clean water was prevalent – 98.25% (7,209.5 mln m³), the share of regulatory purified water was 0.75% (55.5 mln m³), contaminated effluents – 1.0% (72.8 mln m³).

In 2010, the discharge of contaminated effluents amounted to: into the Azov Sea (Atlantic Ocean basin) – 0.3 mln m³, into the Pacific Ocean – 1.8 mln m³, into the Arctic Ocean – 19.9 mln m³, into the Caspian Sea – 20.3 mln m³, to the Baltic Sea (Atlantic Ocean basin) – 30.5 mln m³.

In the structure of the contaminants discharged with the effluents into the natural water bodies, in 2010, chlorides (43,700 t), dry residue (31,900 t), sulfates (9,500 t), suspended substances (2,900 t), and nitrates (1,200 t) were dominant.

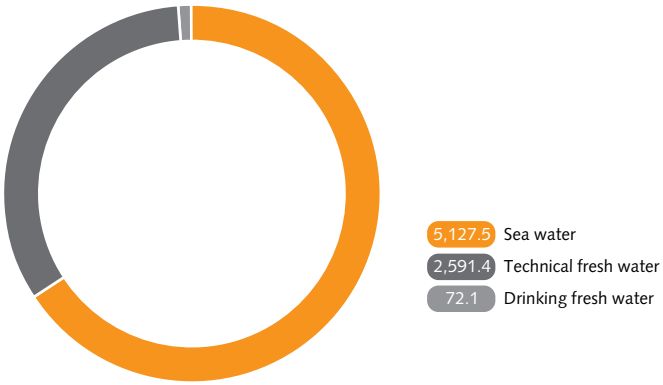
In comparison with the previous year, contaminated water discharges decreased by 3.9 mln m3 (5.1%). The larger part of the contaminated water (70%) comes for A.P. Alexandrov NITI, PA ECP, and PA Start. The main substances released with waste water in excess of permissible limits are oil products, ammonium nitrogen, galvanic processing waste (heavy and non-ferrous metals), nitrites, and manganese.

During the previous decade, a decrease was observed in the volume of contaminated effluents being discharged: in the reporting year, comparing to 2000, discharge of this category of water decreased more than thrice (2000 – 261 mln m³, 2010 – 72.8 mln m³). Minimization of contaminated waste water discharges is considered an important ecological task by industry enterprises.

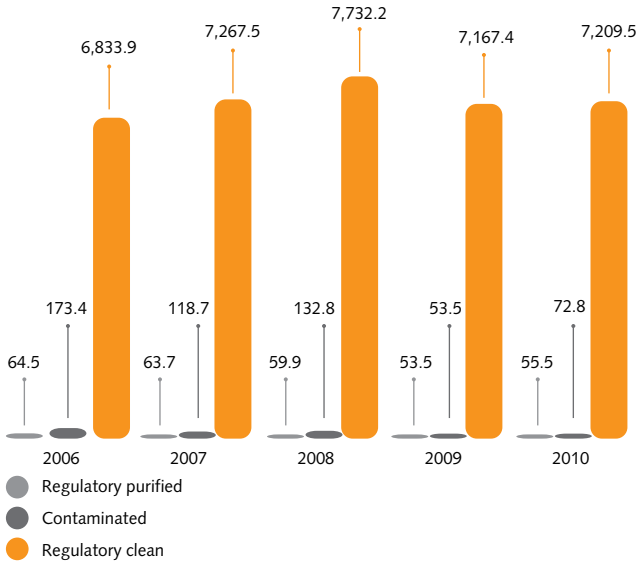
EMISSION OF HARMFUL CHEMICAL SUBSTANCES

Discharges of harmful chemical substances (HCS) into the atmospheric air in the reporting year amounted to 64,300 t. Discharges of solid substances amounted to 22,900 t, gaseous and liquid substances to 41,400 t, among them: sulfur dioxide 19,200 t, oxides of nitrogen 14,500 t, carbonic oxide 4,800 t, hydrocarbon 0,200 t, volatile organic compounds 1,600 t, other 1,100 t. Capture percentage is 88.1 %.

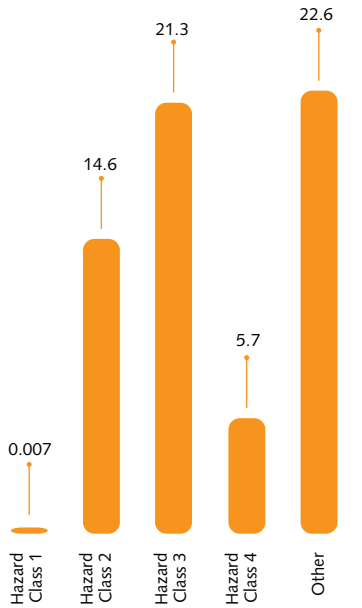
Water use for production needs, thnd. t



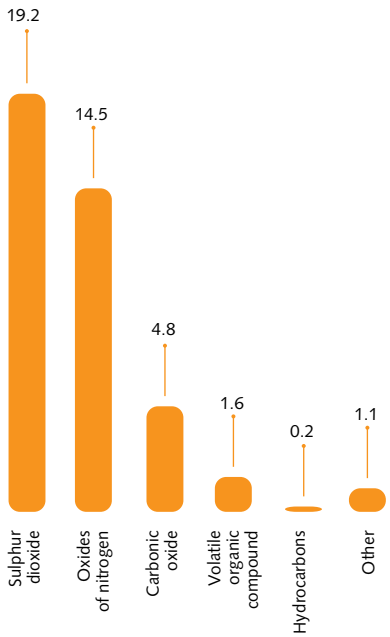
Dumps into surface water basins by Corporation organizations and enterprises in 2006-2010, mln m³



Releases of contaminants per classes in 2010, thousand tons

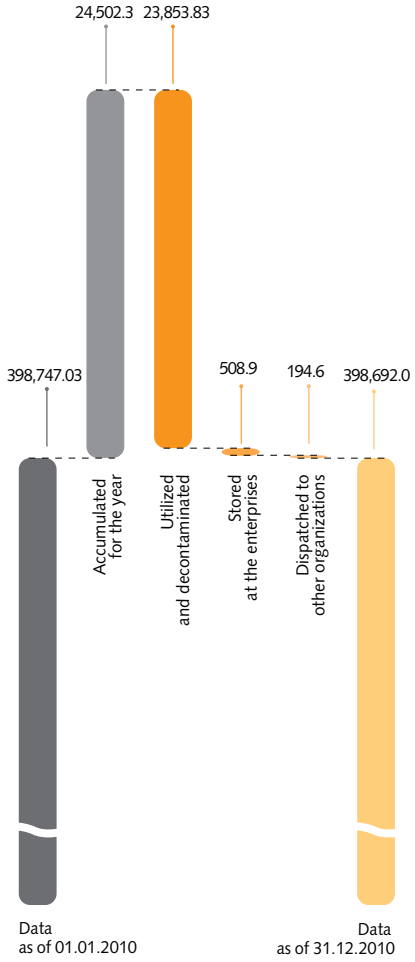


Composition of gaseous and luquid harmful substances discharges, thousand tons

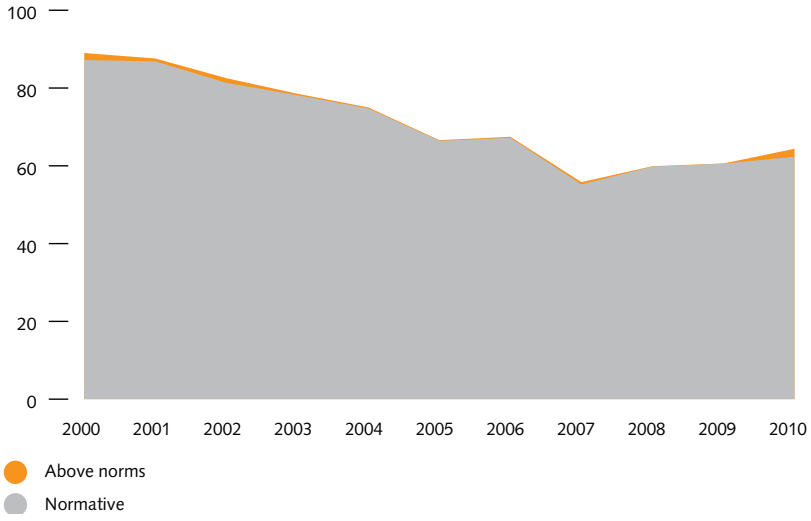


* Classes of hazard are assigned in accordance with the Federal Waste Classification Catalogue FKKO adopted by the Ministry of Natural Resources of Russia Order No. 786 of 02.12.2002.

Radwaste management in 2010



Dynamics of HCS discharge changes by Corporation organizations and enterprises in 2000-2010



Discharge growth took place at MCC in connection with a reactor shutdown due to an increase in the amount of the fuel burnt by the thermal power facilities to supply heat to the city and industrial site.

Discharges in excess of industry norms amounted to 2,054.8 t, or 3.2% of total industry discharges.

PRODUCTION AND CONSUMPTION WASTE

In 2010, 24.5 mln t of production and consumption waste were generated at the enterprises, of which 24.38 mln t (97.7%) constituted non-hazardous waste (Hazard Class 5). Their main bulk was generated at PIMCU (23.9 mln t); it represented overburden rock and enrichment tailing from the ore-processing factory.

As of December 31, 2010, of the total volume of the waste collected, waste of Hazard Classes 3, 2, and 1 constitute less than 0.1%, Class 4 – 1.2%; 98.8% are wastes of Hazard Class 5 (non-hazardous).

IMPAIRED, CONTAMINATED AND RECOVERED TERRITORIES

As of December 31, 2010, the area of impaired lands at the nuclear engineering enterprises amounted to 5,249.4 hectares, of which 2,970.6 hectares were impaired by development of mineral deposit sites, and 2,160.1 hectares – in the course of industrial facility construction.

In the reporting year, the area of recultivated land amounted to 16.6 hectares. Land recultivation was carried out to build water reservoirs and for other purposes at the following enterprises: PA Electrochemical Plant (9.1 hectares), Electrochimpribor Combine (4.85 hectares), and Novosibirsk Chemical Concentrate Plant (2.65 hectares).

A total area of contaminated lands is 474.70 km^2.

Waste type	Amount as of 01.01.2010, thnd. t	Formed during the year, thnd. t	Reused and rendered harmless of those formed in 2010		Handed over to other organizations, thnd. t	Disposed of at enterprises, thnd. t	Amount as of 31.12.2010, thnd. t
			thnd. t	%			
Waste of all hazard classes – total including	**398,747. 03**	**24,502.3**	**23,853.83**	**97.4**	**194.6**	**508.9**	**398,692.0**
Hazard Class 1	0.33	0.3	0.03	10.0	0.2	0.1	0.3
Hazard Class 2	13.0	13.1	12.9	98.5	12.8	0.2	0.2
Hazard Class 3	10.0	10.8	5.4	50.0	4.9	1.4	9.1
Hazard Class 4	4,756. 1	97.5	19.1	19.6	83.8	27.6	4,722.6
Hazard Class 5	393,968.1	24,380.6	23,816.4	97.7	92.9	479.6	393,959.8

The area of contaminated territories at ROSATOM State Corporation organizations and enterprises as of 31.12.2010, km^2

Total		including:					
		At the industrial site		In sanitary-protective zone		In surveillance zone	
474.70		62.53		215.05		197.13	
Land	Water bodies	Land	Water bodies	Land	Water bodies	Land	Water bodies
365.72	**108.98**	59.36	3.17	126.45	88.60	179.91	17.22

4.6.3. RADIATION IMPACT

PUBLIC RADIATION BURDEN

The safe operation of enterprises that employ nuclear technologies is confirmed by a very low level of additional public radiation exposure due to their operation. According to the results of radiological hygienic certification implemented in the subjects of the Russian Federation since 1999, annual effective exposure doses to the public within monitored areas for most of the enterprises of the industry are below 10 μSv per year – the threshold below which it is not reasonable to take any measures to optimize radiological protection.

The additional radiation burden on the public residing in the monitored areas around nuclear facilities is below 0.01 mSv per year. This is confirmed by official data given in "Radiological and Hygienic Certificate of the Russian Federation for 2009". Radiation doses exceeding this minimum value were detected among the population of Ozersk (PA Mayak, Chelyabinsk Region) – 0.11 mSv; Seversk (SCC, Tomsk Region) – 0.047 mSv; Desnogorsk (Smolensk NPP, Smolensk Region) and Zarechniy (PA Start, Penza Region) – 0.04 mSv, due to living in territories that had been contaminated by past accidents.

Gamma dose rate at contaminated territories in ROSATOM organizations and facilities, as of 31 December 2010, μGy/h

	Up to 0.5	0.5 - 2	More than 2
Total, km²	**360.51**	**48.13**	**66.04**
including			
sites	18.89	18.01	25.63
controlled areas	155.08	22.55	37.39
surveillance zones	186.54	7.57	3.02
Ground	**257.36**	**46.54**	**61.80**
including			
sites	18.88	17.96	22.52
controlled areas	69.11	21.04	36.28
surveillance zones	169.37	7.54	3.00
Water bodies	**103.15**	**1.59**	**4.24**
including			
sites	0.012	0.05	3.11
controlled areas	85.97	1.51	1.11
surveillance zones	17.17	0.03	0.02

The given doses are considerably lower than the permissible limit of 1 mSv per year and, undoubtedly, they comply with requirements (NRB-2009/1999) for ensuring public safety during normal operation of radiological facilities.

Public exposure to radiation from naturally-occurring radiation sources varies across the Russian Federation from 1.8 mSv per year per person (in the Republic of Mari El) up to 8.0 mSv per year in Stavropol Territory. A substantial variation of natural background radiation is also common for European countries.

The contribution of facilities employing nuclear technologies to the total exposure dose to the population of Russia, which is 3.9 mSv per year on average, is estimated as fractions of a percent. Natural and medical sources of ionizing radiation are the key sources of ionizing radiation exposure. The average public dose in the Russian Federation is similar to worldwide exposure and is consistent in all the regions where Russia's major nuclear facilities are situated.

Initiatives to mitigate environmental impact in 2010

Aspects of environmental impact	Initiatives to mitigate impact
Water use	Water recycling systems with a capacity of 12.0 million m³ per day were put into service at CMP. Water recycling systems were put into service at AECC, which allowed a reduction of waste water discharges by 5.1 million m3 (37% of the discharge volume in 2009).
Hazardous substances releases	Equipment for capture and disposal of hazardous substances from released gases with a capacity of 193,800 m³ of gas per hour put into service at AECC, and installations with a capacity of 13.000 m3 of gas per hour at MZP. MSZ stopped using chemical poisoning of RBMK-1000 fuel, which allowed a reduction of fluoride releases by 50% and nitrogen acid releases by 8%. Refrigerating equipment was replaced at PA ECP by devices using safe coolants. As a result, the release of freon-113 became 3 times lower and was equal to 0.16 t, while the release of freon-12 became 2 times lower and was equal to 4 t.
Hazardous substances discharges into bodies of water	Waste water clean-up plants were put into service with a capacity of 12,000 m³ per day at Smolensk NPP, with a capacity of 40,000 m³ per day at PIMCU, with a capacity of 0.6 m3 per day at OKBM Afrikantov, with a capacity of 8,420 m³ per day at NIIIS, with a capacity of 0,650 m³ per day at IP.
Generation of production waste	The volume of waste located on the day surface was considerably reduced by placing the overburden in Urtuiskiy (Transbaikal Territory) lignite open-cast in internal dumps (technical stage of recultivation), and by shipping waste of hazard category 4 (sulfur waste of sulfuric acid production) for use in the cement industry.
Radiological impact	Construction of a road and bridge over the Barneva River (Kurgan Region) was finished to prevent shipments of hazardous material through towns and villages.

4.6.4. EXPENDITURES ON ENVIRONMENTAL PROTECTION

TOTAL EXPENDITURES ON ENVIRONMENTAL PROTECTION

Every year, the enterprises of the State Atomic Energy Corporation ROSATOM implement extensive measures for environmental protection. In 2010, total expenditures on environmental protection amounted to 10.64 billion rubles, including 5.48 billion rubles of current expenses, 1.16 billion rubles of expenses on major equipment maintenance and 4.00 billion rubles of investments in capital assets. Most of the investments were allocated for maintenance, operation and overhaul of waste water purification facilities and rational use of water resources.

INVESTMENTS IN CAPITAL ASSETS

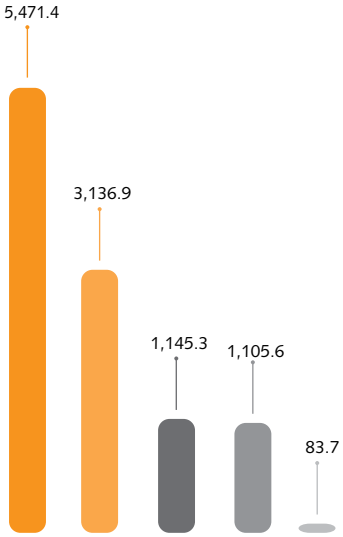
Investments in capital assets in the reporting year were equal to 4.01 billion rubles. Most of them (3.74 billion rubles, or 93.4%) were allocated for protection and rational use of water resources (the largest part at Kalinin NPP – 3.32 billion rubles).

The share of the funds provided by ROSATOM organizations and enterprises in total expenditures for environmental protection in 2010 amounted to 96% (3.85 billion rubles).

EXPENDITURES ON REDUCTION OF ENVIRONMENTAL IMPACT

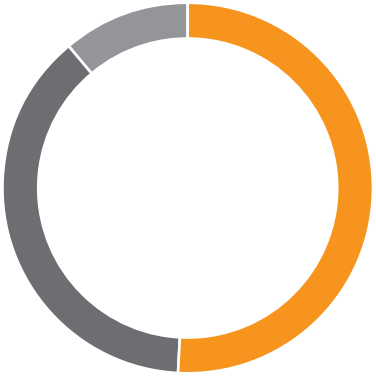
In the reporting year, the funds used for reducing radiological impact on the environment from all financial sources amounted to 7.32 billion rubles (in 2009, 6.28 billion rubles), including 6.0 billion rubles of investments in capital assets (in 2009, 5.04 billion rubles). Funding from the federal budget totaled 1.73 billion rubles (in 2009, 2.17 billion rubles), including 0.81 billion rubles of investments (in 2009, 1.73 billion rubles).

Current expenditures on environmental protection, mln RUB



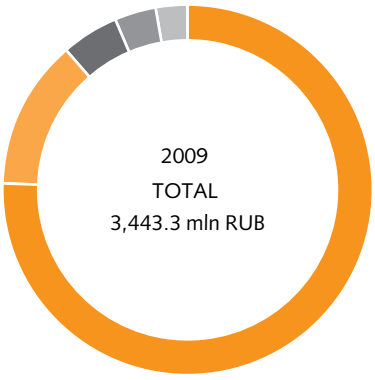
- Current expenditures on environmental protection, total
- Protection and rational use of water resources
- Environmental protection (ground resources) from industrial and consumption waste
- Atmosphere protection
- Recultivation of land

Distribution of expenditures on environmental protection by ROSATOM, %

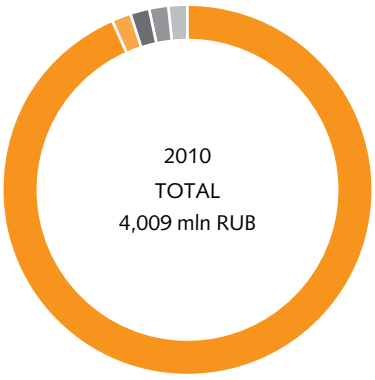


- 51 Current expenditures
- 38 Investments in capital assets
- 11 Expenditures on overhaul

Investments in capital assets for environmental protection in 2010, %



- 2,602.6 mln RUB (75.6 %) Protection and rational use of water resources
- 449.7 mln RUB (13.2 %) Enterprises, grounds or disposal of toxic industrial and other waste
- 176.8 mln RUB (5.1 %) Protection and rational use of land
- 117.8 mln RUB (3.4 %) Installations (facilities) for waste disposal
- 94.6 mln RUB (2.7 %) Protection of atmospheric air



- 3,744.5 mln RUB (93.4 %) Protection and rational use of water resources
- 71.92 mln RUB (1.8 %) Installations (facilities) for waste disposal
- 66.13 mln RUB (1.6 %) Protection and rational use of land
- 64.01 mln RUB (1.6 %) Enterprises, grounds or disposal of toxic industrial and other waste
- 62.42 mln RUB (1.6 %) Protection of atmospheric air

ECOLOGICAL PAYMENTS

Payments for emissions and effluents of chemical pollutants and for waste disposal in the reporting year amounted to 104.9 million rubles. The amount of payments decreased as compared to the previous year (111.8 million rubles in 2009). The largest payments were for waste disposal – 45.7 million rubles (43.6%) and for discharges into water bodies – 44.9 million rubles (42.8%).

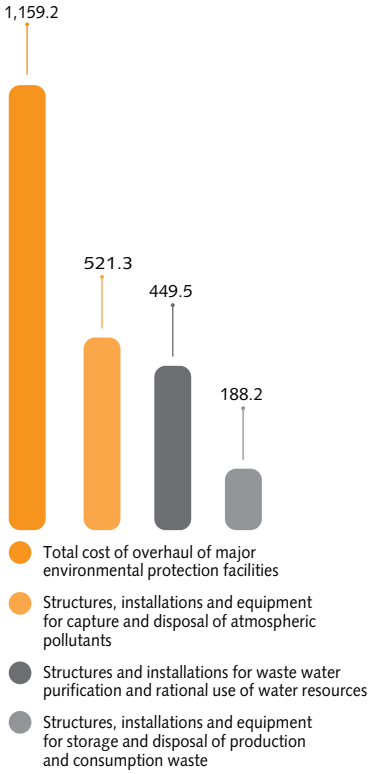
An important environmental task of the Corporation is to reduce excessive impact parameters, which inflict payments equal to 65.3 million rubles, or 62.2% of the total payments for contaminating the environment.

Payments for negative environmental impact in 2008-2010, mln RUB

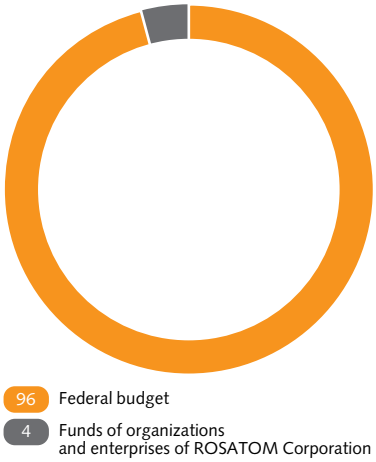
	2008	2009	2010
Damage reparation payments (claims or penalties) inflicted for breach of environmental legislation	4.54	0.30	0.80

In 2010, no nonfinancial sanctions for violation of environmental legislation and standards were applied to organizations and enterprises of Rosatom.

Investments in capital assets on environmental protection in 2010, mln RUB



Investments in capital assets for environmental protection by sources in 2010, %



Expenditures on reducing environmental impact in some ROSATOM organizations and enterprises, mln RUB

Organization/enterprise	Expenditures
AECC	79.20
MSZ	57.00
NCCP	76.00
PIMCU	2.67
SCC	452.50
Balakovo NPP	160.80
Leningrad NPP	4041.33
Novovoronezh NPP	5.99
Kursk NPP	754.14
SSC IPPE	152.21
DalRAO	64.15
NPA Lutch	7.20
PA Mayak	994.21
SevRAO ZF No.1	3.30
PA Start	35.20
Kirov-Chepetsk branch of RosRao	40.00
Samara branch of RosRao	10.73

Payments for releases (dumps) in 2008-2010, mln RUB

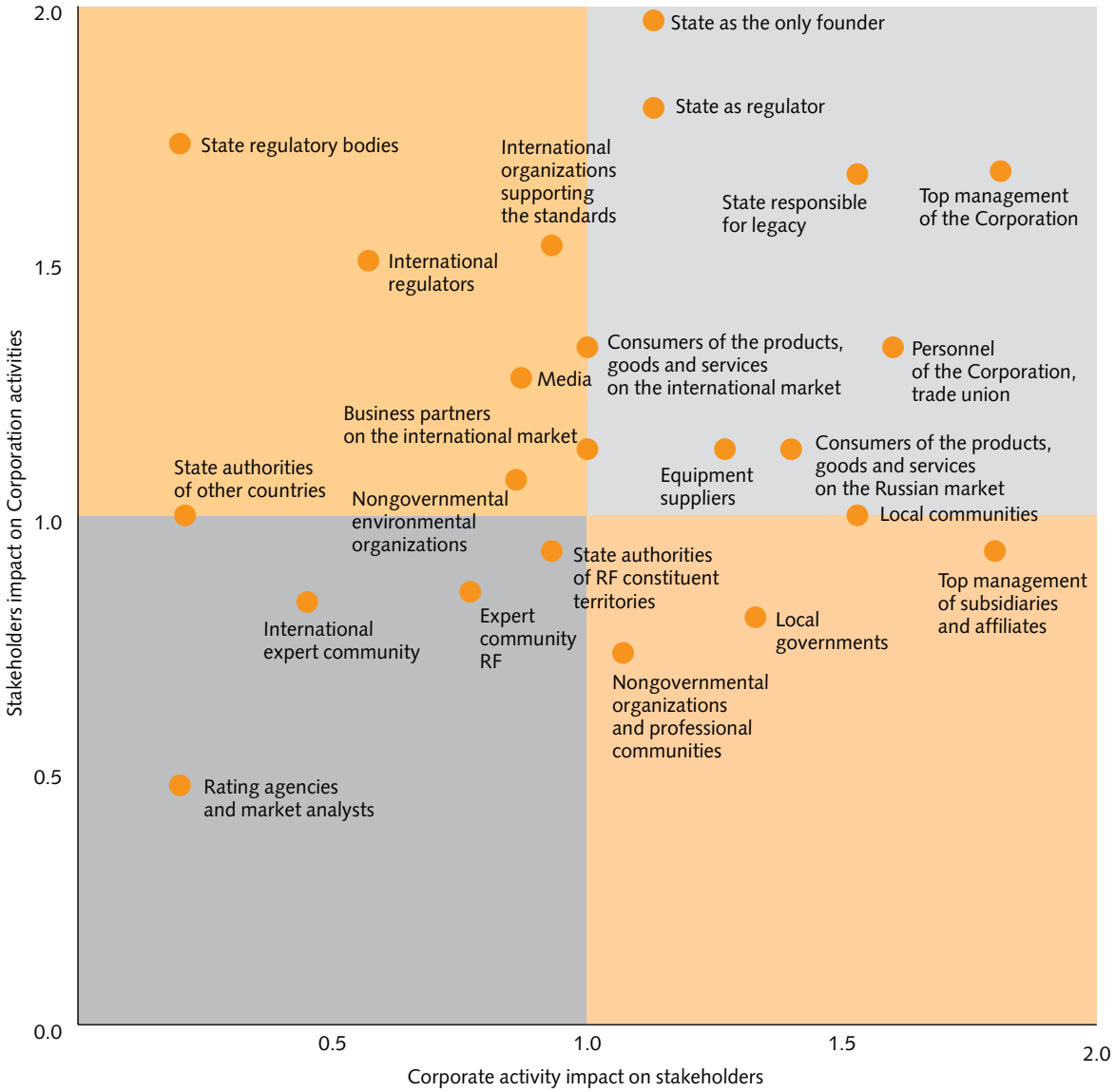
Item	2008	2009	2010
Payment for allowable releases (dumps) of contaminants (disposal of production and consumption waste) including:	46.6	38.6	39. 6
into bodies of water	5.0	4.6	4.3
into the atmosphere	4.0	4.7	4.2
disposal of production and consumption waste	37.4	29.2	31.1
into subsurface horizons	0.2	0.005	
Payment for excessive releases (discharges) of contaminants (disposal of production and consumption waste) including:	24.2	73.3	65.3
into bodies of water	10.3	21.9	40.6
into the atmosphere	2.6	20.6	10.2
disposal of production and consumption waste	11.3	29.0	14.6
into subsurface horizons	-	1.8	0.1
Payment of allowable and excessive releases (discharges) of contaminants (disposal of production and consumption waste), total:	70.8	111.9	104.9

4.7.

ENGAGEMENT OF STAKEHOLDERS

4.7.1. APPROACH OF STAKEHOLDERS ENGAGEMENT

Ranging of stakeholders



Engagement of stakeholders

Stakeholders	Interests of stakeholders	Types of engagement of stakeholders
State authorities of the Russian Federation	1-16	b, d, i, j
State control (supervisory) authorities	1, 2, 4, 6, 7, 10	c, d, i, j
Regional state authorities	2, 6, 10, 15	b, c, d, i, j, f, h, g
Local authorities of host regions	2, 15	c, d, f, j, i, h, g
International organizations including those of the nuclear sector	1, 2, 6, 7	a, d, i, j
ROSATOM Organizations	3, 5, 8, 13, 16	d, e, i, j
Producers and suppliers of equipment and services	5, 7, 10	d, i, j
Consumers of technologies, products and services	3, 5, 6, 8, 9, 12	d, i, j
Business partners	5, 6, 7, 8, 10, 13	d, i, j
Trade union association	6, 14, 16	f, d, e, i, j
Nongovernmental, including environmental, organizations	2, 4, 10, 11	c, d, i, j, f, h
Employees of the Corporation and its organizations, as well as organizations representing their interests	6, 10, 14, 16	f, d, i, j, l, e
Local communities in host regions	11, 15	c, d, i, j, f, h, k, g
Educational establishments	3, 14, 16	m, e, i
Financial institutions	3, 5, 10	d, i, j
Rating agencies, market analysts, experts	5, 10, 13	d, i, j
Citizens of the Russian Federation	1, 2, 4, 6, 10, 11, 15	d, i, j, k

Interests of stakeholders

1. Nuclear material and technology nonproliferation regime
2. Nuclear, radiation and environmental safety
3. Technological modernization of nuclear industry
4. Effective use of budget funds
5. Economic efficiency of ROSATOM organizations
6. Observance of the Russian and international legislation
7. Fair competition and responsible market conduct
8. Competitiveness in the world market
9. Enhancement of quality of product and services
10. Transparency of ROSATOM activities, including transparency of procurement
11. Solving "nuclear legacy" problems of past economic and defense activities
12. Secured energy supplies
13. Learning from international management guidelines and standards
14. Decent reward for personnel, professional career advancement, safe labor conditions
15. Improvement of quality of living in host regions
16. Development of ROSATOM and its organizations skill pool

Types of interaction with stakeholders

- **a** Cooperation with nuclear-related international organizations, participation in international programs and projects
- **b** Participation in lawmaking activities
- **c** Public hearings and public ecological reviews of NPP unit construction projects
- **d** Publication of public reports by the Corporation and its organizations
- **e** Programs of training and improvement of skills of the personnel
- **f** Social programs and projects
- **g** Participation in development of host regions
- **h** Charity
- **i** Dialogs: forums, conferences, seminars, exhibitions, fairs
- **j** Information: industry-wide media, websites, ARMS information centers
- **k** Sociological research
- **l** Hotlines
- **m** Cooperation programs with nuclear-related institutions of higher education

ROSATOM has a broad circle of stakeholders both in Russia and abroad due to the wide range and specific character of its activities (simultaneously solving state-level and business-related tasks). Selection of main stakeholders and goal-oriented interaction with them are determined, first of all, by the strategic objectives of the Corporation and by social responsibility.

The basic principles laying the ground for that interaction are respect and consideration for the interests of all participants, open and productive cooperation, informing the stakeholders of the Corporation's activity in a timely and detailed manner, aiming at concrete benefit for all participants, and fulfilling commitments assumed.

The main areas of engaging the stakeholders of the Corporation are:

- cooperation with nuclear-related international organizations and participation in international programs and projects (see the sections "International cooperation" and "Scientific and Technical Complex" in this report);
- participation in lawmaking (see the section "National Atomic Energy Policy");
- holding public hearings and public environmental expert reviews regarding construction projects of NPP units;
- organization of dialog-like interactions (forums, conferences, seminars, exhibitions, fairs);
- organization of transparent procurement (see the section "Procurement Management");
- publication of public reports by the Corporation and its organizations;
- personnel training and advanced training (see the section "HR Management");
- social programs and projects, including charity (see the section "Social Effects");
- participation in social and economic development of host regions (see the section "Social Effects");
- provision of information (industry-wide media, websites, information centers, a Internet portal providing online radiation monitoring data);
- publishing;
- sociological research;
- interaction with nongovernmental organizations, including environmental NGOs;
- supporting youth and veterans.

Type and frequency of interaction with stakeholders in different fields, and mechanisms of response and consideration of their management interests are determined independently for each field.

Cooperation with stakeholders relies on guidelines stipulated by federal law, international standards, as well as corporate documents; these include:

- Federal Law No. 317-FZ of 1 December 2007 "On the State Atomic Energy Corporation ROSATOM";
- Federal Law No.174-FZ of 23 November 1995 "On Environmental Review";
- Federal Law No. 3297-1-FZ of 14 July 1992 "On the Closed Administrative Territorial Formation";
- ROSATOM strategy for engaging local communities and charity;
- ROSATOM policy in the area of public reporting;
- Unified industry procurement standard of ROSATOM;
- Unified social policy of ROSATOM;
- Sector agreement on nuclear power, industry and science for 2009-2011;
- Basic environmental policy of ROSATOM.

Several governance bodies were established within the Corporation (Public Council of ROSATOM, Council of Managers of Nuclear Industry Organizations, Charity Council, Public Reporting Committee, Arbitration Committee, etc.), and their tasks include managing relations with stakeholders.

The Council of Managers of Nuclear Industry Organizations

The council's activities are aimed at enhancing quality and providing unified management for the Corporation's organizations.

The Council's tasks:
- coordinating activities and representing the interests of the Corporation's organizations,
- enhancing the quality of decisions,
- detecting problems and risk assessment,
- identifying and propagating good practices,
- preparing recommendations to ensure the unification of the management of the Corporation's organizations.

In 2010, the Council reviewed issues relating to ROSATOM corporation procurement, including the federal law draft "Purchasing of goods, works, services by state corporations (companies), parties to natural monopolies, and organizations of the public utility complex," introduction of the Unified System of Remuneration of Labor, and application of the ROSATOM Financial Policy.

4.7.2. ARRANGEMENT OF EXHIBITIONS AND FORUMS

EXHIBITION ACTIVITIES

The Corporation traditionally pays great attention to participation in exhibitions, acting both as a participant and initiator of exhibitions and forums. In 2010, several large-scale exhibition events were arranged: forums for nuclear industry suppliers – Atomex in Moscow and Atomex-North-West in St. Petersburg, with a total number of participants exceeding 400. The main event of the year is the ATOMEXPO 2010 International Forum, attended by nuclear industry companies and utilities from over 40 countries of the world. In the near future, plans are to arrange for new Atomex regional forums for suppliers, including international ones. In addition, unique exhibition projects are planned, such as the establishment of exhibitions in a portable exhibition facility based on a special train, arrangement of displays on the nuclear icebreaker Lenin devoted to the history of nuclear icebreaker fleet and exploration of the Arctic, and arrangement for a nuclear industry history museum at the All-Russia Exhibition Center.

FORUM-DIALOGS

The 6th International Forum "Atomic Energy, Society and Safety" was held on April 20-21, 2010, in St. Petersburg on the initiative of the ROSATOM Public Council and interregional NGO Green Cross. The Forum agenda included issues of nuclear industry development, management of radwaste and spent nuclear fuel, engineering policy and profile education. It discussed various aspects of resolving global environmental problems, including on-site monitoring of subsoil resources and some issues of Global Partnership Program and nonproliferation. The Forum was attended by representatives of France, Finland, Norway, the United States and Russia.

The 3rd regional forum "Nuclear Enterprises, Society and Safety – 2010" was held on November 18-19, 2010, in Chelyabinsk. It was arranged on the initiative of the ROSATOM Public Council with the support of interregional NGO Green Cross, PA Mayak and Chelyabinsk Region NGOs (Public Chamber of Chelyabinsk Region, Public Council on Environmental Problems of Chelyabinsk Region, Cooperation in Public Protection Social Environmentalists' Movement, Ozersk section of the Green Planet public movement, etc.) Presentations devoted to the main aspects of the nuclear enterprise development were made during the forum, including on environment protection, and involvement of municipal and regional authorities and civil society in state and public surveillance of nuclear facilities performance.

The main event of the year is the ATOMEXPO-2010 International Forum, attended by nuclear industry companies and utilities from over 40 countries of the world.

The ROSATOM Public Council

The Public Council consists of representatives of federal-level public organizations, members of the Russian State Duma, expert society and leaders of research companies.
The Council's objectives:

- Enhancement of ROSATOM's interaction with the public and environment protection organizations and citizens of Russia as regards development of policy in the area of atomic energy applications, environment protection, nuclear and radiation safety;
- Assisting in the Corporation's activities aimed at resolving social and public problems in host regions as well as the Corporation's transparency enhancement.

Regional public councils operate in Irkutsk, Murmansk and Kostroma Regions; in 2010, a regional council was established in Leningrad Region.
In the reporting year, the Public Council completed the following activities:

- Scientific-expert assessment and publication of reports on the environmental safety of the Corporation subsidiaries;
- Participation in the arrangement of public hearings and public environmental review of nuclear industry facilities;
- Performance of a set of ecology-biological, socio-demographic and radiation-sanitary studies on nuclear facilities;
- Performance of scientific-methodological consulting for the ROSATOM center for subsoil resource monitoring at ROSATOM enterprises;
- Completion of pilot research on the application of new research technologies (high-resolution geo-radars, automatic pilot-free planes) in a set of design-research studies on selection of sites for nuclear power facilities (e.g., Kostroma NPP).

4.7.3. PUBLIC REPORTING OF ROSATOM AND ITS ORGANIZATIONS

APPROACH TO CORPORATE REPORTING

Enhancement of the responsibility of large companies towards a broad range of stakeholders is internationally recognized as an important factor in the development of world markets. Companies' transparency and accountability has become an inherent part of implementation of sustainable development principles. The ultimate goal of ROSATOM is to create a company that would be a player in the world market of nuclear technologies, requiring institution of an industry-wide public reporting system based on internationally recognized corporate reporting norms. This system was established in 2009.

In this period, a methodology for elaboration of integrated reports combining financial and nonfinancial reporting and Russian and international approaches has been elaborated and tested. The selection of this format was conditioned by the intention of complying with international corporate reporting trends and strengthening the confidence of the stakeholders in the activities of the Corporation and its organizations by presenting exhaustive information. Integrated reports enable clearer understanding of the dependence between financial and nonfinancial aspects of a company's activities and allow management to be more efficient in selecting priorities in combination with business objectives and public needs; therefore, they make more substantiated managerial decisions, which in their turn minimize risks and improve investment attractiveness.

ROSATOM publishes three reports annually. According to amendments made to Federal Law No. 317-FZ of 1 December 2007 "On the State Atomic Energy Corporation ROSATOM," since 2011, the report to the Government of the Russian Federation is published in its non-confidential part on the site[1] (statement by the Audit Commission on the financial and economic activities of ROSATOM and its organizations in 2010 – see the Appendix 4). The integrated report is intended for a wide audience of the stakeholders and elaborated with consideration of Russian and international standards of the corporate reporting and has been voluntarily published by the Corporation since 2010. The safety report has been published by ROSATOM jointly with the Nuclear Safety Institute of the Russian Academy of Sciences since 2002[2].

Public reports of the Corporation and its organizations

[1] http://www.rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/resources/89bb8f00476d845a9866da9e1277e356/GO.30-06-2011.pdf

[2] http://www.rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/resources/880fd38047d27ac49760b7dadfdf304b/report11.pdf

All the open joint stock companies publish annual reports on their activities. Key organizations (for the purposes of public reporting) elaborate integrated reports based on corporate requirements for public reporting (in 2010, eight integrated reports were elaborated). The Corporation's organizations and enterprises included in the list of environmentally significant entities publish environmental reports of their own (58 environmental reports were published in 2010). All reports are placed on the Internet sites of the organizations.

RESULTS FOR 2010

The ROSATOM Public Reporting Committee was established in 2010. It regulates issues of public reporting within the industry, including expert review of report concepts and drafts of key organizations' reports.

A cardinal event of 2010 was the publication of the Corporation's first report addressed to a broad range of stakeholders.

During the reporting year, the regulatory public reporting base was updated with new revisions of the ROSATOM public reporting policy[1] and Generic Standard for public reporting of key organizations, as well as the ROSATOM Public Reporting Standard, which includes report generation guidelines.

The public reporting indicators accepted in the international community do not allow the specific aspects of ROSATOM activities and those of its subsidiaries to be reflected; so the Corporation is tasked with developing a nuclear sector public indicators system. This report contains an expanded (as compared to the 2009 Report) group of "nuclear" indicators (Appendix 2).

The Director General annually approves a list of key (for the purposes of public reporting) organizations, where elaboration of annual reports should receive special attention. Key organizations are those whose activities are of public and political importance and/or of significance for positioning ROSATOM on the national or international markets. The key organizations in 2010 were JSC TVEL, Techsnabexport, Rosenergoatom, St. Petersburg AEP, Atomstroyexport, NIAEP, AEM, and ARMZ.

In 2010, training and methodological support for employees of the key organizations was continued: seminars of a total duration of 90 class hours were held, a manual was published, and consultancy arranged for.

For the purposes of reporting quality improvement, the Corporation completed a number of studies, including the one performed by PricewaterhouseCoopers on ROSATOM's order with respect to systems of public reporting and reports of comparable Russian and international companies including in the nuclear sector.

Since 2009, an industry-wide contest has been held in accordance with methodology close to that of the international "Best Annual Reports" competition. The assessment is made with the involvement of independent experts; in 2010, they were the Russian Union of Industrialists and Entrepreneurs, Russian Institute of Directors, Ernst & Young, PricewaterhouseCoopers, Center for Corporate Development of the Independent Directors Association, Da-Strategy agency of corporate development, ROSATOM Public Council, the Russian State Duma Commission on Legislation Support to Natural Monopolies' Activities, state corporations and commercial organizations with state interest, and the Institute for Sustainable Development of the Public Chamber of the Russian Federation.

According to the industry-wide contest held in 2010, three first places were given – to the annual report by NIAEP (88.74 points out of 100), Atompredmetzoloto (83.14 points), and St. Petersburg AEP (80.43 points). The most significant qualitative growth was demonstrated by NIAEP, which moved from the fifth place last year to first place in the reporting year. The public annual report of ROSATOM for 2009 did not participate in the contest; however, it was assessed by independent experts and earned the highest score (89.91 points).

Annual reports of ROSATOM and ARMZ were prize winners in the national annual reports contest.

TARGETS FOR 2011

- Intensive integration of stakeholder interaction mechanisms in the reporting processes of the key organizations;
- Change in the model and methods of the industry-wide annual reports contest, including a significant increase in the number of contestants;
- Continuation of development of the public indicators system for nuclear sector companies;
- Preparatory activities to launch an initiative for development of an industry application for nuclear sector companies;
- Broadening the number of key (for the purposes of the public reporting) organizations;
- Development of public reporting systems in the key organizations (adoption of corporate documents, establishment of functional responsibility centers);
- Introduction of electronic forms of annual reporting.

[1] http://rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/aboutcorporation/public_reporting/

4.7.4. INFORMATION AND COMMUNICATION

INFORMATION CENTERS

Since 2008, the Corporation has been implementing a project on establishing nuclear energy information centers (IC) in Corporation host regions. The main objectives of such centers are as follows: sharing basic knowledge about the nuclear industry, public education and high school students' career guidance.

The first information center was opened in Tomsk in 2008, the second one in Voronezh in 2009. As of 31 December 2010, 10 information centers operated in Russia (in addition to the ones already mentioned, centers were established in Rostov-on-Don, Kaliningrad, Murmansk, Nizhniy Novgorod, Novosibirsk, Krasnoyarsk, Chelyabinsk and St. Petersburg). In 2011, information centers are planned for Vladimir, Yekaterinburg, Irkutsk and Ulyanovsk. Preparatory work is underway to establish ICs in Vietnam and Turkey.

During the year, the ICs received over 80,000 visitors (in total, they were visited by more than 160,000 people) who were presented a "World of Atomic Energy" multimedia session. In 2010, a Kurchatov library was founded in the IC, a series of "Atomic Meetings" workshops was conducted and public lectures given by "Global Energy" prize winners E.P. Velikhov and F.M. Mitenkov were broadcasted.

In February 2010, the information center project received the PIME Award for Communications Excellence as the best European communications project in the nuclear industry. The award founders are the IAEA, Nuclear Energy Agency and European Atomic Forum FORATOM; the award is given for the best creative strategy and the use of innovative communications tools.

Every Information center is a modern multimedia cinema combining panoramic 3D projection, computer graphics and animation, stereo sound, interactive consoles and personal monitors. All the activities in the Centers are free of charge for the visitors.

INTERNAL CORPORATE COMMUNICATIONS PROGRAM

Striving for more efficient involvement of the Corporation's organizations in meeting its strategic goals, in 2010, ROSATOM launched the Internal Corporate Communications Program, which is to create a common information and communication space. A series of projects were implemented under the Program aimed at informing employees of the Corporation's enterprises and organizations for nuclear industry development strategy and ensuring their engagement in discussions and development of this strategy.

DEVELOPMENT OF LONG-TERM ACTIVITY PROGRAMS OF ROSATOM ORGANIZATIONS

In 2010, a special series of workshops was held in enterprises to discuss the strategic goals of the Corporation and produce proposals on their achievement in the most effective manner. The workshops also worked out the long-term activity programs of the organizations, based on the ROSATOM strategy. The workshops were attended by representatives of 70 organizations of the Corporation. This work resulted in a Road Map that breaks down the Corporation's objectives to the level of organization targets.

Also in the reporting year, 11 movies were shot on various aspects of the ROSATOM strategy, which were shown at the enterprises.

THE "ROSATOM COUNTRY" INTEGRATED INFORMATION PROJECT

The objective of the project is to create an informational and analytical TV program "ROSATOM Country" and corporate newspaper of the same title.

Weekly TV news releases and analytical programs cover important industry events and developments in the nuclear industry; the program is broadcasted in the "closed" cities and satellite cities of NPPs, and placed on the Internet and intranets of the Corporation's enterprises.

The prime objective of "ROSATOM Country" newspaper is to cover issues of nuclear industry reform along with clarifications on some specific aspects. The newspaper circulation approached 63,500 copies (16 pages, twice a month, for free). Research done at the end of 2010 showed that "ROSATOM Country" newspaper had become the most popular of industry-wide media (over 30% of the Corporation's employees are frequent readers).

In the reporting year, an art project, "Clean Energy," was implemented aiming to engage schoolchildren and teachers in CATF in the "ROSATOM Country" project. Entertaining events helped children to get better insight into industry activities and corporate culture. The "Clean Energy" endeavor included art training for teachers and students, attended by more than 300 persons, and an "Atom Street Art" painting session.

Also in 2010, the "Living History" project was implemented. The project's objective is to create a comprehensive picture of the nuclear industry's past and provide outlook perspective on it by bringing together scattered pieces of information, historic evidence, recollections and documents, and enable readers to view the industry from different angles. Books, documents and reference information on the nuclear industry history are available at www.atomhistory.ru. Site visitors are offered exhaustive topical information presented so as to catch the eye and mind. The "Living History" project closely interacts with "ROSATOM Country" newspaper and benefits from feedback from initiative groups at the enterprises.

The Internal Corporate Communications Program embraces hundreds of thousands of people.

TRAINING IN COMMUNICATION SKILLS

In the reporting year, the "Three-Level Speakers' Training" educational project was implemented in 52 organizations of the Corporation. The aim of the project is to train industry workers in communication skills that help address various target audiences, enable them to convey clear and credible information on the nuclear industry and to handle existing myths and stereotypes.

"THE RING OF WEBSITES" PROJECT

In 2010, "The Ring of Websites" project was launched. The project is to create a virtual cluster of websites of leading organizations of the nuclear industry on a common IT platform (IBM Websphere). This approach simplifies technical support of the "ringed" websites and raises traffic. In 2010, website designs were updated at ROSATOM, TVEL, SPbAEP, RosRAO, Ye.E. Sedakov NIIIS and MCC under this project (the plan is to bring the number of project players up to 15 by 2011 yearend). A further plan is to make the Shared Services Center a common ground for IT services that will offer the "ringed" players a set of services (hosting, technical support and information content), which would allow to optimize significantly of the cost of maintaining the websites.

INTERACTION WITH MASS MEDIA

ROSATOM interacts on a permanent basis with the federal Russian mass media, including 10 leading information agencies, 15 print publications, about 20 TV channels and radio stations, and Internet resources. Furthermore, interaction with foreign media from more than 20 countries has been arranged. In 2010, 14 press tours were conducted to the nuclear industry's enterprises and over 10 press events were organized.

In 2010, a documentary series, "The Atom's Encyclopedia," was released to cover naturally occurring radiation phenomenon, fabrication of nuclear fuel, principles of nuclear reactor operation, cutting-edge nuclear technologies and the atomic icebreaker fleet. The series was repeatedly broadcasted by television channels Russia 24 and Russia 2.

In the "Blogosphere" project, work was carried out with Internet users. The main work areas included daily monitoring of public opinion in social networks and training of press services of Corporation organizations in operating within the blogosphere.

During the year, 120 bloggers visited six nuclear industry facilities and published photo reports and their impressions of the tours, with over 300,000 blog visitors. The website arranged for collection of information from those who wished to visit NPPs. That helped to compile a database of 800 bloggers wishing to visit nuclear sites and issue photo reports for their readers. Every month, about 50,000 people read the official blogs of the Corporation and its organizations.

In the reporting year, a project was launched to create virtual tours of nuclear power and industry facilities. The project is aimed at "virtually" demonstrating the operation of the facilities, including the functioning of the safety systems employed at all stages of the nuclear facility lifecycle.

4.7.5. INTERACTION WITH YOUTH

The Corporation's work with young professionals, including potential nuclear workers, is presented in the section "HR Management."

In addition, the Corporation supports the activities of industry-wide youth NGOs and programs involving children that engage kids from different countries.

INTERNATIONAL ASSOCIATION OF YOUNG NUCLEAR WORKERS

The nonprofit "International Association of Young Nuclear Workers" organization (NPO MAMA) was founded in 2004 to coordinate the activities of nongovernmental youth associations of nuclear workers in Russia and foreign countries. As of 31 December 2010, the organization had membership of about 1,000 people.

In 2010, NPO MAMA organized and participated in the interregional "Memory Watch" (Kaliningrad Region, September 11-24), "The Youth of NPPs: Safety, Science and Production" International Science and Technology Conference (Balakovo, Saratov Region, October 19-21); and a mobile exhibition of the Union of Historical Scout Teams of Russian NPPs.

The association organized an industry-wide Club of the Cheerful and Sharp-witted on the 65th anniversary of the nuclear industry (Obninsk, Kaluga Region) and took part in activities of the Union of Historical Scout Teams of Russian NPPs.

YOUTH SECTION OF THE RUSSIAN NUCLEAR SOCIETY

The Youth Section of the Russian Nuclear Society (YS RNS) was established in 1995. It includes 42 offices in organizations and enterprises of the Corporation that carry out scientific, education and career guidance activities, facilitate transfer of knowledge and competences to the younger generation and develop cooperation among nuclear professionals. The organization has a membership of more than 1,000 people.

In 2010, YS RNS organized and participated in the annual YS RNS conference "Youth Engagement in Solving Strategic Tasks of the Industry," which was held at the SSC IPPE on December 6-7; the annual conference of the Russian Nuclear Society was held in Moscow and Desnogorsk (Smolensk Region) on September 23-24; an industry-wide science and practice conference of young professionals and post-graduate students "Youth of NFC: Science, Production, Environmental Safety" was held at SCC on November 15-19.

In January, YS RNS, with support from MCC, held the annual regional Kurchatov Readings for the schoolchildren of Zheleznogorsk (Krasnoyarsk Territory), and arranged guided tours to the nuclear industry facilities and other events (contests, conferences, debate clubs, etc.).

The International Children's Creativity Project "NucKids"

Sixty-five schoolchildren from Russia, Ukraine, India, Iran and Bulgaria participated in the final stage where, guided by a team of trainers, within a short period of time (35 days) they staged a musical, "Go and Watch," which enjoyed success at venues in Moscow and Kiev.

Atomic Seliger

The Seliger-2010 youth forum in July included a session on "Innovations and Technical Creativity." For the first time, a 200-member delegation of the Corporation took part in the event. The delegation included young employees who represented nuclear industry organizations and NNRU MEPhI students.

At the forum, the young nuclear workers had an opportunity not only to attend lecture courses on "Commercialization of ROSATOM's Innovative Technologies," "Small Power Installations," "New Technological Platform of the Corporation," etc., but also to present their projects to the forum's experts, representatives of investment funds and venture companies. The participants presented more than 100 innovative projects and developments in nuclear power, nuclear medicine, etc.

Young nuclear workers participated in the Corporation's strategic session, where they refined their projects and integrated them with the Corporate Strategy. The projects presented were appraised to identify the best works: Medical Neutron Capture Therapy Set for Cancer Treatment by Kirill Nikel (NIKIET) and Regrowth Technology for Uranium Treatment by Vasily Tinin (SCC).

CHILDREN NETWORK SOCIETY

The International Children's Creativity Project "NucKids" started in 2009. Its main goal is to unite through creativity children of nuclear industry workers from different countries (for whom nuclear power development means the future, and many of those children will take direct part in building this future) in a common social network of fellow-thinkers. In 2010, more than 1,500 children from Kovrov, Vladimir, Seversk, Novouralsk, Angarsk, Zelenogorsk, Novosibirsk, Glazov, Elektrostal and other cities took part in tryouts. Sixty-five schoolchildren from Russia, Ukraine, India, Iran and Bulgaria participated in the final stage where, guided by a team of trainers, within a short period of time (35 days) they staged a musical, "Go and Watch," which enjoyed success at venues in Moscow and Kiev. The musical was also performed at the function on the occasion of the 65th anniversary of the nuclear industry and in "The Winter Fairytale" kids' camp.Kids are familiarized with the world of atomic energy through a creative, game-like process and continue their socializing in a designated network[1].

In 2011, new participants will be engaged in the project, including children from Russian and foreign companies of other industries and nuclear newcomer countries.

[1] www.nuckids.ru

4.7.6. INTRODUCTION OF THE CORPORATE CODE OF CONDUCT

Since 2008, ROSATOM's the "Introduction of the Code of Conduct in Organizations of Nuclear Industry" project has been implemented. In 2009, a draft of the Code was produced and, on a pilot scale, implemented in a number of leading organizations of the Corporation (in the organizations, officers responsible for ethics and conduct and Ethics Boards were introduced to address issues of conduct). The Corporation's website launched a hotline for reports of breaches of the code of Conduct[1].

After an analysis of the pilot endeavor, the Code of Conduct will be amended and introduced in all organizations of the Corporation to oblige employees and management of the Corporation and its organizations, consumers, contractors, investors and other partners to follow the ethical principles outlined in the Code of Conduct.

An objective of the 2010 project is to lay the grounds for the expansion of the project (to increase the number of organizations that adopted the Code of Conduct), including an analysis of the yearly testing of the Code on the pilot sites.

During the year, seminars were conducted on the introduction of the Code in organizations, mastering elements of ethical practice, and discussions of generic ethical conflicts, which included "The Technology of Implementing the Code of Conduct at NPPs" (Novovoronezh NPP, April 13-15) and "The Code of Conduct of ROSATOM: Training of Specialists in Ethical Practice. Basic Course" (SCICET, April 19-23; Kursk NPP, October 11-15).

In 2010, a methodological guide on introduction of the Code of Conduct at nuclear enterprises was written. The guide was produced on the basis of experience gained in the pilot organizations and IAEA standards. The guide describes the technology of introducing the Code of Conduct and contains a list of generic difficulties associated with the introduction of the Code.

In the reporting year, work continued to carry out educational events to familiarize target audiences with the project, in particular, at a seminar "Preparing Managers and Specialists Handling Radioactive Materials for Defense Purposes for Qualification Tests" (SCICET, June 2-9).

4.7.7. JUBILEE OF THE INDUSTRY

"The World's First NPP" Memorial Museum

In 2010, work was started to create a memorial museum at the world's first nuclear power plant and an education and exhibition center in Obninsk. The work is financed out of the own funds of ROSATOM.

The museum will be fully available in 2016. During this period of time, buildings will be refurbished and exhibits will be restored and fabricated for display in the museum and education and exhibition center. In 2010, the process of filing and digitalizing archived documents (NPP design and engineering documentation) started; video scripts were written.

The museum opened in the reporting year; the first displays were shown in its halls. Visitors can familiarize themselves with NPP history; tour the central control room, reactor hall, and director's office; and watch a video on NPP history and its role in nuclear power development. In 2010, the museum was visited by over 1,000 people.

In 2010, the Russian nuclear industry celebrated its 65th anniversary. This event was marked by a function held in Moscow and in Corporation host cities.

At the largest exhibitions, two topical displays were arranged: "65 Years of Victory – 65 Years of Industry" as part of "The Army and Society" exhibition dedicated to Victory in the Great Patriotic War, and the display "65 Years of the Nuclear Industry of Russia" became part of the ROSATOM general exhibition at the ATOMEXPO-2010 international forum.

During the celebration, Corporation's employees were given state and departmental awards. Orders, medals and commemoration badges issued on the occasion of the jubilee were given to over 3,000 employees and veterans of nuclear industry enterprises, scientists, cultural and arts professionals, as well as veterans of national nuclear corporations from Abkhazia, Armenia, Bulgaria, Finland, Hungary, Kazakhstan, Slovakia, and Ukraine.

On the occasion of the jubilee, special postage stamps were issued. Their cancellation ceremony was held in the Kremlin. A celebration concert was staged in the State Kremlin Palace.

[1] http://rosatom.ru/wps/wcm/connect/rosatom/rosatomsite/employee/corporateethics

4.7.8. SOCIOLOGICAL STUDIES

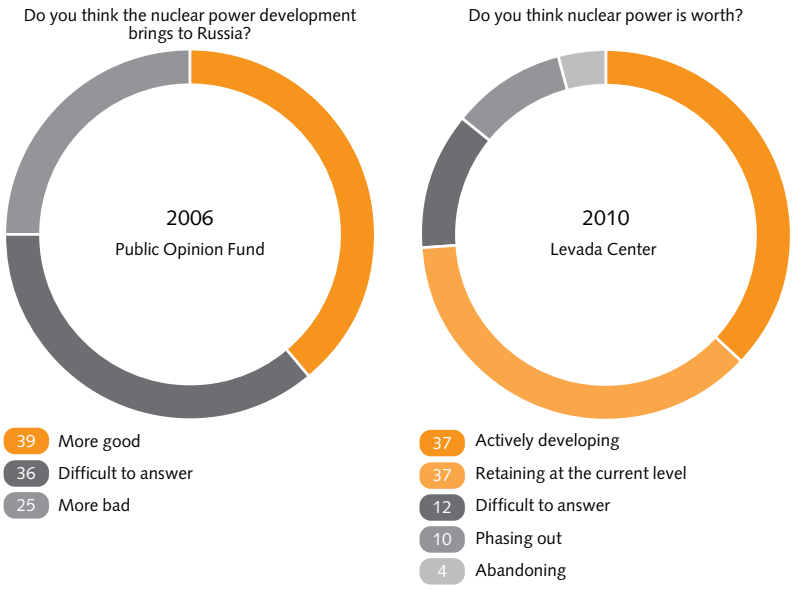
For many years, the Corporation has studied public opinion through regular sociological studies of various issues related to nuclear industry activities.

According to results of a Russia-wide poll conducted in 2010 by the Yuri Levada Analytical Center (Levada Center) and compared to past polls, the share of proponents of nuclear power as a source of electricity supply to the country has been steadily growing.

Also in 2010, research was conducted on how the international community received reforms in the Russian nuclear industry. The attendees of a session of the WNA (World Nuclear Association) were polled. It demonstrated a higher awareness, as compared to previous years, of Russian nuclear power development programs and their contents. This speaks of an understanding in principle of the current situation in the Russian nuclear industry by representatives of the foreign companies' management. Most of them believe that the ongoing reforms produce positive effects on the efficiency of Russian companies. (This opinion is held by respondents irrespective of their practical involvement in nuclear cooperation with Russia).

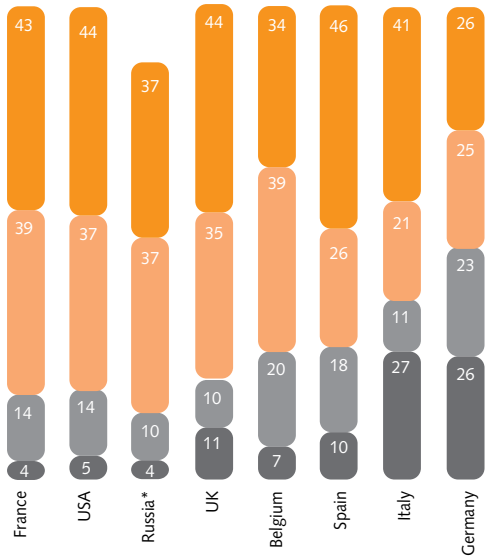
The Corporation also conducts in-house research. In the reporting year, employees of 51 organizations participated in polls on attitudes towards the nuclear power development program, corporate identity and personnel involvement. The research showed that, on the whole, attitudes towards industry reforms were positive; most employees were proud of being associated with ROSATOM and positively appraise the Corporation's management work. More than 75% of respondents expressed satisfaction with their employment. On average across the nuclear industry, 50% of employees showed a high degree of involvement.

Attitudes to nuclear power in Russia, %



Attitudes to nuclear power in Russia and worldwide, %

What is your attitude to the use of NPPs to produce electricity?



* In Russia, 12% of respondents selected the answer "Difficult to answer" this answer option was not offered to respondents in other countries

Source: TNS Sofres study; Levada Center in Russia, 2010

5 ENGAGEMENT OF STAKEHOLDERS IN DRAFTING THE REPORT

The interactions with the stakeholders were built up in accordance with:

- **Manual for reporting in the sustainable development area of Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) G3**
- **AA1000SES Standard of Institute of Social and Ethical Accountability**

In the course of the report elaboration the Corporation had

4 dialogues with the stakeholders

In total the stakeholders sent

82 proposals regarding the draft report and implementing public reporting system

70 %
of all the proposals were accounted

5.1.

APPROACH TO STAKEHOLDERS ENGAGEMENT

The transparency and accountability of ROSATOM was enhanced by engaging representatives of the stakeholders in drafting the report: they discussed various aspects of publicly significant activities of the Corporation and the reflection of these activities in the report, and participated in public hearings on the report. The procedures indicated are regulated by international standards: AA1000SES Institute of Social and Ethical Accountability and Global Reporting Initiative (GRI, version G3).

When preparing the previous annual report, ROSATOM assumed obligations for 2010 taking into account that most of them were already reflected in the 2009 report. In 2010, 6 out of 14 obligations related to report content were accounted for in the 2010 Safety Report and reports of the key enterprises; one obligation was taken into account when preparing this report (information concerning public opinion on nuclear power); one obligation (disclosure of information on the very low activity radioactive waste) will be considered after the adoption of the law on radioactive waste; six obligations were not accounted for and three of them are not possible to take into account as they require changes in legislation, etc.

Eight out of ten obligations for the public reporting system were considered when updating the regulatory documents, two were used when preparing this report (public dialogues in ROSATOM host regions with the participation of ecological organizations in discussing the report).

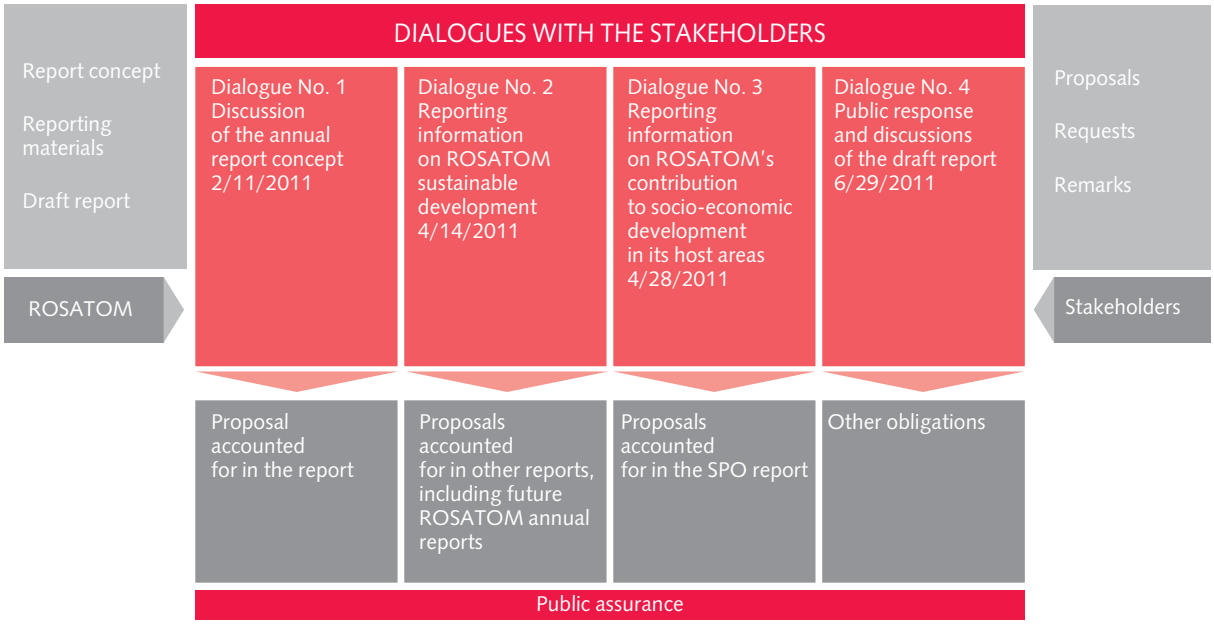
Preparing this annual report, the Corporation had four dialogues with the representatives of stakeholders. The topics discussed were as follows: "Discussion of a draft concept of the ROSATOM annual public report for 2010" (Moscow, 25 participants), "Disclosure of information on ROSATOM's activity in the area of sustainable development in the Annual Report" (Moscow, 22 participants), "Disclosure of information on the ROSATOM's contribution to the socioeconomic development of its host regions in the Annual Report" (Novouralsk, Sverdlovsk Region, 34 participants). The hearing and discussion of the annual report took place on 29 June 2011 in Moscow (54 participants).

The dialogues and discussions were attended by Director General Deputies, department directors, project managers, and experts in various spheres.

The stakeholders were represented by major ROSATOM companies, international organizations of the nuclear sector and large companies of other industries, as well as the Federal Environmental, Industrial and Nuclear Supervision Service, federal and regional authorities, local governments, public organizations and NGOs, educational, ecological and research institutions, business associations, the expert corporate community and members of ROSATOM's Public Council.

Representatives of the stakeholders made requests and concrete recommendations on disclosing various information in the annual report as well as their proposals regarding public reporting by ROSATOM (the minutes of the activities can be requested from ROSATOM's Communications Department).

Engagement of stakeholders in drafting the report



VIKTOR IVANOV

Chair of the Russian Scientific Commission for Radiological Protection, deputy director for science of the Medical Radiological Center of the RF Ministry of Health Care and Social Development

"The previous report said that our industry had continued to introduce the AWSIRA system (automated working station for individual risk assessment) and that 72% of ROSATOM employees had been assessed for individual radiological risks.

"The work on individual risk assessment and informing of every employee of his personal risk is unique, and has not been carried out on such a mass scale in any country in the world. In 2010, the number of ROSATOM employees assessed by this system amounted to 83.5%. This is a very good achievement certainly to be reflected in the report."

ALEKSANDR MAKARENKO

Executive director of the CATF Association in the nuclear industry

"One of the most important topics is the impact of ROSATOM activity on the destiny and life of the population in nuclear industry host regions. Improving the quality of life for local communities is a challenging task for the Corporation. However, there are good examples of positive changes in the lives of people in such nuclear communities. In this respect, Fuel Company TVEL, Rosenergoatom and other ROSATOM companies are trying their best to invest in the development of the 'closed' territories."

ELENA FEOKTISTOVA

Head of the Center for Corporate Social and Nonfinancial Accountability of the Russian Union of Industrialists and Entrepreneurs

"I would like to highlight the significance of the issue of sustainable development, which was raised in the report. This is an absolutely timely, useful and necessary issue. Recently, it has become more and more popular in Europe and the world at large, as it is widely addressed and connected with the business accountability of the companies.

"For the nuclear industry, this issue of sustainable development is especially vital, as international public attention is focused on nuclear power safety. Therefore, there is no doubt that this issue has not just been raised by ROSATOM, but is also being seriously discussed with representatives of the stakeholders."

5.2.

CONSIDERATION OF THE PROPOSALS FROM STAKEHOLDERS

In the course of the dialogues following report preparation, the stakeholders put forward 82 proposals and recommendations. The majority of these proposals related to public requests to include certain information in the report. During the discussions, some requests were referred to existing data sources.

ROSATOM has started to keep account of all recommendations that came up as a result of the discussions. In the end, 57 (73.1%) out of 78 recommendations and proposals concerning the draft report (in terms of report structure, content and the form of data presentation) were accepted, 13 (16.6%) were not taken into account, and 8 (10.3%) will be considered when drafting the report for 2011. One out of four proposals received on the reporting system were accepted and the other three will be considered in the future when improving the system of public reporting for ROSATOM and its organizations.

The unrecorded proposals dealt either with requests to disclose confidential information or were just of minor value.

Record of the most significant proposals

Proposals of the stakeholders	Proposal considered
1. Proposals for the draft report	
Make more analytical comments on the Corporation's financial and economic indicators.	Considered in the Section "Financial and economic indicators."
Comment on the Corporation's contribution to the economic diversification of "closed" territories, creation of new jobs and assurance of the self-reliance of single-industry towns.	Considered in the Section "Economic effects."
One of the discussions should be dedicated to the Corporation's contribution to the development of nuclear industry host areas, involving local government in the discussions.	Considered. A discussion of the Corporation's contribution to the socio-economic development of nuclear industry areas took place on 28 April 2011 in Novouralsk (Sverdlovsk Region).
Inform of the reliability of the security measures for nuclear industry facilities in regard to the increasing danger of terrorist attacks in Russia.	Considered in the Section "Comprehensive measures for ensuring nuclear and radiological safety."
Give more details on the issue of "Sustainable development" as the most important for investors.	Considered. The topic "The Corporation's activity in sustainable development" is a priority issue and is reported in several sections.
Reflect the Corporation's activities to attract trained university graduates to the nuclear industry.	Considered in the Section "HR management."
Show the results of introducing a unified payment scheme.	Considered in the Section "HR management."
Add a "Social partnership in the industry" section the report.	Considered. The information has been added to the Section "Social effects."
Add "ecological safety" as one of the strategic objectives.	Not considered. ROSATOM's strategic objectives are approved by Supervisory Board.
Add information on the number of employees exceeding the socially accepted radiological risk and the decisions made regarding this category of personnel.	Partially considered in the Section "HR management."
Provide data on accumulated RW in Russia in comparison with the United States.	Partially considered in the Section "Comprehensive measures for ensuring nuclear and radiological safety."
Show the dynamics of solving problems related to environmental impact.	Considered in the Sections "Comprehensive measures for ensuring nuclear and radiological safety," "Social effects," "Environmental safety."
Provide information on projects dedicated to medical technologies focused on social utility.	Considered in the Section "Scientific and technical complex."
Reflect the amount of accumulated RW in the report.	Considered in the Section "Comprehensive measures for ensuring nuclear and radiological safety."
Specify information on target investments in the infrastructure of cities and nuclear industry areas.	Considered in the Sections "Social effects," "Economic effects."
Add information about strategic planning of "closed" city development.	Considered in the Section "Economic effects."
Don't report information on fighting theft.	Not considered. ROSATOM holds that it is necessary to speak not only about achievements, but also about problems, i.e., the program for fighting theft.
Report more details about international cooperation, particularly with the World Association of Nuclear Operators (WANO).	Considered in the Sections "International activity," "Nuclear power complex."

Proposals of the stakeholders	Proposal considered
Give a comprehensive account of the principles and approaches to the financing of social and charity projects.	Considered in the Section "Social effects."
Provide more detailed information on sports activities and achievements in the nuclear industry.	Considered in the Section "Social effects."
Reflect the work of the Industry Commission on Social Partnership.	Considered in the Section "Social effects."
It is not advisable to mention the events at Fukushima-1 in the report.	Not considered. ROSATOM thinks the report should take into account the events at Fukushima-1.
2. Proposals for the public reporting system	
It is necessary to continue formation of a system of specific indicators for the nuclear industry.	Considered. ROSATOM is planning to start the development of an international industry reference for nuclear industry enterprises. The report employs specific "nuclear" indicators (Attachment 2).
The reporting data should be familiar to the companies' and enterprises' employees as well as to the population of nuclear industry host areas. To this end, it is necessary to report the main indicators by city and enterprise without averaging them across the whole industry.	Partially considered. It is advisable to provide more detailed information in the reports of the Corporation's enterprises located in designated areas.

ROSATOM's obligations on consideration of proposals

Proposals of the stakeholders	Corporation's obligations
Place the industry union on the stakeholders priority chart as an independent subject.	Will be considered when developing the concept for the 2011 annual report.
Add a section entitled "Legal bases for activity" to the 2011 annual report.	Will be considered when developing the concept for the 2011 annual report.
Add a section entitled "ROSATOM's corporate culture"	Will be considered when developing the concept for the 2011 annual report.
Add a section dedicated to personnel development strategy: "Personnel assuring ROSATOM's technological leadership."	Will be considered when developing the concept for the 2011 annual report.
Consider (reflect in the report) activities connected with personnel development as a specific type of intellectual investment in the nuclear industrial sector.	Will be considered when developing the concept for the 2011 annual report.
Prior to drawing up the "HR management" section, discuss the top management's approach to the development of personnel competence (in terms of the strategic targets for business development) and correlation of this activity with key perfomance indicators.	Will be considered when developing the concept for the 2011 annual report.
One of the discussions should be devoted to the development of a "ROSATOM's corporate culture" section with the participation of representatives for ROSATOM stakeholders (union, youth organizations, etc.).	Will be considered when developing the concept for the 2011 annual report.
Add statistical data from polls of public satisfaction from ROSATOM enterprises' host areas (specify information proceeding from people's participation in each stage of restructuring).	Will be considered when developing the concept for the 2011 annual report.
Work out and add indicators connected with the strategy for the development for the "closed cities."	Will be considered when developing international industrial indicators for the nuclear industry.
Add information about the quality of life for local communities in host areas of ROSATOM enterprises (including "closed cities") based on social indicators.	Will be considered when developing international industrial indicators for the nuclear industry.
Add information about the number of high-tech enterprises built as a result of nuclear sector activities.	Will be considered when developing international industrial indicators for the nuclear industry.

5.3.

STATEMENT ON PUBLIC ASSURANCE OF THE REPORT

INTRODUCTORY INFORMATION

The State Atomic Energy Corporation ROSATOM suggested we evaluate the report "Activity Results of the State Atomic Energy Corporation ROSATOM in 2010" (hereinafter, the Report), including the completeness and relevance of the information it discloses and the response of the Corporation to requests by stakeholders. To this end, we and our representatives were given an opportunity to participate in public consultations that discussed the draft Report on 29.06.2011, as well as in dialogues with the stakeholders (on 11.02.2011, "Discussion of the draft concept of the ROSATOM annual public report for 2010"; on 14.04.2011 "Disclosure of information on ROSATOM activity in the area of sustainable development in the Annual Report"; on 28.04.2011 "Disclosure of information on ROSATOM's contribution to the socioeconomic development of its host regions in the Annual Report").

Our statement is based on the results of a comparative analysis of two revisions of the report (the draft Report for public consultations and the final revision of the Report) and materials we were kindly provided with on the outcomes of the dialogues and consultations (minutes of meetings, tables tracking proposals by stakeholders), as well as comments received from ROSATOM management and employees in the course of the public certification process of the Report.

In the process of public certification of the report, we did not set ourselves the goal of checking on the ROSATOM information collection and analysis system; credibility of factual data provided in the Report is not subject to the public certification process.

We did not receive any reward from the Corporation for participation in the public certification procedure.

ASSESSMENTS, COMMENTS AND RECOMMENDATIONS

We are unanimous in our positive assessment of the Report: its format and the volume of information it contains. It is of absolute importance that the Report should be prepared voluntarily and issued for the second time to set a good example of systemic enhancement of transparency and accountability on the part of a state corporation.

In the process of drafting of the Report, the Corporation showed a tendency to ensure public acceptance of nuclear technologies as well as readiness to maintain an open dialogue with stakeholders on various aspects of its activities. We see that the Corporation management is aware of constructive interaction with stakeholders and takes measures to realize it.

In our opinion, the integrated nature of the Report allowed comprehensive disclosure of information on the main activities of the Corporation and its sustainable development efforts, thus giving readers of the Report a full picture of ROSATOM's activities.

The use of Russian and international standards of corporate reporting (G3 Guidelines of the GRI Sustainability Reporting Framework (Global Reporting Initiative), series of standards AA1000 of the Institute of Social and Ethical Accountability and Basic Performance Indicators of RSPP) to prepare the Report is undoubtedly a merit of the Report.

It should be especially noted that the Report corresponds to Level "B+" of the G3 Guidelines of the GRI Sustainability Reporting Framework (Global Reporting Initiative), which indicates substantial growth of the quality of the information disclosed as compared to the previous report.

Another positive change was more active engagement of stakeholder's representatives by the Corporation, as manifested in a greater number of public events (dialogues) and engagement of the stakeholders in drafting the Report at earlier stages.

In our view, this Report is evidence of the fact that the nuclear industry is becoming more open, making public information on its activities, including on topics of public significance, such as safe functioning of nuclear facilities, solutions to "nuclear legacy" problems, etc., as well as on problems of the industry and mid- and long-term development plans.

We are not aware of any facts that may call into question the credibility of the information given in the Report.

Meanwhile, we feel it our duty to note and recommend the Corporation to pay special attention:

- to the expedient coordination of the content and preparation progress of this Report and other reports by ROSATOM: specialized reports of the Corporation, annual reports of key organizations (as part of public reporting) and others in the nuclear industry, environmental reports of organizations and enterprises of the nuclear industry (such coordination is necessary, for example, for publishing information not covered by the Report but of great significance to some stakeholders, in other reports);
- to the necessity of more exhaustive disclosure in subsequent reports of information on the connection between ROSATOM's strategic goals and sustainable development, as well as strategic goals and results of how successfully they were achieved in the reporting period.

In our view, it is the integrated Report that should represent the official position of the management of the Corporation on key, publicly significant areas of the Corporation's activities.

MATERIALITY OF INFORMATION

We believe that ROSATOM reflected in the Report all topics of significance for the stakeholders. The Report contains the position of the Corporation on issues of strategic development, financial and economic activity results, and the effects of its social, environmental and economic influence.

Selection of the priority topics of the Report (ROSATOM development strategy and ROSATOM sustainable development activities) is an unquestionable merit of the Report because these are the topics that raise the highest interest with the stakeholders.

The Report reflects the position of the Corporation on problems of concern to the international nuclear community, environmental organizations, representatives of local communities in the Corporation's host regions and other stakeholders.

We are not aware of any other topics of importance to the stakeholders that the Corporation should have included in the Report.

COMPLETENESS OF INFORMATION

We believe it is unreasonable to enlarge the Report, in spite of the fact that it does not provide answers to all the questions the stakeholders representatives asked in the course of dialogues and public consultations. We support the decision to make reference in the Report to other reports of the Corporation and its organizations where requested information is contained.

In our view, information about the main activities in the field of sustainable development should be accompanied by disclosure of a great number of reporting indicators and measures. The Corporation has already shown substantial progress in this issue and we believe that it would be right to continue the work on disclosure of a larger number of indicators.

ROSATOM RESPONSE TO COMMENTS AND WISHES OF STAKEHOLDERS

The Corporation responded to stakeholder proposals by inclusion of clarifications and additional information (or provided grounded explanations why the requested information cannot be disclosed) in the final revision of the Report, as well as by the undertaking by the Corporation of a number of obligations related to disclosure of certain information in the subsequent reporting period and to enhancement of the public reporting system. In particular, in this Report the following sections were rewritten or supplemented with requested information: "Nuclear power complex", "Nuclear and Radiation Safety Complex", "Sustainable development management", "Economic effects", "HR management", etc.

We believe that the Corporation has shown significant progress in developing interaction with the stakeholders and building up the practice of public reporting in the nuclear industry. The Report writing process included a set of events associated with engagement of stakeholders and various groups of stakeholders were given an opportunity to express their wishes and recommendations on disclosure of information in the report or on development of nuclear industry reporting as a whole.

Therefore, in the course of drafting the Report the Corporation showed its readiness for a constructive response to requests from the stakeholders.

We hope that ROSATOM will continue consistent implementation of the principles of responsible corporate conduct in its activities through development of nuclear industry public reporting and engagement of stakeholders.

Secretary of the Public Chamber of the Russian Federation, Academician-Secretary of the Department for Nanotechnologies and Information Technologies of the Russian Academy of Sciences, President of the National Research Center Kurchatov Institute	E.P. Velikhov
Member of the State Duma, Chairman of the State Duma Committee for Natural Resources, Use of Natural Resources and Ecology	E.A. Tugolukov
First Deputy Chairman of the Federation Council's Committee for Natural Monopolies	V.E. Mezhevich
Deputy Chairman of the State Duma Energy Committee	K.B. Zaitsev
President of the Green Cross Interregional Ecological Nongovernmental Organization	S.I. Baranovsky
Chairman of the Russian Trade Union of Nuclear Power and Industry Workers	I.A. Fomichev
Head of the Center for Corporate Social Responsibility and Nonfinancial Reporting of the Russian Union of Industrialists and Entrepreneurs	E.N. Feoktistova

LIST OF ABBREVIATIONS

AEA – administrative and economic activity

ARMS – automated radiation monitoring system

ASST – automated safety system for transportation

AWMS – accident warning and management system of ROSATOM enterprises

BA – business accounting

CATF – closed administrative territorial formation

CF – capacity factor

CIS – Commonwealth of Independent States

CJSC – closed joint stock company

CRAS – corporate risk assessment system

D – decommissioning

ELLE – exclusive long-lead equipment

EUP – enriched uranium product

EurAsEC – Eurasian Economic Community

FA – fuel assembly

FAIR – Facility for Antiproton and Ion Research

FEU – Financial and Economic Bloc

FMBA – Federal Medical and Biological Agency

FR – fuel rod

FRC – Financial Responsibility Center

FSUE – federal state unitary enterprise

FTP – Federal Target Program

FTS – Federal Tariff Service

GC – gas centrifuge

HEU – highly enriched uranium

HRW – high-level radioactive waste

IAEA – International Atomic Energy Agency

IAR – intellectual activity results

ILW – intermediate-level radioactive waste

INES – International Nuclear Event Scale

INPRO – International Project on Innovative Nuclear Reactors and Fuel Cycles

IRAW – individual risk assessment workstation

IRG – inert radioactive gases

IS – inspection system

ITER – International Thermonuclear Experimental Reactor

IUEC – International Uranium Enrichment Center

JSC – joint stock company

JV – joint venture

KPI – key performance indicator

LLW – low-level radioactive waste

LRW – liquid radioactive waste

LTAP – ROSATOM's Long-term Activity Program

LTS RC – long-term storage facility for reactor components

MPSSC – multi-purpose shared servicing center

N – Navy

NEA OECD – Nuclear Energy Agency of the Organization for Economic Cooperation and Development

NF – nuclear facilities

NFC – nuclear fuel cycle

NIBC – nuclear icebreaker and support complex

NPP – nuclear power plant

NRF – nuclear research facility

NRHF – nuclear and radiation-hazardous facility

NRS – nuclear and radiation safety

NS – nuclear-powered submarine

NWC – nuclear weapons complex

OJSC – open joint stock company

PDC – Pilot Demonstration Center

R&D – research and development

RBMK – high power channel-type reactor

RF – Russian Federation

ROSATOM, Corporation – State Atomic Energy Corporation ROSATOM

Rostechnadzor – Federal Environmental, Industrial and Nuclear Supervision Service

RS – radioactive substances

RSPP – Russian Union of Industrialists and Entrepreneurs

RTG – Radioisotope Thermoelectric Generator

RTU NPIW – Russian Trade Union of Nuclear Power and Industry Workers

RW – radioactive waste

S&A – subsidiaries and affiliates

SNF – spent nuclear fuel

SRW – solid radioactive waste

STAR – scientific and technical activity results

STC – Science and Technology Center

SWU – separate work unit

TA – tax accounting

TCS – toxic chemical substances

UDMS – Unified Industry-wide Document Management System

UNO – United Nations Organization

USR – Unified System of Remuneration

USS RAW – Unified State System for Radioactive Waste Management

USS SNF – Unified State System for Spent Nuclear Fuel Management

VVER – water-cooled water-moderated power reactor

WANO – World Association of Nuclear Operators

GLOSSARY

AA1000 Stakeholders Engagement Standard AA1000 SES – a generally applicable and accessible normative base for planning, execution, evaluation, informing and conducting of nonfinancial audit of quality of engagement with stakeholders in the course of reporting and accountability of organizations in the field of effective management.

Becquerel (Bq) – a unit of activity of a nuclide in the radioactive source equal to one transformation per second.

Closed nuclear fuel cycle – a nuclear fuel cycle where spent nuclear fuel is recycled to extract uranium and plutonium for reuse in new nuclear fuel.

Covenants – limits provided by financial documentation (syndicated credit agreements, transactions of EUR bonds, etc.) for one or several companies. Covenants can prohibit some transactions and other legal actions as well as oblige to perform some actions (e.g. providing information) on a regular basis.

Depleted uranium – uranium where uranium isotope U-235 content is lower than in natural uranium (e.g., uranium in spent fuel of nuclear reactors fueled with natural uranium).

Discharge of radioactive substances – controlled ingress of radionuclides into reservoirs containing liquid waste of a nuclear installation (e.g., a nuclear power plant).

Division – an economic entity having a regulation on interaction with ROSATOM defining it as a Division that manages companies incorporated into the Division's activity.

Dose burden – the sum of individual exposure doses received or anticipated during operation, maintenance, repair, replacement or dismantling of equipment at a nuclear installation, e.g. a nuclear power plant.

Enrichment (with regard to an isotope) – a) the content of atoms in a specific isotope mixed with isotopes of the same element if it exceeds the proportion of the same isotope in naturally-occurring mixtures (expressed in percent); b) a process whereby the content of a specific isotope increases in an isotope mix.

Fast neutrons – neutrons whose kinetic energy exceeds a specified value. This value can vary over a wide range and depends on its actual use (reactor physics, shielding or dose monitoring). This value is often set at 0.1 MeV in reactor physics.

First criticality – the stage of commissioning a nuclear power plant that includes loading of nuclear fuel into the reactor, achieving criticality, and conduct of required physical experiments at a power level where heat is removed due to natural heat loss.

First power – the commissioning stage of a nuclear power plant where the plant starts generating power and the plant's performance at different power levels up to commercial power levels is checked.

Fuel assembly – a set of fuel rods (rods, bars, plates, etc.) held together by spacer grids and other structural components and undetached during transportation and irradiation in a nuclear reactor. Fuel assemblies are loaded into the core of a nuclear reactor.

Fuel pellet – a pellet of compacted uranium dioxide, which is the base for nuclear fuel; it is placed in fuel rods.

Global Reporting Initiative (GRI) – an internationally adopted reporting system with regard to economic, ecological and social performance, which is based on the Sustainability Reporting Guidelines, Protocols and Sector Supplements.

HEU Agreement – the agreement concluded between the Government of the Russian Federation and the Government of the United States of America concerning utilization of enriched uranium extracted from nuclear weapons. Under this agreement, Russia undertakes to deliver over 20 years (until the end of 2013) to the USA low enriched uranium (LEU) produced from 500 tons of highly enriched uranium (HEU), extracted from nuclear weapons and designated by the Russian side as no longer required for defense purposes.

IAEA Safeguards – a system of verification applicable to peaceful uses of atomic energy, which is established within the framework of the global nonproliferation policy; the International Atomic Energy Agency is entitled to implement this system.

International Standard on Assurance Engagements ISAE 3000 – the international standard for auditing nonfinancial reports.

MOX fuel (Mixed-Oxide fuel) – nuclear fuel that contains more than one oxide of fissile material. The term is mainly applied to plutonium blended with natural uranium, enriched or depleted uranium, which reacts similarly (although not identically) to LEU oxide and is used as fuel for the majority of nuclear reactors. One of the advantages of MOX fuel is that it is a way of utilizing surplus weapons-grade plutonium, which would otherwise be stored as nuclear waste.

Natural background – ionizing radiation consisting of cosmic radiation and ionizing radiation of naturally distributed naturally-occurring radionuclides (on the surface of the Earth, in the air, food products, water, human bodies, etc.).

NPP Safety – NPP's ability to ensure radiation safety of the personnel, general public and environment within established limits during normal operation and in case of accident.

Nuclear fuel – a material containing fissionable nuclides which, if placed in a nuclear reactor, allows for nuclear chain reaction.

Nuclear fuel cycle – a sequence of production processes aimed at maintaining nuclear reactor operation; it starts with extraction of uranium and ends with disposal of radioactive waste.

Nuclear Non-Proliferation Treaty (NPT) – an international treaty on limitation of the arms race and aimed at preventing emergence of new nuclear-weapon states. The agreement stipulates that states possessing nuclear weapons shall not transfer nuclear weapons or control thereof to other parties, while non-nuclear weapons states shall refrain from production or acquisition of nuclear weapons or other nuclear explosive devices.

Nuclear power – the sector of power engineering where atomic energy is used for electrification and district heating.

Nuclear safety – a general term describing the capability of a nuclear installation to limit radiation effects on personnel, the general public and environment to acceptable limits during normal operation and accidents.

Operating organization – an organization authorized by a regulatory authority to operate a nuclear power plant or other nuclear installation.

Phase-Gate approach – a planning and investment principle when investment projects are divided into phases separated by gates. At each gate, the continuation of the project is decided after a comprehensive analysis (Gate Review) of the results available at the time, including further plans and risk analysis.

Pilot operation – the commissioning stage of a nuclear power plant that begins with the start of the first power program and ends with plant commissioning for commercial operation.

Radiation monitoring – obtaining information on the radiation situation in an organization, environment, and on exposure of people (includes health physics and radiometry surveillance).

Radiation safety – a set of measures aimed at limiting exposure of personnel and the general public to the lowest radiation dose values, which is achieved by publicly acceptable means, and at preventing early consequences of exposure and limiting delayed radiation effects to an acceptable level.

Radioactive waste – nuclear materials and radioactive substances whose future use is not anticipated.

Recycling of spent nuclear fuel – a set of chemical processes intended to remove fission products from spent nuclear fuel and recover fissionable material for reuse.

Release of radioactive substances – ingress of radionuclides into the atmosphere due to a nuclear installation operation (e.g., nuclear power plant).

Research reactor – a nuclear reactor intended as an object of research to acquire data on reactor physics and technologies required for design and development of similar reactors or their components.

Source of raw materials – integrated reservoir volume of prospected and predicted resources with a high level of reliability.

Treatment of radioactive waste – process operations aimed at changing the state of aggregation and (or) physical and chemical properties of radioactive waste, and carried out to convert it into forms acceptable for transportation, storage and (or) disposal.

Uranium conversion – a chemical process for transformation of uranium-containing materials into uranium hexafluoride.

Uranium hexafluoride – a chemical compound of uranium and fluorine (UF_6). It is the only volatile uranium compound (when uranium hexafluoride is heated to 53°C, it changes directly from a solid to a gaseous state). UF_6 is used as input feed for the separation of isotopes uranium-238 and uranium-235 by means of gas diffusion or gas centrifuge technology to produce enriched uranium.

Uranium ore enrichment – a set of processes for primary processing of uranium-containing feed to separate uranium from other minerals that are part of the ore. This does not lead to changes in the composition of minerals but mechanically separates them to produce ore concentrate.

VVER – a water-water power reactor where water is used as the coolant and the moderator. This reactor type is most widely used in Russia in two versions: VVER-440 and VVER-1000.

APPENDIX 1

TABLES OF GRI (G3) STANDARD DISCLOSURES AND PERFORMANCE INDICATORS

TABLE OF GRI (G3) STANDARD DISCLOSURES

Number	Standard disclosure	Report chapter/section/comment	Page
Strategy and analysis			
1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy	Statement by the Chairman of the Supervisory Council Statement by the Director General	5-6
1.2	Description of key impacts, risks, and opportunities	Development strategy Sustainability development management	14 100-102
Organizational Profile			
2.1	Name of the organization	General information about ROSATOM	9
2.2	Primary brands, products, and/or services	General information about ROSATOM Main activities	9 49-98
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	General information about ROSATOM Corporate structure Appendix 7. List of main organizations of ROSATOM	9 36 166-168
2.4	Location of organization's headquarters	General information about ROSATOM	9
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the Report.	General information about ROSATOM International cooperation Nuclear power complex	9 23-26 53-72
2.6	Nature of ownership and legal form	General information about ROSATOM	9
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	General information about ROSATOM Nuclear power complex Scientific and technical complex The nuclear icebreaker complex	9 53-72 73-82 96-98
2.8	Scale of the reporting organization	Key results Financial and Economic Results Nuclear power complex Scientific and technical complex The nuclear icebreaker complex	1 15-20 53-72 73-82 96-98
2.9	Significant changes during the reporting period regarding size, structure, or ownership	Corporate structure Appendix 7. List of main organizations of ROSATOM	36 168-168
2.10	Awards received in the reporting period	HR management	104
3.1	Reporting cycle (annual, biennial, etc.)	About This Report	4
3.2	Contact point for questions regarding the report or its contents	About This Report	4
3.3	Reporting cycle (annual, biennial, etc.)	About This Report	4
3.4	Contact point for questions regarding the report or its contents	Contacts	170
3.5	Process for defining report content, including: Determining materiality; Prioritizing topics within the report; and Identifying stakeholders the organization expects to use the report	About This Report Development strategy Engagement of stakeholders Engagement of stakeholders in drafting the Report	4 12-14 130-140 141-147
3.6.	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	About This Report Appendix 7. List of main organizations of ROSATOM	4 166-168
3.7	State any specific limitations on the scope or boundary of the report	About This Report Appendix 7. List of main organizations of ROSATOM	4 166-168
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	About This Report Appendix 7. List of main organizations of ROSATOM	4 166-168
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report	About This Report	4
3.10	Explanation of the effect of any restatements of information provided in earlier reports, and the reasons for such restatement (e.g., mergers/acquisitions, change of base years/ periods, nature of business, measurement methods)	About This Report	4
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	About This Report Appendix 7. List of main organizations of ROSATOM	4 166-168
3.12	Table identifying the location of the Standard Disclosures in the report	Appendix 1. Tables of GRI (G3) standard disclosures and performance indicators	151-154
3.13	Policy and current practice with regard to seeking external assurance for the report	About This Report Report public certification statement Appendix 5. Auditors' Report by Nexia Pacioli LLC on Consolidated Financial Statements of ROSATOM for 2010 Appendix 6. Auditors' Report by ZAO PricewaterhouseCoopers Audit on Nonfinancial Reporting of ROSATOM for 2010	4 146-147 162-163 164-165

Number	Standard disclosure	Report chapter/section/comment	Page
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	Governance bodies	28-35
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	Governance bodies	28
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or nonexecutive members	Governance bodies	28
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Governing bodies Development of the governance system Social impact Stakeholders engagement	28, 29 47-48 117-121 130-140
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance)	Governance bodies HR management	29 108-109
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Corporate governance	28 47-48
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics [of sustainable development]	Governance bodies	28-29
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Development strategy Sustainable development management Engagement of stakeholders	12-14 100-102 130-140
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	Key results Corporate governance HR management Stakeholders Engagement	1 28-29 108-109 139
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	Key results Corporate governance HR management	1 28 108-109
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	Management system development Nuclear power complex	43-46 62-63
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	Development strategy International cooperation Environmental safety Engagement of stakeholders	12-14 23-26 122 139
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	International cooperation Nuclear power complex Nuclear and radiation safety complex	23-26 57-58, 72 85
4.14	List of stakeholder groups engaged by the organization	Engagement of stakeholders Engagement of stakeholders in drafting the Report	130-140 141-147
4.15	Basis for identification and selection of stakeholders with whom to engage	Engagement of stakeholders Engagement of stakeholders in drafting the Report	130-141 142-143
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Engagement of stakeholders Engagement of stakeholders in drafting the Report	131-141 142-145
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	Engagement of stakeholders Engagement of stakeholders in drafting the Report	131-141 142-145

TABLE OF GRI (G3) PERFORMANCE INDICATORS AND RSPP BASIC PERFORMANCE INDICATORS

● Fully disclosed
◑ Partially disclosed

Indicator	Number of RSPP basic performance indicator	Report section	Disclosure degree	Report page / disclosure
Economic Performance Indicators				
EC1 Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	1.2.-1.7.	Economic effects	●	112
EC 3 Coverage of the organization's defined benefit plan obligations		HR management	●	104-105
EC 4 Significant financial assistance received from government	1.8.	Financial and economic results	●	15
EC 5 Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation		HR management	●	104
EC 6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation		Economic effects	●	113-114
EC 8 Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement		Economic effects Social effects	●	114-116 117-121
EC 9 Understanding and describing significant indirect economic impacts, including the extent of impacts		Nuclear power complex Economic Impact	●	69 113
Environment Performance Indicators				
EN 5 Energy saved due to conservation and efficiency improvements		Sustainable development management	◑	102
EN 6 Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives		Nuclear power complex Sustainable development management	◑	69-70 81
EN 8 Total water withdrawal by source	2.3.	Environmental safety	●	124
EN 10 Percentage and total volume of water recycled and reused	2.4.	Environmental safety	●	125
EN 13 Habitats protected or restored		Environmental safety	◑	126
EN 20 NOx, SOx, and other significant air emissions by type and weight	2.6.	Environmental safety	●	125-126
EN 21 Total water discharge by quality and destination	2.7.	Environmental safety	●	124-125
EN 22 Total weight of waste by type and disposal method	2.8.	Environmental safety	●	125-126
EN 26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	2.11.	Environmental safety	●	127
EN 28 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		Environmental safety	●	129
EN 30 Total environmental protection expenditures and investments by type	2.12.	Environmental safety	●	128-129
Labor Practices & Decent Work Performance Indicators				
LA 1 Total workforce by employment type, employment contract, and region	3.1.1.	HR management	◑	103-104
LA 2 Total number and rate of employee turnover by age group, gender, and region	3.1.2.	HR management	◑	103-104
LA 4 Percentage of employees covered by collective bargaining agreements	3.1.4.	Social effects	●	117
LA 7 Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region	3.1.5.-3.1.8.	HR management	◑	106-107
LA 9 Health and safety topics covered in formal agreements with trade unions.Health and safety topics covered in formal agreements with trade unions		HR management	●	105
LA 10 Average hours of training per year per employee by employee category		HR management	◑	109
LA 12 Percentage of employees receiving regular performance and career development reviews		HR management	●	108-109
Society Performance Indicators				
SO 4 Actions taken in response to incidents of corruption		Development of the governance system	●	47-48
SO 8 Monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with laws and regulations		Financial and economic results	●	16

Indicator	Number of RSPP basic performance indicator	Report section	Disclosure degree	Report page / disclosure
Product Responsibility Performance Indicators				
PR 1 Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures		Nuclear power complex	●	62-63, 70-72
Human Rights Performance Indicators				
HR 1 Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening		-	●	In 2010, agreements concluded by ROSATOM did not include human right clauses and did not undergo human right screening.
HR 2 Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken		-	●	In 2010, suppliers and contractors of ROSATOM did not undergo human rights screening.
Mining and Metals Performance Indicators (Sector Supplement)				
MM 9 Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process		Social effects	◑	121

APPENDIX 2

INDICATOR CHART OF ROSATOM PUBLIC REPORTING

Indicator	Measure	Report section/chapter	Page
MAIN ACTIVITY PERFORMANCE			
Electricity generation for the country's economy			
1.1.1. Nuclear electricity generation	1.1.1.1. Share of electricity produced by nuclear power plants in the total power output in Russia	Nuclear Power Complex	69
	1.1.1.2. Nuclear electricity generation in the reporting year	Nuclear Power Complex	68
1.1.2. NPP capacity utilization	1.1.2.1. Capacity factor of NPPs	Nuclear Power Complex	69
1.2.1. Uprating of power units	1.2.1.1. Target increment of equivalent power	Nuclear Power Complex	69
	1.2.1.3. Number of upgraded VVER-1000s (for the reporting period and total)	Nuclear Power Complex	70
	1.2.1.4. Number of upgraded RBMKs (for the reporting period and total)	Nuclear Power Complex	69-70
1.2.2. Reactor service lives	1.2.2.1. Number of units which service live extended up to 15 years in the reporting year	Nuclear Power Complex	70
	1.2.2.2. Number of units for which documentation on life extension, upgrading and retrofitting was developed	Nuclear Power Complex	70
1.2.3. Operation of reactors	1.2.3.5. Total reduction in scheduled outage time, considering rescheduling of their beginning, including: – by means of shortening of repair time – by means of rescheduling without changes in total duration	Nuclear Power Complex	54
	1.2.3.7. Availability factor	Nuclear Power Complex	70-72
1.3.1. Construction and commissioning of new reactors in Russia	1.3.1.1. Number of reactors under construction in Russia	Nuclear Power Complex	64
Achieving leadership for Russian companies in world markets			
2.1.1. Financial performance	2.1.1.1. Gross profit	Financial and economic results	15
	2.1.1.2. Total deduction for profit tax accrued	Financial and economic results	15
	2.1.1.3. Net operational profit after taxes (NOPAT)	Financial and economic results	15
	2.1.1.4. Profits (total sales of products (works, services))	Financial and economic results	15
2.1.2. Efficiency	2.1.2.1. Labor efficiency	Financial and economic results	17
	2.1.2.2. Internal performance (added value)	Financial and economic results	17
2.1.3. Financial stability	2.1.3.1. Debt-to-equity ratio	Financial and economic results	17
	2.1.3.2. Substantial subsidies from the state	Financial and economic results	15
	2.1.3.3. State subsidies-to-own revenues from sales of products (works, services)	Financial and economic results	17
2.2.1. Russian engineering in the world market of NPP construction	2.2.1.1. Number of reactors being built abroad (in the reporting period)	Nuclear Power Complex	65-66
2.2.3. Feed	2.2.3.1. Share in the feed market in natural uranium equivalent	Nuclear Power Complex	55
	2.2.3.2. World's recoverable uranium resources (Russia, ARMZ, Russia's share)	Nuclear Power Complex	55
	2.2.3.3. Controlled uranium production	Nuclear Power Complex	55
	2.2.3.4. Controlled uranium feed with competitive mining cost	Nuclear Power Complex	55
	2.2.3.5. Uranium mining output (inclusive of new deposits)	Nuclear Power Complex	55
2.2.4. Sales in conversion and enrichment markets	2.2.4.1. Share of conversion and enrichment market	Nuclear Power Complex	57
2.2.5. Sales in fuel assembly, nuclear fuel components, fabrication technologies and equipment markets	2.2.5.1. Supplies of NF components and Fas to NPPs of Russian design	Nuclear Power Complex	58
	2.2.5.2. Supplies of NF components and Fas to NPPs of foreign design	Nuclear Power Complex	58
	2.2.5.3. Share of NF and FA market	Nuclear Power Complex	57
2.2.6. Long-term contracts with buyers (buyer orders portfolio)	2.2.6.1. Cumulative cost of long-term contracts with buyers (buyer orders portfolio)	Nuclear Power Complex	57
2.2.7. Long-term contracts with suppliers and contractors (suppliers and contractors orders portfolio)	2.2.7.1. Cumulative cost of long-term contracts with suppliers and contractors (supplier and contractor orders portfolio)	Nuclear Power Complex	57
2.3.1. Capital investments in the reporting period	2.3.1.1. Resources allocated for the investment policy goals (with a share of resources for renovation of production and technology)	Development of the governance system	41
	2.3.1.3. Investments in uranium exploration	Nuclear Power Complex	55

Indicator	Measure	Report section/chapter	Page
2.4.1. International legal infrastructure for promotion of Russian companies in the world nuclear technology and services markets	2.4.1.1. Number of concluded intergovernmental and interagency cooperation agreements on the peaceful uses of atomic energy	International cooperation	24
	2.4.1.2. Number of countries where the legal basis for cooperation is available	International cooperation	24
2.4.2. Strategic alliances, international cooperation development	2.4.2.1. List and description of the Corporation and its organizations' alliances with foreign partners (in engineering, NFC, machine engineering)	International cooperation Nuclear Power Complex	24 60, 62
2.4.3. Strengthening of nuclear nonproliferation regime	2.4.3.1. Large-scale international projects and initiatives of the Russian Federation	International cooperation	24
	2.4.3.2. Fulfillment of international obligations and national legislation in the field of export control by ROSATOM and its organizations	International cooperation	26
Maintaining the nuclear arsenal at a level ensuring the nuclear deterrence policy			
3.1.1. Fulfillment of GDO	3.1.1.1. GDO fulfillment in percent	Nuclear Weapons Complex	52
Ensuring nuclear and radiation safety			
4.1.1. Implementation of projects to develop national systems of RW and SNF management	4.1.1.1. Adoption of laws providing for development of URWMS and USNFMS	Nuclear and Radiation Safety Complex	93
4.1.4. Emergency response and emergency preparedness	4.1.4.1. Reliability characteristics of NRHF facilities and their life-cycle planning	Nuclear and Radiation Safety Complex	86-87
	4.1.4.2. Description of the emergency response system, including improvement of safety control and monitoring systems at nuclear facilities; professional rescue teams system	Nuclear and Radiation Safety Complex	91-92
	4.1.4.3. Description of notification and communications systems	Nuclear and Radiation Safety Complex	91-92
4.1.5. Physical protection of nuclear facilities	4.1.5.1. Description of current engineered systems for the personnel access control and monitoring	Nuclear and Radiation Safety Complex	89-90
4.2.2. Violations in handling of nuclear and radiation-hazardous materials	4.2.2.1. Number of accountable events at nuclear facilities as per the International Nuclear Event Scale (INES)	Nuclear and Radiation Safety Complex	86-87
4.3.1. Decommissioning	4.3.1.1. Number of shut down NRHFs	Nuclear and Radiation Safety Complex	86
	4.3.1.2. Number of NRHFs prepared for decommissioning	Nuclear and Radiation Safety Complex	86
4.3.2. Disposal of NS, NPI and RTG	4.3.2.1. Number of disposed NS and ships with nuclear power installations (NPI)	Nuclear and Radiation Safety Complex	86
	4.3.2.2. Number of disposed RTG	Nuclear and Radiation Safety Complex	86
4.4.1. Rehabilitation of contaminated territories	4.4.1.1. Area of rehabilitated contaminated territories	Environmental safety	126
4.4.2. Changes in SNF accumulated volumes	4.4.2.1. Volume of accumulated SNF	Nuclear and Radiation Safety Complex	95
4.4.3. Changes in RW accumulated volumes	4.4.3.1. Volume of accumulated RW	Nuclear and Radiation Safety Complex	93
4.4.5. Reprocessing of accumulated RW	4.4.5.1. Disposed volume of accumulated RW (over the year, legacy)	Nuclear and Radiation Safety Complex	93
	4.4.5.2. Fraction of RW disposal of a total RW accumulation in Russia	Nuclear and Radiation Safety Complex	93
Development of innovative nuclear technologies and broadening of their use in different industries			
5.1.1. Inventive activity in the field of atomic energy	5.1.1.1. Number of patents, utility models and industrial designs	Scientific and Technical Complex	77-78
	5.1.2.3. Spending on R&D	Scientific and Technical Complex	77
5.2.2. Participation in implementation of international innovative projects	5.2.2.1. Participation in implementation of international innovative projects (INPRO, ITER, Generation IV, FAIR)	International cooperation Scientific and technical complex	23 76-77, 80
5.3.1. VVER-TOI	5.3.1.1. Description of the work done in the reporting year	Scientific and Technical Complex	80
	5.3.1.2. Execution of the work plan	Scientific and Technical Complex	80
5.3.3. Floating NPP	5.3.3.1. Description of the work done in the reporting year	Nuclear Power Complex	64
5.4.3. Fast neutron reactors	5.4.3.1. Description of the work done in the reporting year	Scientific and Technical Complex	80
5.5.2. Radiation technologies	5.5.2.2. Description of plans for development of radiation technologies (plans, objectives, performance)	Scientific and Technical Complex	82
5.5.3. High-technology equipment for nuclear medicine	5.5.3.1. Share of nuclear medicine services market	Scientific and Technical Complex	79
5.5.4. Superconductors	5.5.4.1. Description of plans for development of superconductors	Scientific and Technical Complex	81
5.6.1. Research in new applications of atomic nucleus energy	5.6.1.2. Description of research in the field of new applications of atomic nucleus energy	Scientific and Technical Complex	76

Indicator	Measure	Report section/chapter	Page
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	6.1.2.2. Economic effect of implementation of the production development and cost reduction programs at enterprises	Nuclear Power Complex	54
6.1.3. Reorganization of financial and economic management	6.1.3.1. Assessment of the reorganization results (assessment of meeting the targets)	Development of the governance system	40
6.1.5. Procurement management	6.1.5.1. Tools to improve openness and transparency of procurement activities	Development of the governance system	46-47
	6.1.5.2. Volume of funds saved as a result of open competitive procurement processes (in % and RUB)	Development of the governance system	47
6.1.6. Development of internal communications	6.1.6.1. Projects aimed at developing communications channels between the management and employees	Engagement of stakeholders	136-137
6.1.8. Risk management		Development of the governance system	43-46
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Ensuring public acceptance of nuclear power development			
7.1.1. Public reporting of the Corporation and its organizations	7.1.1.1. Fulfillment of international requirements in the area of non-financial reporting and engagement of stakeholders	About This Report	4
	7.1.1.2. Interaction with stakeholders in the course of drafting public reports	Engagement of stakeholders in drafting the Report	142-145
	7.1.1.3. Fulfillment of corporate requirements for public reporting	About This Report	4
7.1.2. Information resources of the industry	7.1.2.1. Number of information centers	Engagement of stakeholders	136
	7.1.2.2. Public cultural activities (museums, popular science, career-guidance, other activities)	Engagement of stakeholders	118 133
	7.1.2.3. Industry-wide mass media	Engagement of stakeholders	136-137
Execution of certain state authorities and functions of a body controlling the uses of atomic energy			
8.1.1. Distribution of budget funds received for implementation of federal target programs	8.1.1.1. Amount of budget funds received for implementation of federal target programs	National atomic energy policy	22
	8.1.1.2. Share of accomplished FTP measures over the reporting period	National atomic energy policy	22
8.2.1. Regulatory and legal activities	8.2.1.1. Number of draft laws or other regulations submitted to the President of Russia and the Government of Russia	National atomic energy policy	21
8.3.1. Maintenance and control of state-owned property	8.3.1.1. Number of Russian Federation's ownership certificates for immovable property	National atomic energy policy	22
	8.3.1.2. Share of facilities subject to formalization of Russian Federation's ownership rights	National atomic energy policy	22
8.3.3. Management of the state reserve of special feedstock and fissile materials	8.3.3.1. Degree of accomplishment of works to maintain, service and replenish the state reserve done in accordance with requirements for secrecy regime, state secret protection, physical protection of nuclear materials, and nuclear, radiation, industrial and fire safety	National atomic energy policy	22
	8.3.3.2. Number of inspections of nuclear material control and accounting	National atomic energy policy	22
Development of HR capital (training and education to support implementation of strategic goals)			
9.1.1. Provision of competent staff	9.1.1.1. Number of students who did internships	HR management	110
	9.1.1.2. Number of students employed based on internship results	HR management	110
	9.1.1.4. Ratio of costs to support nuclear-related education establishments to number of young specialists graduated from nuclear-related educational establishments and recruited to the Corporation's organizations	HR management	110
	9.1.1.5. Number of PhDs	HR management	104
9.1.2. Education of employees	9.1.2.1. Share of employees subject to periodic performance and career development appraisals	HR management	108
	9.1.2.3. Level of expenditures for training of employees	HR management	110
9.1.3. Building up and use of skill pools	9.1.3.1. Number of employees in the skill pool	HR management	109
	9.1.3.2. Share of employees from the skill pool appointed to open positions	HR management	109

Indicator	Measure	Report section/chapter	Page
SUSTAINABLE DEVELOPMENT PERFORMANCE			
Environmental impacts (impacts on the environment, environmental protection activities)			
11.1.4. Initiatives on reduction of noxious substance releases to the atmospheric air; achieved reduction	11.1.4.1. Information on initiatives on reduction of noxious substance releases to the atmospheric air; achieved reduction	Environmental safety	127
11.1.5. Initiatives on reduction of noxious substance discharges to water reservoirs; achieved reduction	11.1.5. 1. Information on initiatives on reduction of noxious substance discharges to water reservoirs	Environmental safety	127
	11.1.5.2. Quantitative data on reduction of noxious substance discharges to water reservoirs	Environmental safety	125, 127
11.1.11. Implementation of environmental management systems in the Corporation's organizations	11.1.11.1. Number of enterprises certified for conformance to requirements of the standard ISO 14001	Environmental safety	122
11.2.5. In-house water consumption	11.2.5.1. In-house water consumption	Environmental safety	124-125
11.3.15. Payments for noxious substance releases in the atmospheric air from stationary and mobile sources, contaminant discharges to surface and ground water bodies, placement of production and consumption waste	11.3.15.1. Payments for noxious substance releases in the atmospheric air from stationary and mobile sources, contaminant discharges to surface and ground water bodies, placement of production and consumption waste	Environmental safety	129
11.5.1. Radionuclide releases to the atmosphere	11.5.1.1. Total activity of radionuclide releases to the atmosphere	Environmental safety	123
11.5.2. Discharge of radionuclide-containing effluents	11.5.2.1. Amount of radionuclide-containing effluents	Environmental safety	123-124
	11.5.2.2. Total activity of radionuclide-containing effluents	Environmental safety	123-124
11.5.4. Radionuclide contamination of territories	11.5.4.1. Area of contaminated territories	Environmental safety	126
	11.5.4.2. Gamma-radiation dose rate of the contaminated territories	Environmental safety	127
Social and labor relations (work organization and decent work)			
12.1.4. Share of employees aged under 35	12.1.4.1. Share of employees aged under 35	HR management	104
12.1.5. Average age of employees (by categories)	12.1.5.1. Average age of employees (by categories, without outsourced part-time workers and off-schedule workers).	HR management	104
12.1.8. Level of average wage against average level of the labor market	12.1.8.1. Level of average wage against average level of the labor market	HR management	104
12.3.3. Number of employees having non-state pension provisions	12.3.3.1. Number of employees having non-state pension provisions	HR management	105
12.3.4. Total expenditures for the personnel	12.3.4.1. Total expenditures for the personnel	HR management	104
12.3.5. Total expenditures for social programs for employees	12.3.5.1. . Total expenditures for social programs for employees	HR management	105
12.3.6. Social payments per employee per year	12.3.6.1. Social payments per employee per year	HR management	105
12.3.7. Costs of additional medical insurance	12.3.7.1. Costs of additional medical insurance	HR management	105
12.4.5. Monitoring of the personnel exposure doses	12.4.5.1. Annual average effective exposure dose to the personnel	HR management	107
	12.4.5.2. Number of cases of personnel exposure in excess of regulatory dose limit	HR management	107
	12.4.5.4. Share of the employees included in AWSIRA system of a total number of employees subject to individual dose monitoring	HR management	107
	12.4.5.5. Share of employees exposed to negligibly small risk	HR management	107
	12.4.5.6. Share of employees exposed to lifetime risk	HR management	107
Influence on social and economic situation in host regions. Interaction with society			
13.2.1. Generation of CATF development programs	13.2.1.1. Generation of CATF development programs	Economic effects	114-116
13.4.1. Charity projects and funds allocated for such projects	13.4.1.1. Charity projects and funds allocated for such projects	Social effects	119-121
Conduct and social regulation			
14.4.2. Institutionalization of conduct	14.4.2.1. Availability of a Code of Conduct	Engagement of stakeholders	139

APPENDIX 3

FINANCIAL HIGHLIGHTS OF ROSATOM ACTIVITY IN 2010

mln RUB	31.12.2009	31.12.2010
ASSETS		
Noncurrent assets		
Intangible assets	34,844	38,584
inclusive of goodwill	33,569	36,862
R&D	2,693	2,887
Fixed assets	374,237	442,737
Construction in progress	323,290	357,690
Income yielding investments into tangible assets	6,480	9,262
Long-term financial investments	77,109	107,662
Deferred tax assets	-	320
Other noncurrent assets	8,818	11,093
Total of noncurrent assets	**827,471**	**970,235**
Current assets		
Inventories including:	154,846	175,158
raw materials, materials and similar assets	47,888	51,963
rearers and fatteners	300	98
costs related to production in progress	59,806	63,942
finished products and goods for resale	20,650	28,763
shipped goods	3,792	4,788
unexpired costs	4,310	6,476
other inventories and expenses	18,100	19,128
Input value-added tax	23,823	19,460
Accounts receivable (that are due beyond 12 months) including:	35,426	29,026
buyers and customers	1,975	3,410
advances made	10,020	7,478
Accounts receivable (due beyond 12 months) including:	173,484	177,778
buyers and customers	52,350	56,789
unpaid dividends of participation in other organizations	3	35
advances made	59,999	58,400
Short-term financial investments	71,257	47,426
Cash assets	94,202	77,929
Other current assets	317	57
Total for current assets	**553,355**	**526,834**
Assets total	**1,380,826**	**1,497,069**

CAPITAL AND LIABILITIES		
Capital and reserves		
Target financing	2,815	219
Authorized capital (fund) of organizations whose property is subject to transfer to the Corporation according to legislation	20,337	26,758
Capital surplus	703,330	789,423
including: asset contribution by the Russian Federation	650,379	705,418
Capital reserve including:	84,300	125,501
reserves formed according to legislation	82,237	120,647
reserves formed according to constituent documents	2,063	4,854
Retained earnings	115,077	160,591
Total of capital and reserves	**925,859**	**1,102,492**
Minority interest	38,259	10,008
Goodwill	13,287	71
Long-term liabilities		
Borrowings	114,849	69,111
Deferred tax liabilities	1,316	–
Other long-term liabilities	29,458	21,260
Total of long-term liabilities	**145,623**	**90,371**
Short-term liabilities		
Borrowings	49,350	31,913
Accounts payable including:	113,507	127,324
suppliers and contractors	37,296	35,170
accounts due to personnel of the organization	4,622	4,746
accounts due to state extra-budgetary funds	1,048	950
taxes and fees payable	13,645	18,544
other creditors	30,358	38,712
advances received	26,538	29,202
Dividends payable	66	86
Deferred income	78,348	97,484
Expenses and provisions including:	16,077	24,130
reserves generated according to Government Resolutions No. 68 and No. 576 (except specified on p. 431)	4,927	6,444
Other short-term obligations	450	13,190
Total of short-term liabilities	**257,798**	**294,127**
Total of capital and liabilities	**1,380,826**	**1,497,069**
Financial results		
Proceeds (net) from sale of goods, products, work operations, and services	458,200	498,001
Prime cost of sold goods, production, work operations, and services	(261,071)	(257,490)
Gross profit	197,129	240,511
Commercial expenses	(10,928)	(11,668)
Management expenses	(112,261)	(139,207)
Sales profit	**73,940**	**89,636**
Other profits and expenses		
Interest receivable	7,478	11,043
Interest payable	(13,823)	(9,883)
Participation capital	645	1,119
Other profits	173,935	268,256
Other expenses	(184,153)	(287 916)
Plow back profits (losses) of subsidiaries	–	(461)
Profit before taxes	**58,022**	**71,794**
Deferred tax assets	2,139	2,612
Deferred tax liabilities	(1,555)	(1,339)
Current profit tax	(19,979)	(24,553)
Other compulsory payments	(177)	(3,455)
Net profit (loss) in accounting period without minority interest	**38,450**	**45,059**
Minority interest	(725)	(757)
Net profit in accounting period	**37,725**	**44,302**

APPENDIX 4

STATEMENT BY THE AUDIT COMMITTEE ON FINANCIAL AND ECONOMIC ACTIVITY OF THE STATE ATOMIC ENERGY CORPORATION ROSATOM AND ITS ORGANIZATIONS IN 2010

MOSCOW
29 APRIL 2011

The Audit Committee consisting of Committee Chairman Siluanov A.G., Deputy Minister of Finance of the Russian Federation, and Committee members: Artyukhin R.E, Head of the Federal Treasury of the Ministry of Finance of the Russian Federation; Belyakov V.G., Chief Engineer of the 12th Main Department of the Ministry of Defense of the Russian Federation; Zobov V.N., Head of Division of the Department for Defense Industry within the Government of the Russian Federation; Kaulbars A.A., Director of Department for Budget Policy in Military, Law Enforcement and Governmental Defense Order at the Ministry of Finance of the Russian Federation, has audited the financial and economic activities and credibility of the information contained in the Annual Report of the State Atomic Energy Corporation ROSATOM (hereinafter referred to as the Corporation) covering the period of time from 01 January 2010 until 31 December 2010.

When conducting the audit, the Audit Committee was guided by Article 31 of Federal Law No. 317-FZ of 01.12.2007 "On the State Atomic Energy Corporation ROSATOM" approved by the Supervisory Board of the State Atomic Energy Corporation ROSATOM, record No. 1 of 26.12.2007.

When auditing the financial and economic activities and the credibility of the information contained in the Annual Report of the Corporation for 2010, the Audit Committee found that, based on a random check on the documents, credible in all material respects are:

- the balance sheet of the Corporation, as based on the outcome of the random document check, credibly reflects the Corporation's financial situation and the results of its financial and economic activity in all material respects over the reporting period;
- the consolidated financial statement of the Corporation and its organizations, as based on random check of the documents, credibly reflects, in all material respects, the financial situation of the Corporation and its organizations, and results of its financial and economic activities over the reporting period.

The Audit Committee has concluded as follows:

- no facts of violation of accounting and financial reporting procedures in the course of conduct of financial and economic activities by the Corporation and its organizations, as established by legal acts of the Russian Federation, were revealed;
- no facts of inefficient use of budget funds or property of the Corporation and its organizations and other resources were revealed;
- no facts of improper use budget funds were revealed;
- recommendations made by the Audit Committee in its statement of 29 April 2010 were considered.

The Audit Committee confirms the credibility of the information provided in the Annual Report of ROSATOM for 2010.

Recommendations for the Supervisory Board and Governing Board of ROSATOM:

1 To ensure uniformity of the methodology for producing Cost Estimates of Profits and Losses and the Finance Plan of the Corporation.

2 To include an explanation on reserve funds being set up in accordance with the Russian Government's Resolutions No. 68 of 30.01.2002 and No. 576 of 21.09.2005, including on special reserve funds of the Corporation, in the Explanatory Note to the Consolidated Financial Statement of the Corporation and its organizations.

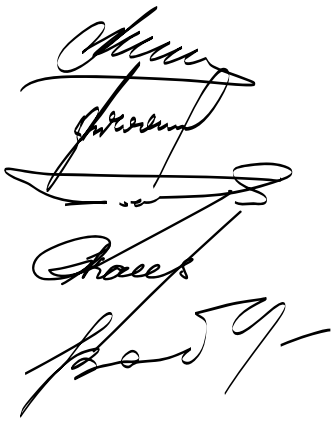
3 To Corporation governance bodies when executing their authorities, to ensure observance of the norms of the Federal Law on the Corporation as regards the exercising of their authorities by Corporation executives.

4 In case changes are made to the reporting procedure, to ensure uniformity of approaches to the generation of statements of the Corporation, its affiliates and subsidiaries, as well as of consolidated statements of the Corporation and its organizations.

5 To coordinate changes in the staff schedule of the Corporation with the Supervisory Board.

Audit Committee Chairman — A.G. Siluanov

Audit Committee Members:



R.E. Artyukhin

V.E. Belyakov

A.A. Kaulbars

V.N. Zobov

APPENDIX 5

AUDITORS' REPORT BY NEXIA PACIOLI LLC ON CONSOLIDATED FINANCIAL STATEMENTS OF ROSATOM FOR 2010

AUDITED ENTITY INFORMATION

Full name	State Atomic Energy Corporation ROSATOM
Short name	ROSATOM
State registration	State registration certificate series 77 No 011300424 dated 18.12.2007, issued by the Department of the Federal Tax Service for Moscow; entered in the Unified State Register of Legal Entities under Primary State Registration Number 1077799032926
Location	Moscow, Russian Federation
Mailing address	24 Bolshaya Ordynka St., Moscow 119017, Russia

AUDITOR INFORMATION

Full name	Nexia Pacioli Limited Liability Company
Short name	Nexia Pacioli LLC
State registration	State registration certificate No. 856.235 dated June 23, 1995, issued by the Moscow Registration Chamber; State registration certificate series 77 No 005390060 dated October 22, 2002, issued by the Inter-District Inspectorate of the Ministry of Taxes and Levies of the Russian Federation No 39 for Moscow; Entered in the Unified State Register of Legal Entities under Primary State Registration Number 1027739428716
Location	2 Malaya Polyanka St., Moscow 119180, Russia
Mailing address	2 Malaya Polyanka St., Moscow 119180, Russia
Membership in a self-regulating organization of auditors	Member of the self-regulatory organization of auditors Non-Profit Partnership "Institute of Professional Auditors"; Entered in the Register of Auditors and Auditing Organizations of the above self-regulatory organization of auditors on October 30, 2009, under Primary Registration Number 10202000073

We conducted the audit of the attached consolidated financial statements of the State Atomic Energy Corporation ROSATOM (hereinafter, the Corporation), Corporation joint stock companies and their affiliated and subordinate enterprises (hereinafter, the Group) consisting of:

- Consolidated balance sheet (Form No. 1), as of December 31, 2010;
- Consolidated profit and loss accounts (Form No. 2) for 2010;
- Consolidated statement of changes in equity (Form No. 3) for 2010;
- Consolidated statement of cash flow (Form No. 4) for 2010;
- Appendices to the consolidated balance sheet (Form No. 5) for 2010;
- Explanatory Note to the consolidated balance sheet.

RESPONSIBILITY OF THE AUDITED ENTITY FOR CONSOLIDATED FINANCIAL STATEMENTS

The management of the audited entity is responsible for the generation and credibility of the said consolidated financial statements in accordance with established rules of generation of consolidated reporting of the Russian Federation and for the system of internal audit necessary for generation of the consolidated financial statements that do not contain material misinterpretations due to unscrupulous actions or errors.

RESPONSIBILITY OF THE AUDITOR

Our responsibility is to express an opinion as to the credibility of the consolidated financial statements following the audit carried out by us. We carried out the audit in compliance with the Russian Federation federal audit standards. These standards demand compliance with applicable ethic norms, and planning and performing audits in such a way as instills sufficient confidence that the consolidated financial statements do not contain any material errors.

The audit included those audit procedures that are aimed at obtaining audit evidence to verify the quantitative values in the consolidated financial statements and the information they contain. The audit procedures were selected on the basis of our judgment, which is based on the assessment of risk of material misinterpretations due to unscrupulous actions or errors. In the process of the risk assessment, we reviewed the internal control system that provides for generation and credibility of consolidated financial statements with the purpose of selection of related audit procedures, but not for the expression of an opinion on the efficiency of the internal control system.

The audit also included an assessment of the appropriateness of the accounting policy in place and of the validity of the evaluation indicators that were obtained by the management of the audited entity, as well as an assessment of the presentation of the consolidated financial statements as a whole.

We assume that the audit evidence obtained in the course of the audit gives sufficient grounds to express a judgment as to credibility of the consolidated financial statements.

JUDGMENT

In our opinion, the consolidated financial statements credibly reflect, in all material aspects, the financial position of the Group as of 31 December 2010, results of its financial and economic activities and cash flows in 2010 in accordance with the rules of the Russian Federation for consolidated accounting.

OTHER INFORMATION

The consolidated financial statements of the group are classified as secret. The consolidated financial statements are kept in the Information Security Office of ROSATOM.

Director General,
Nexia Pacioli LLC
(qualification certificate No. 007414 of 29 June 1995, for general auditing; unlimited; incorporated in Register of Auditors and Auditor Organizations of IPAR Primary Registration Number 29502000448)

S.I. Romanova

Head of Quality Control Department,
Nexia Pacioli LLC
(qualification certificate No 044587, for general audit; unlimited; included in the Register of Auditors and Audit Organizations NP IPAR under Primary Registration Number 20202001716)

T.D. Pavlova

31 March 2011

APPENDIX 6

AUDITORS' REPORT BY ZAO PRICEWATERHOUSECOOPERS AUDIT ON NONFINANCIAL REPORTING OF ROSATOM FOR 2010

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INDEPENDENT ASSURANCE REPORT

To the Management of State Atomic Energy Corporation ROSATOM ("SC Rosatom")

We have performed assurance procedures to provide independent assurance on the below-mentioned aspects of the 2010 Annual Report of SC Rosatom.

Subject matter

Data and figures disclosed in the SC Rosatom 2010 Annual Report on the following aspects:

- The 2010 environmental, workforce, safety and socio-economic performance indicators and data contained in Tables of GRI (G3) standard disclosures and performance indicators.

Our assurance procedures are limited to the 2010 data only.

Criteria

- The defined procedures and internal reporting guidelines, by which the sustainability related Information is gathered, processed and aggregated internally by SC Rosatom;
- The "Sustainability Reporting Guidelines G3" ("GRI G3") published in October 2006 by the Global Reporting Initiative (GRI).

Responsibility and Methodology

The accuracy and completeness of sustainability performance indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our independent assurance report should therefore be read in connection with SC Rosatom's internal sustainability reporting guidelines, definitions and procedures on the reporting of its sustainability related performance.

The Management of SC Rosatom is responsible for both the subject matter and the criteria.

Our responsibility is to provide a conclusion on the subject matter based on our assurance procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information", approved in December 2003 by the International Auditing and Assurance Standards Board (IAASB) and AA1000 Assurance Standard published by Institute of Social and Ethical Accountability in 2003.

Main Assurance Procedures

Our assurance procedures included the following work:

Site visits:

- Interviewing personnel of SC Rosatom responsible for internal sustainability reporting and data collection to determine the understanding and application of SC Rosatom internal sustainability reporting guidelines;
- Visiting JSC "TVEL" main office in Moscow, Russia;
- Participation in public hearings with stakeholders which took place on 29 June 2011.

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Assessment of key figures:

- Performing tests on a sample basis of evidence supporting data in Tables of GRI (G3) standard disclosures and performance indicators in SC Rosatom Annual Report concerning completeness, accuracy, adequacy and consistency.

Review of the documentation and analysis of relevant policies and basic principles:

- Reviewing the relevant documentation on a sample basis, including SC Rosatom internal policies, management and reporting structures and documentation.

Review of the SC Rosatom 2010 Annual Report:

- Review of the SC Rosatom Annual Report against the criteria of the GRI G3 Application level requirements.

Conclusions

Based on our work described in this report and the assessment of the Criteria:

- nothing has come to our attention that causes us to believe that the performance indicators and data mentioned in the subject matter and disclosed in the Annual Report of SC Rosatom in Tables of GRI (G3) standard disclosures and performance indicators does not give a fair picture of SC Rosatom's performance; and

- nothing has come to our attention that causes us to believe that the SC Rosatom 2010 Annual Report does not meet the requirements of the GRI G3 Application Level of "B+".

ZAO PricewaterhouseCoopers Audit

Moscow, Russian Federation
September, 2011

APPENDIX 7

LIST OF KEY ORGANIZATIONS OF ROSATOM[1]

Legend:
● — organizations whose data are included by purchase method in the main financial indicators of ROSATOM as per Appendix 3;
● — organizations on the list of environmentally significant organizations.

Nuclear Weapons Complex

1.	A.P. Aleksandrov Research and Technology Institute, FSUE
2.	All-Russian Research Institute for Experimental Physics, Russian Federal Nuclear Center, FSUE (RFNC VNIIEF)
3.	Atombezopasnost, Coordinating Center for Design of Safety and Control Systems, FSUE
4.	Bazalt FSUE
5.	Central Research Laboratory for Innovative Technologies in the Nuclear Sector, FSUE
6.	Departmental Security Agency of ROSATOM, FSUE
7.	Design Bureau of Automotive Transport Equipment, FSUE
8.	Elektrokhimpribor Combine, FSUE
9.	Eleron, Specialized Research and Production Complex, FSUE
10.	EnergoAvtotrans LLC
11.	Engineering Center for Diagnostics of NPP Components at NIKIET, LLC
12.	Engineering Center of Nuclear Equipment Strength and Research in Material Behavior, LLC
13.	Expedition No 2, FSUE
14.	Housing Management Company, LLC
15.	I&C Subsidiary OKSAT NIKIET, LLC
16.	Institute of Strategic Stability, FSUE
17.	Instrumentation Factory, FSUE
18.	Krasnaya Zvezda, FSUE
19.	Mayak Production Association, FSUE
20.	N.A. Dollezhal Research and Development Institute of Power Engineering, JSC
21.	N.L. Dukhov All-Russian Research Institute of Automatics, FSUE
22.	Obespecheniye RFNC-VNIIEF, JSC
23.	Research Institute of Instruments, FSUE
24.	Sarov Electric Grid Company, JSC
25.	Sarov Gas Supply Company, JSC
26.	Sarov Generating Company, CJSC
27.	Sarov Heating Grid Company, JSC
28.	Scientific, Technical and Certification Center for Comprehensive Information Security, FSUE
29.	Sever Production Complex, FSUE
30.	Start Production Complex (PC Start named after M.V. Protsenko), FSUE
31.	Urals Electromechanical Plant, FSUE
32.	Ye.I. Zababakhin All-Russian Research Institute of Industrial Physics, Russian Federal Nuclear Center, FSUE
33.	Yu.Ye. Sedakov Research Institute of Measuring Systems, Federal Research and Production Center, FSUE

Nuclear Power Complex

34.	"Liges s.r.o."
35.	A.A. Bochvar High Technology Research Institute of Inorganic Materials, JSC
36.	AC Terminal-Sofia, CJSC
37.	AEM-Invest, CJSC
38.	AEM-Leasing, CJSC
39.	AEM-Technology, CJSC
40.	AEM-TECHNOLOGY-CYPRUS LTD
41.	Afrikantov Experimental Design Bureau for Mechanical Engineering, JSC (OKBM Afrikantov)
42.	All-Russia Research and Design Institute of Nuclear Machine Engineering, JSC (VNIIAM)
43.	All-Russian Production Association Zarubezhatomenergostroy, JSC (VPA ZAES)
44.	Angarsk Electrolysis Chemical Complex, CJSC
45.	Argon LLC
46.	ASE-Engineering, LLC
47.	Atomenergomash Cyprus Limited
48.	Atomenergomash, JSC
49.	Atomenergoremont, JSC
50.	AtomEnergoSbyt North-West, JSC
51.	Atomenergosbyt, JSC
52.	Atomredmetzoloto, JSC (Uranium Holding ARMZ)
53.	Atomspetstrans, JSC
54.	Atomstroyexport, JSC
55.	Atomstroyexport-Finance, LLC
56.	Atomstroyfinance, LLC
57.	Atomstroyinvest, LLC
58.	Atomtechenergo nuclear power plants commissioning, operation improvement and management, JSC
59.	Atomtechexport, JSC
60.	AtomTeploSbyt, LLC
61.	Atomtrubpromvodomontazh, CJSC
62.	Balakovo NPP-Auto, LLC
63.	Beloyarsk NPP II, JSC
64.	Beloyarsk NPP-Auto, LCC
65.	Bilibino NPP-Auto, LLC
66.	Capital Projects Directorate, JSC
67.	Capital projects Directorate, LLC
68.	Carbon and Composite Material Plant, LLC
69.	Center Atom-Innovations, LLC
70.	Central Design Bureau of Machine Building, JSC
71.	Centrotex-SPb, CJSC
72.	Chepetsky Mechanical Plant, JSC
73.	Commercial Center 100, JSC
74.	Compan, LLC
75.	Construction and Installation Company Yug, CJSC
76.	Construction and Installation Directorate No 7, CJSC
77.	Construction and Installation Directorate No 9, CJSC
78.	Construction and Installation Directorate No. 1, CJSC
79.	Construction and Installation Directorate No. 1, LLC
80.	Construction and Installation Directorate No. 2, LLC
81.	Construction and Installation Directorate No. 4, CJSC
82.	Construction Economics Directorate, JSC
83.	Consyst-OS, CJSC
84.	Crown, LLC
85.	Dalur, CJSC
86.	Dalur-Finance, LLC
87.	Design and Engineering Service, CJSC
88.	Design-Prospecting and Scientific-Research Institute of Industrial Technology, JSC
89.	Direct Investment Company RusAtomStroy-Invest, CJSC
90.	East European Leading Research and Design Institute of Energy Technologies, JSC (Leading Institute VNIPIET)
91.	Effective Energy N.V.
92.	EGMK-Proekt, JSC
93.	Electrogorsk Research and Engineering Center on Nuclear Power Plant Safety, JSC
94.	Elektrostal Water Treatment Facilities, LLC

[1] List of ROSATOM organizations within the consolidation perimeter as of 31.12.2010.

95. ELEMASH MAGNIT, LLC
96. ELEMASH-AUTO, LLC
97. ELEMASHSPETSTRANS, LLC
98. ELEMASH-TEK, LLC
99. Elkonsky Mining and Metallurgical Combine, CJSC
100. Energoatominvest, LLC
101. Energomashinostroyeniye, CJSC
102. Energomaskompleks, LLC
103. Energoremont, LLC
104. Energospetsmontazh, JSC
105. Engineering Center Russian Gas Centrifuge, JSC
106. Engineering Company ZIOMAR, JSC
107. Experimental & Design Organization OKB Gidropress, JSC (GIDROPRESS)
108. Experimental Bureau for Process Design and Production of Glass Articles, FSUE
109. Experimental Refractory Metals and Hard Alloys Plant, JSC (OZTMiTS JSC)
110. Finishing Works Directorate, CJSC
111. Firm Geostar, LLC
112. Gornoye Uranium Mining Company, CJSC
113. Health Resort and Rehabilitation Center Cheptsa, LLC
114. Hotel Complex Glazov, LLC
115. Housing Utility DOM, LLC
116. Information Technology Specialized Company, LLC
117. Institute for Physical and Technical Problems, JSC
118. Intellectual Energy Engineering, JSC
119. Interdepartmental Coordinating Scientific and Technical Center of Nuclide Technology, FSUE
120. International Uranium Enrichment Center, JSC
121. INTERNEXCO GmbH
122. Invest-Service, LLC
123. Iskra, LLC
124. Itmanovo Agriculture Firm, LLC
125. Ivatomenergosbyt, JSC
126. KABUSHIKIKAISHA TENEX-JAPAN (TENEX-Japan Co.)
127. Karkhy Geologiya, LLC
128. Kazakhstan-Russian Nuclear Stations, JSC
129. Khiagda, JSC
130. Kola NPP-Auto, LLC
131. Kola NPP-Service, LLC
132. Kovrov Mechanical Plant, JSC
133. Leningrad NPP-Auto, LLC
134. Lunnoye, CJSC
135. Machine Engineering Facility CMP, LLC
136. Machine-Building Plant ZiO-Podolsk, JSC
137. Machinery Directorate, CJSC
138. Mashinostroitelny Zavod, JSC (MSZ)
139. Mechanization Directorate, LLC
140. Molniya Machine-Building Plant Production Association, FSUE
141. Moscow Polymetal Plant, JSC
142. MosOblAtomEnergoSbyt, JSC
143. Mospromtekhmontazh, JSC
144. Motor Transport Directorate, LLC
145. National Technical Physics and Automation Research Institute, JSC (NIITFA)
146. NCCP Motor Transport Directorate, CJSC
147. NCCP-Instrument, LLC
148. Nizhniy Novgorod Engineering Company Atomenergoproekt, JSC
149. Nizhniy Novgorod Engineering Company Atomenergoproekt, JSC (JSC NIAEP)
150. Nizhnyaya Tura Machine Engineering Plant Venta, JSC
151. Northern Construction Directorate, JSC
152. Novosibirsk Chemical Concentrates Plant, JSC (NCCP)
153. Novouralsk Instrumentation Plant, LLC
154. Novouralsk Research and Design Center, LLC
155. Novovoronezh NPP-Auto, LLC
156. Nuclear Power Financial and Production Company, CJSC
157. NUKEM Technologies GmbH
158. OKB Nizhniy Novgorod, CJSC
159. Olovskaya Mining and Chemical Company, CJSC
160. Package Production Supplies Directorate, JSC
161. PetrozavodskMash Holding Company, CJSC
162. Power Engineering Technologies, LLC
163. Priargunsky Industrial Mining and Chemical Union, JSC (PIMCU)
164. Pribor-Service, LLC
165. Production Association Electrochemical Plant, JSC (PA ECP)
166. Public Catering and Retail Directorate, LLC
167. Public Catering Organization, LLC
168. Real Estate Directorate Estate, LLC
169. Recreation Facility Bylina, CJSC
170. Recreation Facility Siniy Utes
171. Research and Design Institute of Installation Technology – NIKIMT Atomstroy, JSC
172. Research, Design, Engineering and Survey Institute Atomenergoproekt, JSC (JSC AEP)
173. RusAtomStroy-Management, CJSC
174. RUSBURMASH, CJSC
175. Rusburmash-Kazakhstan Joint Venture, LLP
176. Ruskorp Sung Won UEIP Co. Ltd.
177. Russian Concern for Production of Electrical and Thermal Energy at Nuclear Power Plants, JSC (Rosenergoatom)
178. Russian EnergyMachineBuildingCompany, CJSC
179. Saint Petersburg ISOTOPE, JSC
180. Saint Petersburg Research, Design and Engineering Institute ATOMENERGOPROEKT, JSC (SPb AEP)
181. Scientific and Production Association – Central Research Institute of Engineering Technology, JSC
182. Shchekotovo, LLC
183. Siberian Chemical Combine, JSC
184. Sibirian Design and Survey Institute Orgstroyproekt, JSC
185. SNV, LLC
186. Sole Customer Directorate, JSC
187. Sovlax-Batareya, CJSC
188. SPC Khimpromengineering, JSC
189. Specialized Construction and Installation Directorate Lenatomenergostroy, JSC
190. Specialized Scientific Research Institute for Instrumentation Engineering, JSC (SNIIP)
191. St. Petersburg Research and Survey Institute Energoizyskaniya, JSC
192. Stalenergoproekt, LLC
193. State Specialized Design Institute, JSC (GSPI)
194. StavropolAtomEnergoSbyt, JSC
195. Streltsovsky Construction and Repair Trust, LLC
196. Sverdlovsk Research Institute of Chemical Engineering, JSC (SverdNIIkhimmash
197. SverdNIIkhimmash-RAO, CJSC
198. SverdNIIkhimmash-SPK, CJSC
199. Technology Center TENEX, CJSC
200. Techsnabexport, JSC
201. Tekhatomservce, CJSC
202. Television Center, CJSC
203. TENAM Corporation
204. TENEX-Complect, LLC
205. TENEX-Korea Co., Ltd.
206. TENEX-Logistics, CJSC
207. Teplovodokanal, LLC
208. Tochmash, LLC
209. TRADEWILL LIMITED
210. Transport and Handling Machine Engineering, CJSC
211. Treatment and Recreation Complex – Resort Kolontayevo, JSC
212. Trust SpetsAtomEnergoMontazh, LLC
213. TsentrAtom-Komplekt, LLC
214. Turbine Machine Building, LLC

215.	**TVEL, JSC**
216.	**TVEL-INVEST, CJSC**
217.	TVEL-INVEST-Technology, CJSC
218.	TVEL-Leasing, CJSC
219.	**TVEL-Story, CJSC**
220.	TverAtomElektroMontazh, JSC
221.	**United Company Enrichment and Sublimation Complex, JSC**
222.	**United Service Company ARMZ, LLC (USC ARMZ LLC)**
223.	**Urals Electrochemical Combine, JSC**
224.	**Urals Gas Centrifuge Plant, LLC**
225.	Urandobycha Management Center, LLC
226.	Uranium Enrichemnt Center, CJSC
227.	**Uranium Mining Company, JSC (UGRK)**
228.	Ventilation Systems, CJSC
229.	**Vladimir Production Association Tochmash, JSC**
230.	**VNIIAES, JSC**
231.	VNIPIET, JSC
232.	Volgodonsk Installation Directorate, LLC

Nuclear Icebreaker Fleet

233.	**Atomflot, FSUE**

Nuclear and Radiation Safety Complex

234.	**Emergency Technical Center of Minatom of Russia, FSUE (St. Petersburg)**
235.	**Far East Federal Enterprise for Management of Radioactive Waste, FSUE (DalRAO)**
236.	**Federal Nuclear and Radiation Safety Center, FSUE**
237.	**Isotope, JSC**
238.	Isotope, JSC (Yekaterinburg)
239.	**Isotope-NIIAR, CJSC**
240.	**Mining and Chemical Combine, FSUE**
241.	**Northern Federal Enterprise for Management of Radioactive Waste, FSUE (SevRAO)1**
242.	**RosRAO, Radioactive Waste Management Company, FSUE**
243.	**Situation and Crisis Center of the Federal Atomic Energy Agency, FSUE**
244.	**V.G. Khlopin Radium Institute, Research and Production Complex, FSUE**

Scientific and Technical Complex

245.	**A.I. Alikhanov Institute of Theoretical and Experimental Physics, State Scientific Center of the Russian Federation, FSUE**
246.	**A.I. Leipunsky Institute of Physics and Power Engineering, State Scientific Center of the Russian Federation, FSUE**
247.	AKME-Engineering, JSC
248.	**All-Russia Research Institute of Chemical Technology, JSC (VNIIKhT)**
249.	**Central Research Institute for Management, Economy and Information of ROSATOM, FSUE**
250.	Chernobyl Archive, SUE
251.	**D. Efremov Research Institute of Electrophysical Instrumentation, FSUE**
252.	**Federal State Research and Design Institute of Rare Metal Industry - Giredmet, JSC**
253.	**Institute of High-Energy Physics, State Scientific Center of the Russian Federation, FSUE**
254.	**Institute of Reactor Materials, JSC (IRM)**
255.	Joint Venture Beijing CAEI-RIAR Radioisotope Co. Ltd.
256.	**L.Ya. Karpov Physical-Chemical Research Institute, FSUE (Karpov NIFKhI)**
257.	**Luch, Research Institute – Research and Production Complex, FSUE**
258.	Russian-Belarus Joint Venture Isotope Technologies, CJSC
259.	**State Research Center – Research Institute of Atomic Reactors, JSC (SRC NIIAR)**
260.	**State Research Institute of Graphite-Based Structural Materials, FSUE (NIIgrafit)**
261.	**Technopark-Technology, JSC**
262.	**Troitsk Institute of Innovative and Thermonuclear Research, State Scientific Center of the Russian Federation, FSUE**

Administrative Economic Activity

263.	**Atomic Energy Power Corporation, JSC (Atomenergoprom)**
264.	**Atomkomplekt, JSC**
265.	**Greenatom, CJSC**
266.	Non-public Educational Establishment – Central Advanced Training Institute
267.	Non-public Educational Establishment – Moscow Advanced Training Institute Atomenergo
268.	Non-Public Supplementary Professional Education Establishment Atomprof (NPE Atomprof)
269.	**State Atomic Energy Corporation ROSATOM**
270.	**TENEX-Service, CJSC**

Non-Related Assets

271.	Alliancetransatom, JSC
272.	Atom-service, JSC
273.	Atomspetskonservice, JSC
274.	Atom-Trans Service, CJSC
275.	Atomtrans, JSC
276.	Baikal Hotel Complex, JSC
277.	**CenterAtom, JSC**
278.	**Dedal Scientific and Production Complex, JSC**
279.	EFCON, JSC
280.	Media Center of Nuclear Industry, JSC (Atom-Media)
281.	Nuclear Industry Information and Exhibition Center, JSC
282.	Recreation and Sports Center OLenKur, JSC
283.	Zhilkomservis, JSC

Auxiliary Infrastructure

284.	**Administrative Building Management Company, FSUE**
285.	Child Development Center – Kindergarten Doshkolenok, SUEE
286.	**Federal Property Management Center, FSUE**
287.	Interdepartmental Specialized Training Center, FSI
288.	**Public Catering Combine, FSUE**

[1] DalRAO and SevRAO are parts of RosRAO since April 2010.

FEEDBACK QUESTIONNAIRE

Dear Reader!

You have read the second annual public report of the State Atomic Energy Corporation ROSATOM. Your opinion of the report is extremely important to us. We would appreciate your contribution to improving the quality of the report by filling out the Questionnaire.

You can send the filled out questionnaire to the following address: 24 Bolshaya Ordynka Street, 119017, Moscow; Care of the Communications Department and/or the Responsible Secretary of the Committee on Public Reporting (MVGalushkina@rosatom.ru).

1. EVALUATE THE REPORT ACCORDING TO THE FOLLOWING CRITERIA:

Credibility and objectiveness

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

Were you personally influenced by the conclusions made by the independent auditor and public certification?

☐ Yes ☐ No

Completeness and relevance of information

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

Report structure, user friendliness, style

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

Report design

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

2. INDICATE REPORT SECTIONS YOU CONSIDER IMPORTANT AND USEFUL:

3. IN YOUR OPINION, WHAT TOPICS SHOULD BE INCLUDED IN THE NEXT REPORT:

4. YOUR RECOMMENDATIONS AND ADDITIONAL COMMENTS:

5. INDICATE YOUR STAKEHOLDER CATEGORY:

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☐ Employee of an organization within the ROSATOM system

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☐ Representative of regional authorities

☐ Representative of local authorities

☐ Representative of a Contractor / Supplier

☐ Representative of a Customer / Consumer of goods or services

☐ Business representative

☐ Representative of a nongovernmental organization

☐ Representative of the mass media

☐ Representative of expert community

☐ Other (please specify)

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