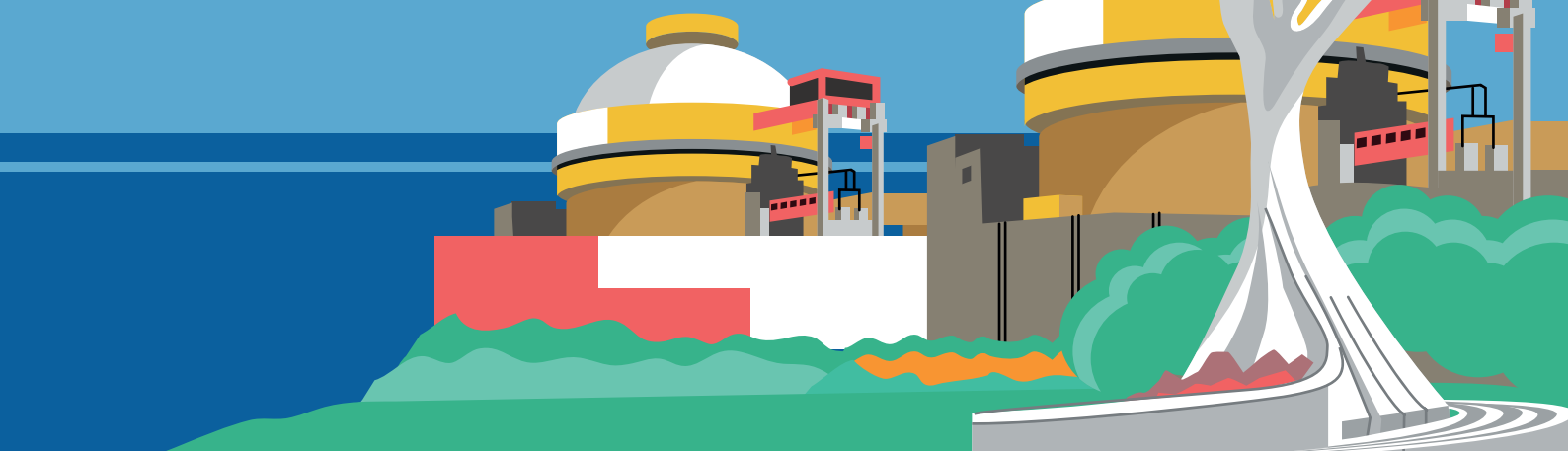


ROSATOM



ANNUAL REPORT

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About the Report

The Annual Public Report of the State Atomic Energy Corporation Rosatom (hereinafter referred to as “ROSATOM” or “the Corporation”) for 2014 is the sixth report voluntarily published for a broad range of stakeholders.

The top management and representatives of the stakeholders defined the priority topic of the Report as: “Improvement of ROSATOM’s positions in the world market of nuclear technologies and services”.

Standards and regulatory requirements

The Report was drafted in compliance with the requirements of

- Policy in the field of public reporting and standards of annual public reporting of ROSATOM and its organisations,
- <IR> International Framework,
- Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI G4, Core ‘in accordance’ option),
- AA 1000 Standards of AccountAbility,
- The RSPP Recommendations for use in the practice of management and corporate nonfinancial reporting (key performance indicators).

Stakeholder involvement

The drafting of the Report was carried out with the input of stakeholders as per the International Standard AA1000SES to enhance the transparency, accountability, and materiality of the disclosed information. A study was conducted to determine the material aspects disclosed in the report, and two dialogues were held with stakeholders, including public consultations and discussions concerning the draft report in the Public Chamber of the Russian Federation.

The Report takes into account all the main recommendations given by the representatives of stakeholders during these dialogues.

See more information about the report and the process of determining the content of the Report in [Appendix 1](#).



ROSATOM

ANNUAL PUBLIC REPORT 2014



PERFORMANCE RESULTS OF
THE STATE ATOMIC ENERGY
CORPORATION “ROSATOM”

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1. STRATEGIC REVIEW

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1.1.1. ROSATOM TODAY

1.1.1.

GENERAL INFORMATION ABOUT THE CORPORATION

ROSATOM is one of the largest utilities in Russia and one of the leading companies in the global nuclear technology market

State Atomic Energy Corporation "Rosatom" was established on December, 18, 2007 (ROSATOM, corporation). The status, purpose of creation and its operations, functions and powers of the State Corporation "Rosatom" are defined in the Federal Law of December, 01, 2007 No. 317-FZ "On the State Atomic Energy Corporation "Rosatom".

No. 1

in the number of simultaneously constructed nuclear power plants abroad (29 blocks are already in our portfolio, 11 blocks are in the construction phase)

No. 1

in the world
uranium enrichment
(36% of the market)

NO. 2

In terms of the world's
uranium reserves
(13% of world
production)

1

million euros per day
Spent on research and
development
investment

1

billion rubles
Annual expenditure on social
and charity programs

~ 17%

Share in the power
generation in Russia

258,000

Employees

33.2

billion rubles
Expenses on environmental
protection

~ 350

Organisations and enterprises
are part of the Corporation

The world's only
Nuclear-Powered
Icebreaker Fleet



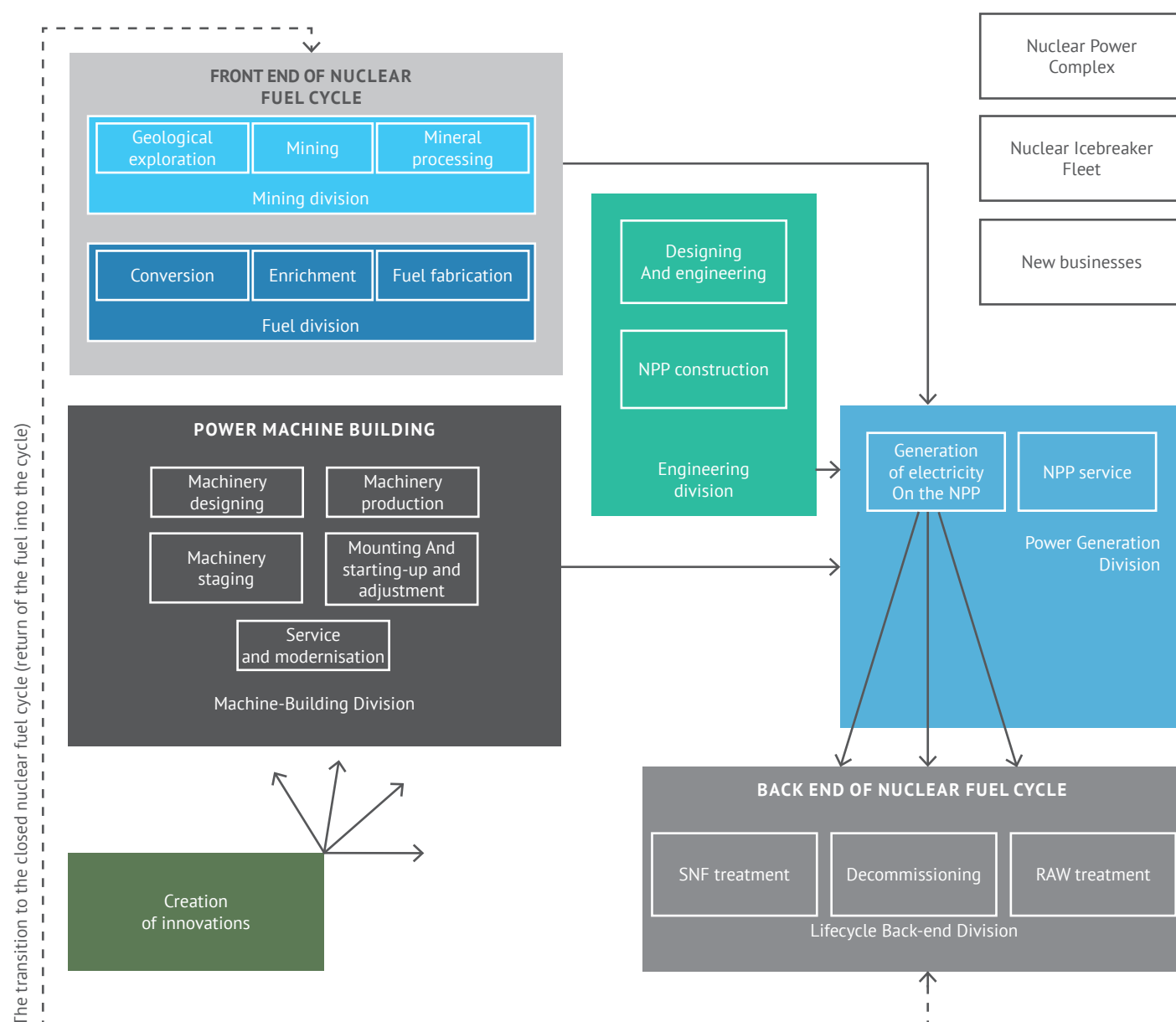
The Corporation is authorised on behalf of the Russian Federation to fulfil the international obligations of Russia in the field of peaceful uses of atomic energy and the observance of nuclear weapons in a non-proliferation regime.

ROSATOM is

- responsible for the implementation of national policy concerning the use of atomic energy,

- a global company that owns assets in all stages of the nuclear power and industry production chain, including: the exploration of uranium and its production, designing and building NPP, machine-building, generation of heat and electricity, uranium conversion and enrichment, the fabrication of nuclear, and the management of spent nuclear fuel (SNF) and radioactive waste (RAW).

Key areas of activity of Rosatom



As of 31 December 2014, ROSATOM has incorporated more than 350 different corporate entities. A list of the organisations and enterprises

is given in the [Corporation's annual web report](#).

1.2.

MAIN RESULTS OF ACTIVITIES IN 2014

Main results table*

Indicator	2014	2013	2012	2014/2013,%**
Revenues according to International Financial Reporting Standards, billion rubles	618.3	529.2	474.8	116.8
EBITDA, billion rubles***	200.5	155.2	140.8	129.2
Net assets according to International Financial Reporting Standards, billion rubles	1722.2	1550.1	1458.2	111.1
Intangible assets, billion rubles	48.0	48.3	44.8	99.4
Portfolio of overseas orders for 10 years, billion US dollars	101.4	72.7	66.5	139.5
Number of power units in portfolio of overseas orders, units	29	19	19	152.6
Implementation of state defence order, %	100	100	100	100.0
Number of level "2" events and above, according to INES scale	0	0	0	–
Amount of NPP power generation in Russia, billions of kilowatts per hour	180.5	172.2	177.3	104.8
NPP Installed capacity utilisation factor, %	81.6	77.9	80.9	104.8
Mineral feedstock of natural uranium (Russian assets), thousands of tonnes****	524.7 +224.1	541.9 +229.45	550.5 +155.0	–
Natural uranium mining, thousands of tonnes	7.85	8.3	7.6	94.6
Environmental protection expenses, billion rubles	33.2	19.6	15.7	169.4
Consolidated labour productivity growth by 2011 (in current prices without Nuclear Weapons Division), %	37.5	28.5	17.7	131.6
Share of specialists under 35 years old, %	32.6	29.7	29.2	109.8

* The indicators established by the Supervisory Council for 2014 in the table are marked with colour.

** Calculating the indicators in the column "2014/2013, %" the figures for 2013 are assumed to be 100%.

*** Data is given in accordance with the fiscal consolidation perimeter.

**** The bottom line with a "+" shows the data of Uranium One Holding NV mineral resources base. Due to changes in the calculating methodology used in 2012, the data is given separately for Russian assets and for the Uranium One Holding NV mineral resource base.

Key events table

January	<ul style="list-style-type: none"> Signing of the Agreement between the Government of the Russian Federation and the Government of Hungary concerning cooperation in the field of nuclear power consumption for peaceful purposes
February	<ul style="list-style-type: none"> Signing of the Agreement between the Government of the Russian Federation and the Government of the Republic of Finland concerning cooperation in the field of nuclear power consumption for peaceful purposes Signing of the Memorandum of low enrichment of uranium by the Russian Federation at an international summit in the Netherlands, which reduces the risk of nuclear terrorism
March	<ul style="list-style-type: none"> Acquisition by ROSATOM of 34% of stocks of the Fennovoima company, which will build and operate nuclear power plant "Hanhikivi-1" in the Republic of Finland.
April	<ul style="list-style-type: none"> Signing of the Agreement between the Government of the Russian Federation and the Government of the Republic of Uzbekistan concerning cooperation in the importation of spent nuclear fuel from the research reactor IIN-ZM to Russia Awarding of ROSATOM with an honorary diploma of the Federal Anti-monopoly Service of the Russian Federation for the establishment of an effective and progressive procurement system
May	<ul style="list-style-type: none"> Start of construction of power unit No. 2 of the Belarusian nuclear power plant Signing of the Memorandum of Understanding between ROSATOM and the Atomic Energy Agency in the Republic of China concerning cooperation in the construction of floating nuclear power plants (document reflects the intention of the parties to work out the possibilities of cooperation in the field of floating nuclear power plants)
June	<ul style="list-style-type: none"> Signing of a package of agreements concerning nuclear fuel deliveries by the JSC TVEL with the Slovak Republic in 2016–2021 for about US \$600 million Downloading of 4 KVADRAT fuel assemblies into the PWR reactor for the implementation of the experimental-industrial programme Start of production of fuel assemblies with mixing grids at PJSC "Novosibirsk Chemical Concentrates Plant", which have no analogues in the world (the use of these fuel assemblies will bring VVER a new level of power)
July	<ul style="list-style-type: none"> Signing of the Agreement between the Government of the Russian Federation and the Government of the Argentine Republic concerning cooperation in the field of nuclear power for peaceful purposes
August	<ul style="list-style-type: none"> Creation of the world's first complex of proton radiography CGRP-100 in the Federal State Budgetary Institution SRC IHEP Research Centre "Kurchatov Institute", which will enable the exploration of materials with a very high density

September	<ul style="list-style-type: none"> Signing of the Agreement concerning the development of the construction project of the first Jordanian nuclear power plant between JSC "Rosatom Overseas" and the Atomic Energy Commission of the Jordan Hashemite Kingdom Signing of the Agreement between the Government of the Russian Federation and the Government of the Republic of South Africa concerning strategic partnership and cooperation in the field of nuclear energy and industry Signing of the Agreement between the Government of the Russian Federation and the Government of the Algerian People's Democratic Republic on cooperation in the field of nuclear power for peaceful purposes
October	<ul style="list-style-type: none"> Completion of a multi-year project concerning the removal of ship spent nuclear fuel from the Primorsky Territory (42 trains of SNF removed) Conduction of an anniversary XXV International Conference on Fusion Energy (FEC 2014) IAEA, with the assistance of the Government of the Russian Federation and ROSATOM
November	<ul style="list-style-type: none"> Putting power unit No. 2 Yuzhnouralsk GRES-2 into operation (the first unit became operational in February 2014); the units were built by the United Nizhniy Novgorod Atomenergoproekt and ASE Signing of the Protocol to the Agreement between the Government of the Russian Federation and the Government of the Islamic Republic of Iran concerning the construction of a nuclear power plant in Iran (the protocol provides the construction of eight nuclear power units with VVER reactors, as well as a supply of nuclear fuel for the nuclear power plant by the Russian party throughout the entire life cycle of the new units) Signing of the Hungarian JSC "MVM Razvitiye Paks NPP-II" and Joint company the ASE-Nizhniy Novgorod Atomenergoproekt of the package of agreements on the construction of two power units of the Hungarian Paks NPP-II with the Russian VVER reactors-1200
December	<ul style="list-style-type: none"> Approval of the Report on the environmental impact of NPP "Akkuyu" (Turkish Republic). The transition to full-scale construction on the plant site Approval of the construction of "Hanhiki-V-1" NPP by the Parliament of Finland NPP in that country Signing of the Agreement between the Government of the Russian Federation and the Government of the Republic of Armenia concerning cooperation in extending the service life of power unit No. 2 of the Armenian nuclear power plant (intergovernmental agreement provides for the repair and modernisation of the power unit) Signing of the document "The strategic vision of cooperation strengthening in the peaceful utilisation of nuclear energy" (document presents the possibility of building at least 12 nuclear power units of Russian design in the next 20 years) The power start-up of power unit No. 3 of Rostov NPP

1.2.1. STATEMENT FROM THE CHAIRMAN OF THE SUPERVISORY BOARD

Dear Colleagues,

Reporting year 2014 is a landmark for the global nuclear energy industry. We celebrated the 60th anniversary of the power start-up of the first nuclear power plant in the world. This event makes us especially proud, because that nuclear power plant was built in Russia, in the city of Obninsk.

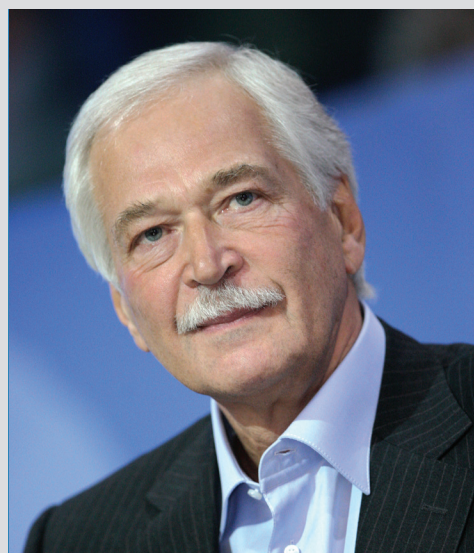
The development of Russia's role in the nuclear industry is one of the state's major priorities to this day. The funding of key programs continued in 2014: funds were allocated for the development of next-generation nuclear technologies, for nuclear power plant construction, and for the construction of nuclear-powered icebreakers. Also, a new state programme "Development of the Nuclear Power Complex" was approved for the period up to 2020.

ROSATOM, due to support from the state, has a significant responsibility for achieving a positive end result. I note with satisfaction that for 2014, the key performance indicators of ROSATOM, established by the Supervisory Board, are fulfilled (including 100% fulfilment of state defence order). The projected values were exceeded for many indicators.

For 2014, the key performance indicators of ROSATOM, established by the Supervisory Board, are fulfilled

Being a Chairman of the Supervisory Board, I welcome the development of international cooperation with foreign partners of ROSATOM, which strengthened our positions in the world market of nuclear technology and services and increased the long-term orders portfolio for the Corporation in 2014. The competitiveness of Russia is significantly improved through the technological leadership of ROSATOM in the global nuclear industry.

I think it is important to note that the effectiveness of the Corporation's activities has increased greatly in recent years. ROSATOM Production System is one of the main tools here, in which a culture of lean manufacturing and continuous improvement of the systems within all enterprises and



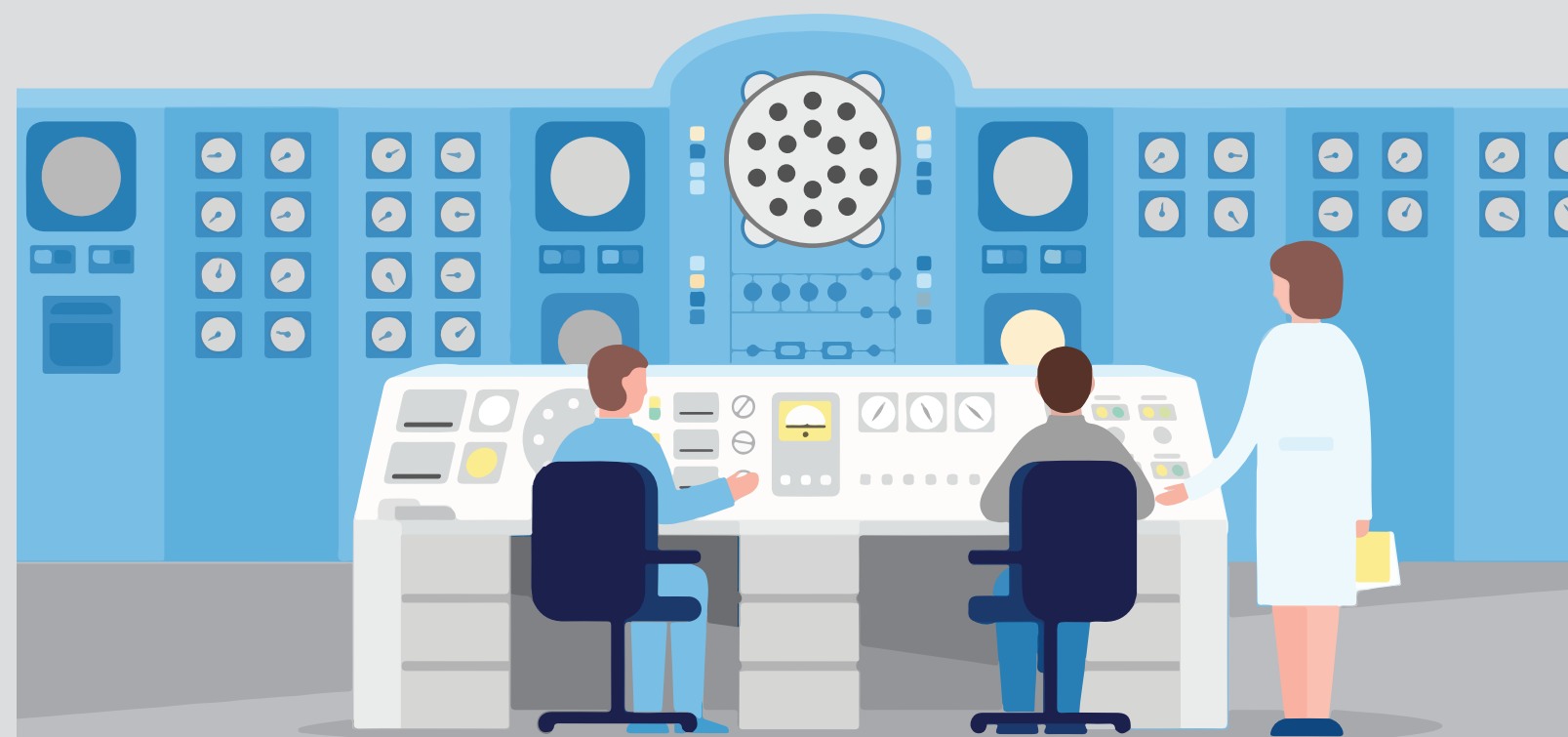
ROSATOM is consistently demonstrating high results, as well as absolutely reliable and safe technologies, and the Russian nuclear industry remains open and transparent to all stakeholders

organisations are being promoted. This significantly improves the efficiency of work processes.

ROSATOM is consistently demonstrating high results, as well as absolutely reliable and safe technologies, and the Russian nuclear industry remains open and transparent to all stakeholders. I believe that this is definitely an important standard to maintain for the ongoing development of the Corporation in the future.

In conclusion, I want to emphasise that the management and employees of the Corporation demonstrated a high level of professionalism and dedication in 2014, just as in previous years. I would like to further thank the management and employees of the Corporation, its affiliated organisations and companies for their work. I wish you new and even greater success as we move forward!

BORIS GRYZLOV,
CHAIRMAN OF THE SUPERVISORY BOARD
OF ROSATOM



1.2.2. STATEMENT FROM THE CEO OF ROSATOM

Dear colleagues and partners!

This is a report of ROSATOM for 2014. Over the past six years, the State Corporation has been voluntarily preparing public reports for all stakeholders, which is a confirmation of the steady course of openness and transparency that Rosatom adopted a few years ago.

We have effectively handled all the tasks set by the government and those laid out in the business strategy of ROSATOM during the past year.

The key event of the year was the early completion of construction on the third power unit of the Rostov nuclear power plant 2 months ahead of schedule. In addition, the first unit of NPP "Kudankulam" was successfully delivered to the customer in India, to come into guarantee commission.

2014 was also a record year in power generation: Russian nuclear power plants developed 180.5 billion kWh, which is 12 billion kWh more than planned by the Government of the Russian Federation, and accounts for more than 17% of the produced electricity in the country.

The most important indicator for us is to ensure our operating capacity in the long term. We estimate this capacity through a portfolio of overseas orders for 10 years in the future, which amounts to 101.4 billion dollars, based on the results of this year. That growth is more than 30 billion dollars over the previous year. This result is an indication that Russian nuclear technology is appreciated and considered to be the most reliable in the world. This significant expansion of the portfolio of overseas orders is solid proof that the current political changes are rather opportunistic in nature and do not have a significant effect on long-term cooperation in the field of peaceful nuclear energy between countries and companies.

In 2014, we signed contracts for the construction of two nuclear power units "Paks-2" in Hungary with the Russian VVER-1200. An agreement was also signed to develop the construction project of the first nuclear power plant in Jordan. Another contract was



signed with Iran concerning the construction of two power units of the second stage of the NPP "Bushehr". A general framework agreement was signed for the construction of two power units of NPP "Kudankulam" in India.

An intergovernmental agreement was signed between Russia and Finland concerning the peaceful use of nuclear energy. The Parliament of Finland approved the implementation of a joint project with ROSATOM for the construction of nuclear power plants "Hanhikivi."

In 2014, we completed a number of important activities associated with the practical development of future technologies in the nuclear industry. The commercial production of MOX fuel has been launched at the enterprises of the Corporation. We started to establish pilot production of nitride fuel at the Siberian Chemical Combine. These developments are another essential step in the future transition to the closed nuclear fuel cycle with fast neutron reactors.

The priority of ROSATOM is to ensure nuclear radiation safety, as well as labour protection. There were no events recorded in the domestic nuclear power above "1" according to the international scale INES for 2014, nor in recent years, (events level "1" and "0" are not dangerous for staff facilities, individuals and the environment). Through systematic work, we also manage to reduce the level of industrial injuries each year; that rate is 4 times lower at the enterprises of the Corporation than the average in Russia.

Addressing the issue of "nuclear legacy", the multi-year project for the exportation of the spent ship nuclear fuel from the Primorsky Territory was accomplished, so there is no more ship SNF in the Far East. In the coming years, we will continue to deal actively with problems of "legacy", and the key goal here is to create a production capacity that ensures an excess of irradiated fuel processing volume over its generation. A new federal programme target for nuclear and radiation safety in 2016–2030 is under development and focused mainly on the implementation of this task.

It should be noted that together with our progress and results, we understand our enormous responsibility to the community, so we attach special importance to initiatives in the field of sustainable development and social responsibility. ROSATOM is a large taxpayer of the country (in 2014, it paid about 102 billion rubles to the budgets of various levels). Environmental safety remains the focus of our attention: the total expenditure on environmental protection in 2014 increased by 70% and amounted to 33.2 billion rubles.

We constantly think about the comfort of work and the further development of our employees. The volume of funds allocated for corporate social programs was 10 billion rubles in 2014. ROSATOM successfully operates a system of managerial succession pool, and about one-third of ROSATOM participants of the management succession pool received promotions in various organisations of the industry in 2014. More than 121,000 employees received training, retraining and education training during the year. It should also be noted that recently, the proportion of professionals under the age of 35 in the Corporation is steadily increasing (from 29.7% in 2013 to 32.6% in 2014).

The stable growth of all indicators in recent years shows that we have created a solid foundation for the development of the nuclear industry for the benefit of the country and the world. Also, we do not intend to stop at what we have achieved. Further expansion of the portfolio of contracts in Russia and abroad, the development of new businesses, and reducing the cost and construction time of nuclear power plants – these are just some of the challenges we face in the near future.

I am confident that as one team, we can achieve great results and remain one step ahead of any challenges that arise!

SERGEY KIRIENKO,
CEO OF ROSATOM

1.2.3. STATEMENT OF THE IAEA DEPUTY DIRECTOR GENERAL

Dear colleagues!

Mankind has been using nuclear power for peaceful purposes for the past seventy years. More than 435 working nuclear reactors contribute to the global energy supply and promote significant economic growth. Over these decades, nuclear power has proved its effectiveness and has become an integral part of the global energy balance. Today, we see continued interest in nuclear power around the world, and according to the forecasts made in 2014, by 2030, the current 379 GW of installed capacity will increase by 88%.

2014 is marked by the significant events for the international development of nuclear energy. The International Uranium Enrichment Centre is operating in Angarsk and the International Atomic Energy Agency (IAEA) has begun to develop an agreement with Russia concerning the transit of low-enriched uranium for the uranium IAEA bank, which will be established in Kazakhstan.

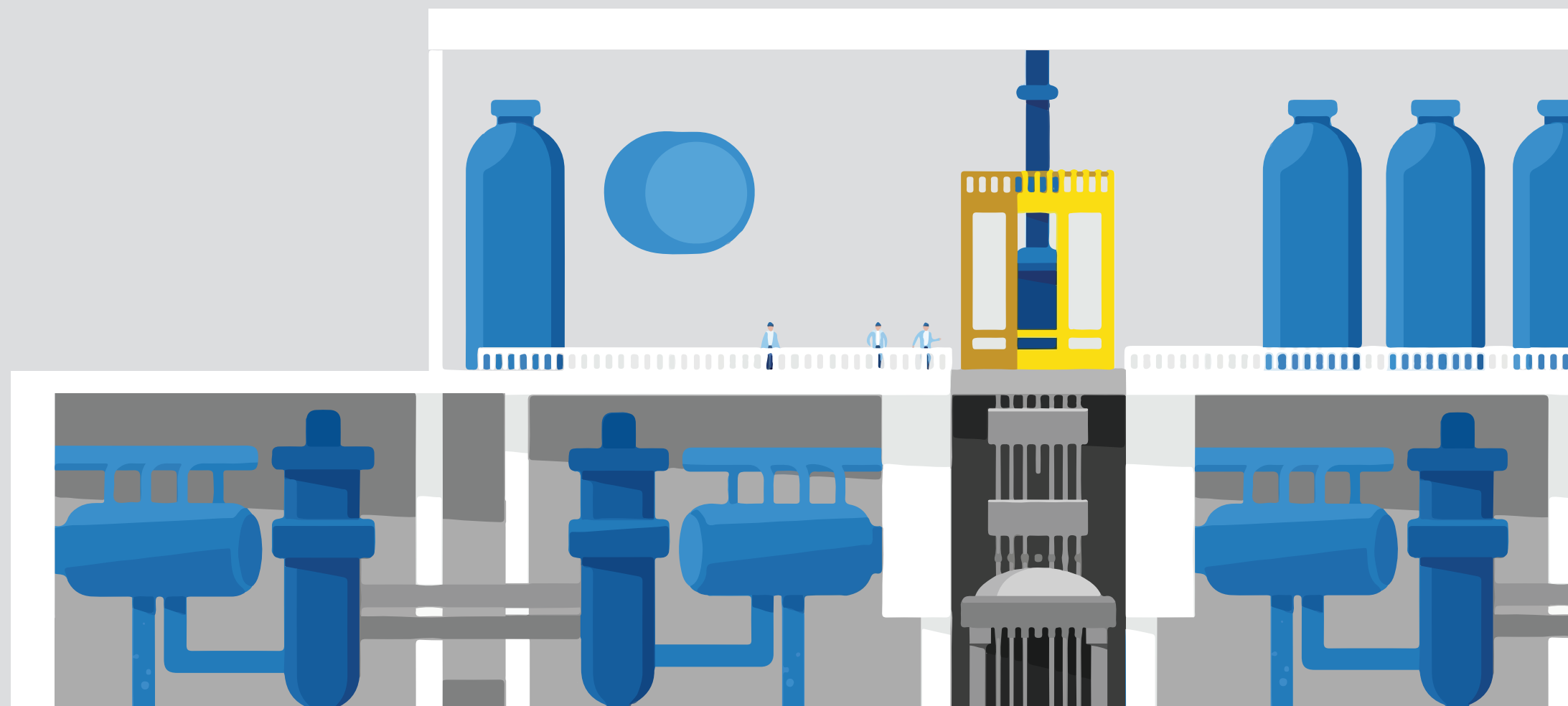
During the year, the IAEA and ROSATOM collaborated on the development of key areas of nuclear power development for the future. St. Petersburg hosted the XXV International Conference of the IAEA on nuclear fusion. The International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), which was initiated in 2000 and enjoys strong backing from Russia, welcomed the newest, 40th member – the People's Republic of Bangladesh. Two INPRO Dialogue Forums on Global sustainability of nuclear energy were successfully passed in 2014. All these events and achievements formed the basis for the decision to establish a permanent INPRO section in the structure of the IAEA.

During the year, the IAEA and ROSATOM collaborated on the development of key areas of nuclear power development for the future



In our work at the IAEA, we are still committed to the organisation's main mission to assist Member States in achieving social and economic objectives, as well as planning and using the achievements of nuclear science and technology for peaceful purposes. I believe that the scientific and industrial potential of ROSATOM will not only contribute to the successful implementation of already launched joint projects, but will also serve as a basis for cooperation in many areas of peaceful nuclear power use, from security to knowledge management.

DEPUTY DIRECTOR GENERAL,
HEAD OF THE DEPARTMENT OF ATOMIC ENERGY
INTERNATIONAL ATOMIC ENERGY AGENCY
MICHAIL CHUDAKOV



1.3.

THE MISSION AND STRATEGY OF ROSATOM

1.3.1.

THE MISSION OF ROSATOM

THE MISSION OF ROSATOM IS TO PROMOTE COMPETITIVENESS OF THE RUSSIAN FEDERATION



1.3.2.

VALUES OF ROSATOM

THE VALUES OF ROSATOM WERE APPROVED BY THE STRATEGIC COUNCIL IN 2014



EFFICIENCY

We always find the best solutions to problems. We are efficient in all we do; when achieving the set targets, we make efficient use of the company's resources and are continuously improving our working processes. There are no obstacles that can hinder our finding out the most efficient solutions.

ONE STEP AHEAD

We strive to be the leader in the global market. We are always one step ahead in technology, knowledge and the professional strength of our employees. We foresee what will be tomorrow and are ready to be it today. We continuously advance and learn. Every day we try to work better than yesterday.

RESPECT

We always treat our customers, partners and suppliers with respect. We always attentively listen to and hear each other, regardless of positions and places of work. We respect the history and traditions of the nuclear industry. The achievements of the past inspire us for new victories.

ONE TEAM

We all are ROSATOM. We have common goals. Working in a team of like-minded fellows allows for unique results. Together we are stronger and can achieve most ambitious goals. The successes of our employees are the successes of the team.

SAFETY

Safety is the highest priority. In our work, we ensure absolute safety of people and the environment first. There are no minutiae in safety; we know safety rules and follow them, while putting a stop to violations.

RESPONSIBILITY FOR THE RESULT

Each of us bears personal responsibility for his/her work result to the State, Sector, colleagues and customers. In our work, we set for ourselves the most stringent requirements. It is not the spent effort that is evaluated, but the achieved results. The successful results are the basis for our new achievements.

1.3.3.

STRATEGY OF ROSATOM

The strategy of the State Atomic Energy Corporation "Rosatom" was approved by the Supervisory Board on October, 31, 2014 (Minutes of the meeting of October, 31, 2014 No. 65). The business strategy for the period up to 2030 was developed on the basis of the goals set by the state for the civil nuclear industry.

The development of nuclear energy will be based on the long-term technology policy, along with the development of nuclear power and the development of next-generation technologies, including fast neutron reactors and technologies related to the closed nuclear fuel cycle, as well as an increase of the export potential of Russian nuclear technologies – nuclear power plant

construction, uranium enrichment, nuclear fuel and others.

Given the limited nature of total investment resources, and taking into account the current and projected world market conjuncture, existing competitive advantages, and technological backlogs of nuclear power complex, the business strategy of ROSATOM suggests a concentration on improving the efficiency of the nuclear power business, which should lead to a significant increase in key financial indicators by 2030.



THE STRATEGY OF THE CORPORATION IS BASED ON THE FOLLOWING DOCUMENTS:

- The Concept of Long-term Socioeconomic Development of the Russian Federation for the Period until 2020 (approved by a Directive from the Government of Russia No. 1662-r of 17 November 2008, August, 08, 2009 edition);
- Concept of Foreign Policy of the Russian Federation (approved by the President of the Russian Federation December, 02, 2013)
- the Strategy for the Innovative Development of the Russian Federation for the Period until 2020 (approved by a Directive from the Government of Russia No. 2227-r of 8 December 2011);
- Russian state armaments programme for the period 2011–2020;
- The National Programme of the Russian Federation "Development of the Nuclear Power and Industry Complex" (approved by a Resolution of the Government of Russia No. 506-12 of 2 June 2014).
- The long-term programme of activities of the State Atomic Energy Corporation "Rosatom" (2009–2015), approved by the RF Government from September, 20, 2008 No. 705 (in addition, RF Government Resolution of November, 23, 2009 No. 941 from October, 04, 2013 No. 878 -41);
- The Federal Law from December, 01, 2007 No. 317-FZ "On the State Atomic Energy Corporation 'Rosatom'."

To fulfil the long-term goals for both public and business levels, it is necessary to ensure long-term competitiveness and sustainability of the business. The mandatory conditions to achieve this are:

- Ensuring the secure use of nuclear energy,
- Non-proliferation of nuclear technology and materials,
- Integrating an offer on the entire life cycle of nuclear power plants
- Maintaining competitive operating costs at all stages of the value chain, and a low cost of kWh (LCOE)* at NPP of Russian design
- Providing technological leadership
- Integration into the world economy
- Availability of a cost-effective investment portfolio
- Ensuring social acceptability of nuclear power
- Maintaining the Corporation's ability to self-improve and innovate
- Formation of corporate culture, aimed at achievement and efficiency gains
- Unconditional compliance with Russian legislation, including the Law "On the State Secret".

Expected results of the Strategy implementation for ROSATOM activities

Target positioning of the Corporation is being a global leader in the nuclear industry in terms of growth and efficiency. The unique combination of competencies possessed by the Corporation is the main factor that contributes to the achievement of the target position, which simultaneously combines the advantages of the following ultimate development options.

Key objectives of the Corporation in 2014–2019 which are necessary to achieve the strategic objectives:

- Ensuring the implementation of the state defence order / State Arms Programme;
- Increasing competitiveness through lower LCOE, and the development of key competencies through the reduction of the cost of nuclear power plant operation, as well as a reduction of costs and a shortening of NPP construction terms;
- Building a portfolio of orders for traditional and innovative business in Russia and abroad;
- Obtaining references on modern technologies, including the VVER-TOI and TVS-KVADRAT.

The horizon of 2020–2030 will address the following objectives:

- Expansion of market opportunities through more competitive offerings and the implementation of the results of R&D, including the new business;
- Active diversification into related segments in case of high economic attractiveness.

The highest adjusted free cash flow** over the planning horizon will be generated for the life cycle (LC) of NPP due to the active construction of nuclear power plants in Russia and abroad (including Build-Own-Operate conditions). Also, a substantial increase in margins is planned in the life cycle of NFC, by means of operational efficiency improvements, by 2030.

Traditional business will remain the key factor to the Corporation, and in 2030, the share of new business will increase.

* LCOE is a specific discounted cost of electricity throughout the entire life cycle of NPP.

** Given the significant growth in working capital in 2011–2012 with a simultaneous increase in applications for investment in maintenance, the EBITDA indicator has been replaced by a monetary indicator of the dynamics of the cash flows that can be invested in development. Free cash flow (FCF) has been recognised as the most appropriate one, with regard to certain adjustments. Adjusted free cash flow (SSDP) is characterised by simplicity and clarity of calculation of the index for division, by a direct connection with extra budgetary funding sources, through the provision of more tools to achieve this goal. Due to the high importance of SSDP for the Corporation as a whole, the figure is decomposed into the KPI cards of the heads of all divisions. For more information about SSDP, refer to the "Management of financial and investment activities" section, an interview with Nikolay Solomon.

1.3.4.

SUSTAINABILITY AGENDA

Due to great public significance of the nuclear industry's activities, one of ROSATOM's priorities is the sustainable development of its nuclear industry entities, the Corporation itself, and its contribution to the development of the country and mankind as a whole.

Since ROSATOM performs a broad range of work in different areas, sustainability issues are regulated for each activity area (See [previous Annual reports of State Corporation Rosatom for SD management](#)).

The Corporation's agenda is to ensure the sustainable development of business through:

- non-proliferation of nuclear weapons, nuclear materials, and critical nuclear technologies;
- ensuring nuclear and radiation safety and reliability of nuclear facilities;
- ensuring energy security;
- managing the lifecycle of nuclear facilities;
- ensuring ecological safety;
- developing modern technologies for RAW management and solving "nuclear legacy" problems;
- applying nuclear technologies in those industries that are essential for the quality of living and the lifespan of the population;
- positive economic and social impact on the regional, national, and international scales;
- creating appropriate conditions for the professional and career growth of employees, and ensuring safe working conditions and social programs;
- minimising environmental impact, including on the world's climate;
- increasing capital use efficiency;

- affirmative interaction with stakeholders;
- enhancing transparency and accountability;
- ensuring public acceptance of nuclear power development.

Corresponding sections of the Report elaborate on the implementation of the sustainability agenda in 2014.



One of ROSATOM's priorities is the sustainable development of its nuclear industry entities, the Corporation itself, and its contribution to the development of the country and mankind as a whole

1.4.

BUSINESS MODEL, VALUE-CREATION PROCESS AND MARKETS OF PRESENCE

1.4.1.

BUSINESS MODEL AND VALUE-CREATION PROCESS

ROSATOM manages the Russian nuclear industry assets at all stages of the nuclear fuel cycle, during the cycle of construction, and during the operation and decommissioning of nuclear power plants, as well as during other segments involving the use of atomic energy. Being aware of the significance of its activities for the Russian economy and society, ROSATOM has tasked itself with sustainable business development, thereby increasing the aggregate value of the Corporation itself, for a broad range of stakeholders and the country's population as a whole. The notion of "value" is understood not only as products created, services rendered, and the financial results of the Corporation, but also the economic, social, and ecological influence of the Corporation on its stakeholders and the surrounding world as a whole.

ROSATOM defines a business model as a system that ensures the creation of value in the long-, mid-, and short-term, and is aimed at the achievement of strategic goals.

ROSATOM's business model is based on the Corporation's mission and long-term strategy up to 2030. The business model includes:

- accessible capitals,
- a management system aimed at the most efficient use of capitals; (See [chapter "Management efficiency"](#))
- performance outcomes and their contribution to the long-term increase of the capital of the Corporation, which is achieved by meeting the strategic target indicators.

ROSATOM's business model pays special attention to the external environment because: a) part of the accessible capitals of the Corporation comes from the environment and a significant part of the outcomes associated therewith, and b) the environment is a source of key risks and opportunities for the Corporation.

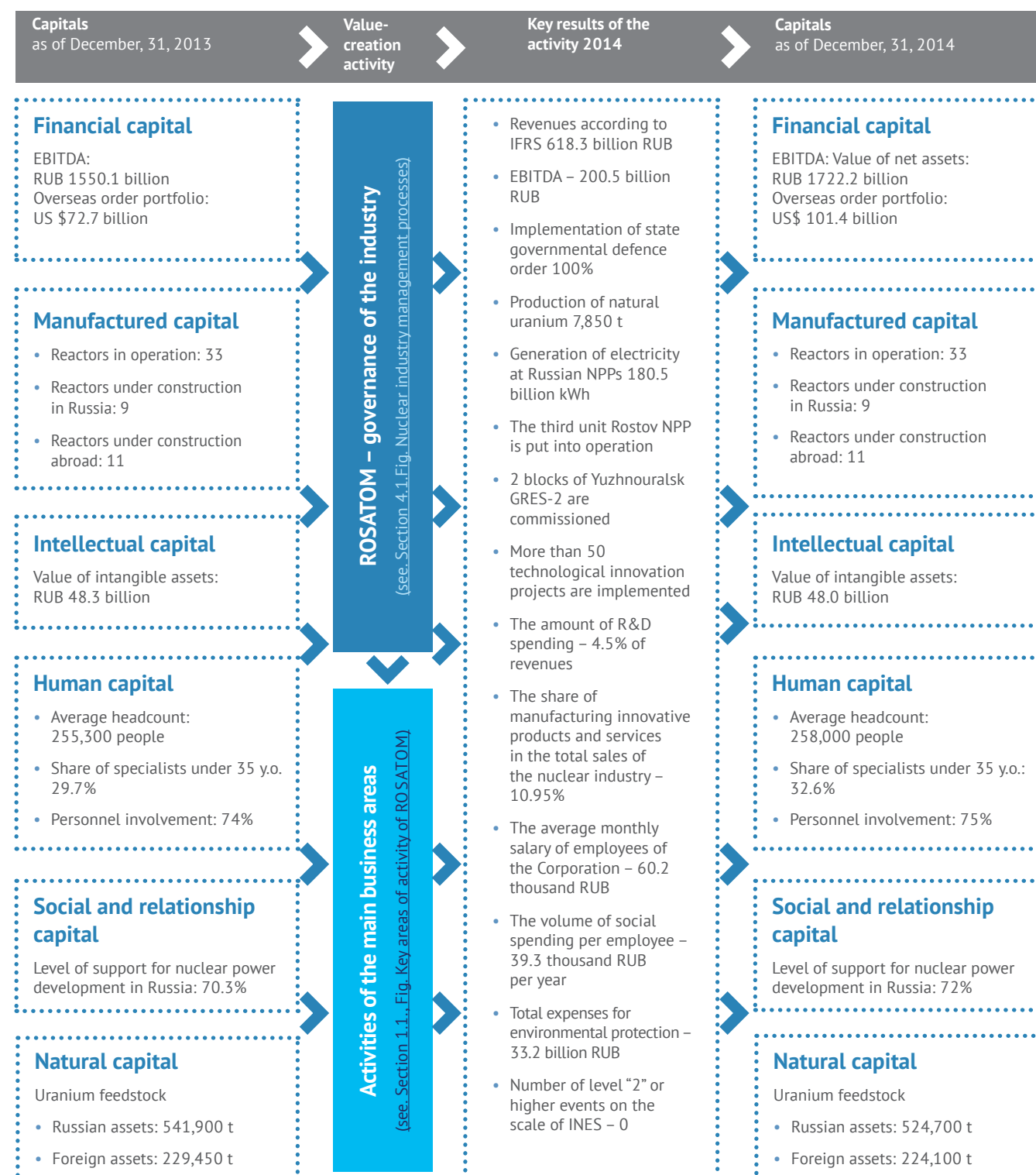
The provided schematic diagram represents an integrated value-creation process. The business

model of ROSATOM is the core of this process. It defines the system of different areas of activity and outcomes contributing to all changes in key capitals over the reporting period.

The business model of the Corporation in the Russian market is represented by the present

scheme, the business model of activity in foreign markets is presented in the [“International Business” section](#). The model of asset management in the Russian Nuclear Industry is available in the [section “Corporate Governance”](#).

Fig. Business model and value-creation process of ROSATOM



1.4.2.

THE CAPITALS OF CORPORATION

The capitals of ROSATOM are one of the main elements in the value chain. They are converted in the course of commercial or other activities (are increased, reduced, transformed and so on), which generally leads to the creation of value in the medium and long term.

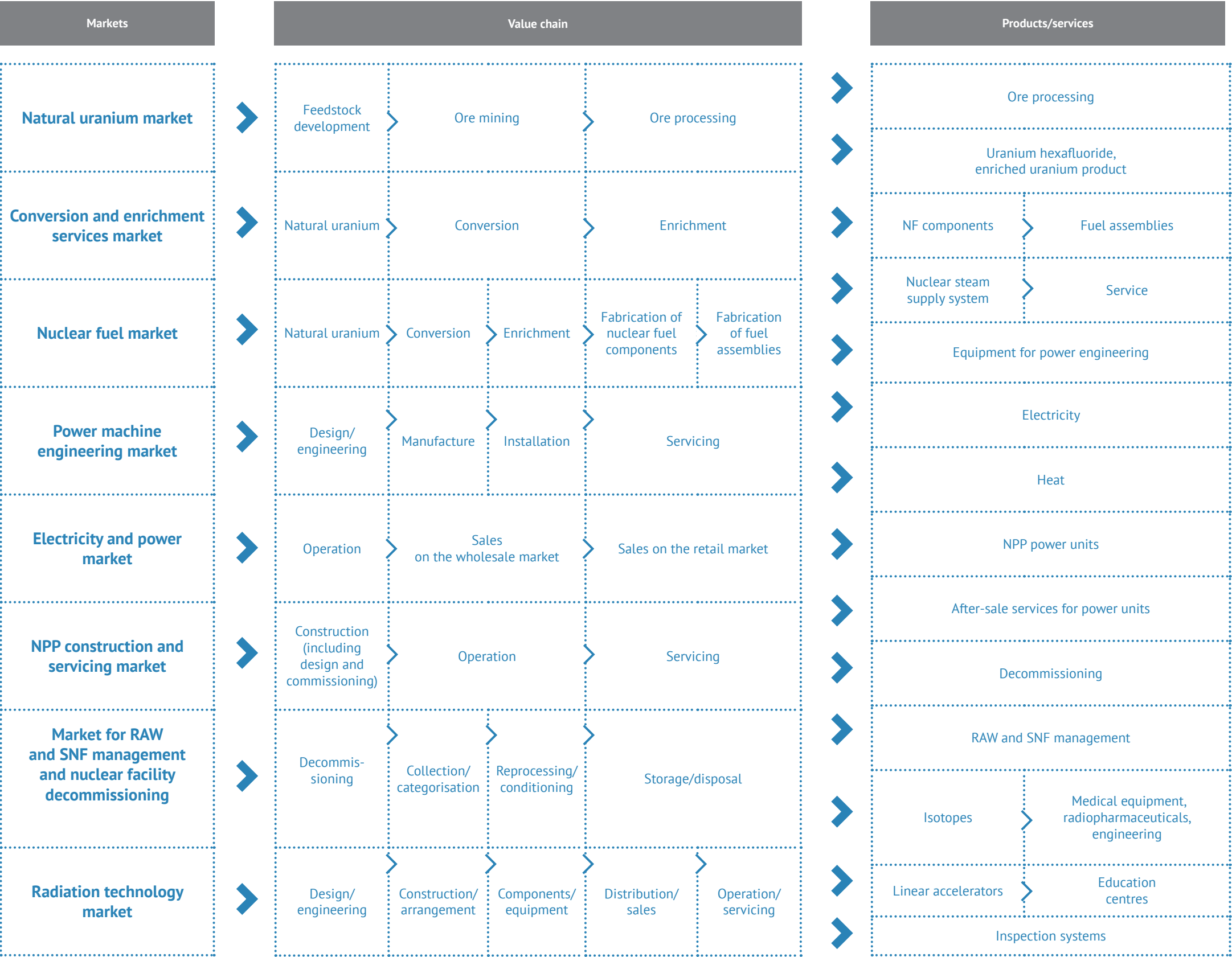
By capitals, the Corporation means certain resources (reserves) of tangible and intangible assets that are being used in its operations. The Corporation acknowledges that some of its available capital is jointly owned with other stakeholders (e.g., natural resources and public infrastructure), and is therefore treated responsibly. ROSATOM identifies six kinds of capital that are being used: financial, manufactured, human, intellectual, social and relationship, and natural. Integral growth or the decline of capitals leads to an increase or decrease in value, so the Corporation pays a great deal of attention to management and the more efficient use of the available capitals.

Table. The results of the creation of value

Capital	Indicator	2014	2013	2014/2013, %
Financial	Value of net assets, billion RUB	1722.2	1550.1	+11.1
	Overseas orders portfolio, US\$ billion	101.4	72.7	+39.5
Manufactured	Reactors in operation	33	33	0
	Reactors under construction in Russia	9	9	0
	Reactors under construction abroad	11	11	0
Intellectual	Value of intangible assets, billion rubles	48.0	48.3	-0.6
Human	Average headcount, thousand people	258.0	255.3	+1.1
	Personnel involvement, %	75	74	+1.35
	Share of specialists under 35 y.o., %	32.6	29.7	+9.8
Social and relationship	Level of support for nuclear power development in Russia, %	72	70.3	+1.7
Natural	Uranium feedstock (Russian assets), thousand t	524.7	541.9	-3.2
	Uranium feedstock (Foreign assets), thousand t	224.1	229.45	-2.3

1.4.3.

MARKETS OF PRESENCE



1.4.3.1. Tendency of nuclear industry development in Russia and the world

Factors affecting the development of nuclear industries are:

- increase in the world's population from 7 to 9 billion people in the next 50 years;
- increasing demand for electricity (two-fold) by 2050 in order to satisfy the electricity needs of a growing population (for the next 50 years, humanity will consume more energy than it has consumed in all previous history);
- increase in the accumulation of greenhouse gases. World's level of emitted carbon dioxide is 25 billion tonnes per year, or 800 tonnes per second, and that number continues to grow. It is forecasted that during the 21st century, the concentration of greenhouse gases in the atmosphere will increase by more than 2 times compared to global society's pre-industrial period.

Nuclear generation is unique among energy-generation technologies, and has a minimal impact on the environment: each year, global nuclear power plants prevent the release of more than 3 billion tonnes of carbon dioxide into the atmosphere. NPPs produce almost no greenhouse gas emissions. ROSATOM is a strong supporter of global greenhouse gas emission reductions and the transition to an economy based on renewable energy sources.

A key benefit of the Russian nuclear industry is that it is one of the most advanced in the world in terms of scientific and technical developments in the design of reactors, conversion stages of the nuclear fuel cycle (NFC), operating experience of nuclear power plants, and NPP staff. Russia has the world's most advanced enrichment technologies, and projects using nuclear power plants with pressurized water reactors (VVER) have proven their reliability in thousands of reactor-years of trouble-free operation. The high quality of products and offered services confirm this success in international tenders for the supply of nuclear fuel and the construction of nuclear power plants abroad.

1.4.3.2. The natural uranium market

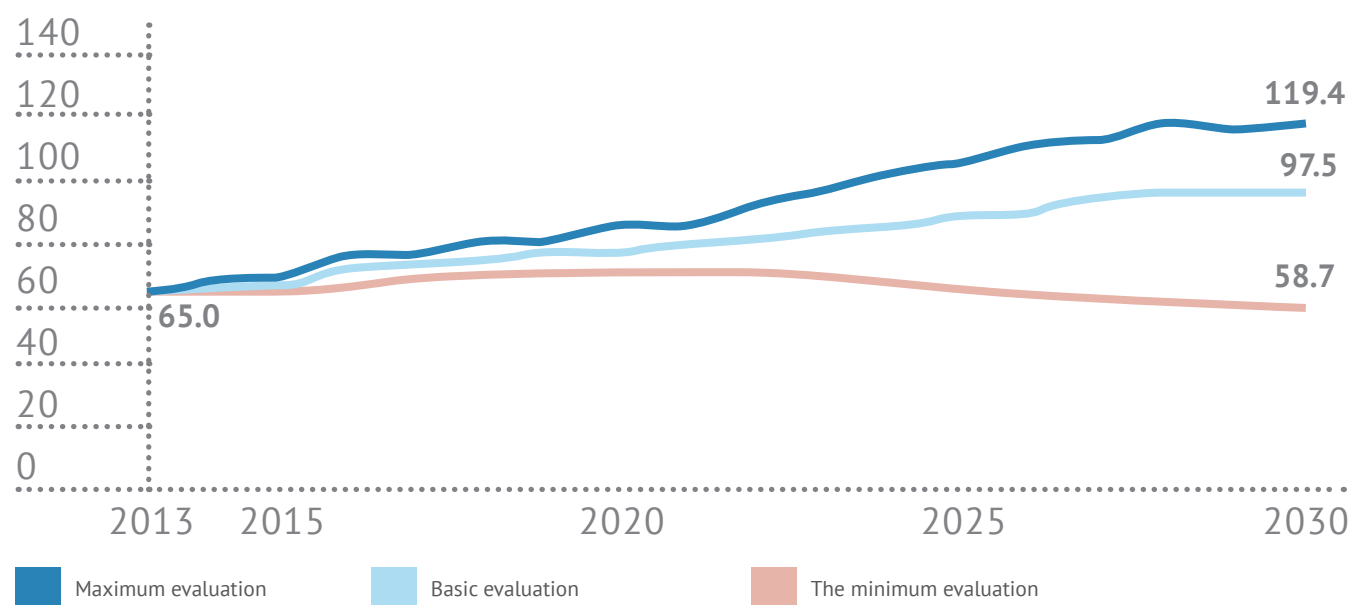
The accident at the NPP “Fukushima-1” in Japan caused a drop in activity and prices in the wholesale market, but in the medium and long term, the demand for natural uranium associated with the further development of nuclear energy in China, India and other countries is still expected to increase.

According to the baseline scenario of the World Nuclear Association (WNA), the global demand for uranium will increase, and in 2030 will amount to 97.5 thousand tonnes.

Production of natural uranium in the world in 2014 was 57 thousand tonnes (a decrease of 4% as compared to 2013). Deliveries from secondary sources (stocks of energy companies and some states, re-enrichment of depleted uranium hexafluoride, the recovered uranium, and so on) has resulted in 17–19,000 tonnes in uranium equivalent, covering the rest of the demand and providing an oversupply of 8–10,000 tonnes.

It is expected that until 2030, uranium production will increase in line with rising demand. At the same time, the volume of supply from secondary sources will be reduced and will not exceed 12,000 tonnes in uranium equivalent by 2030.

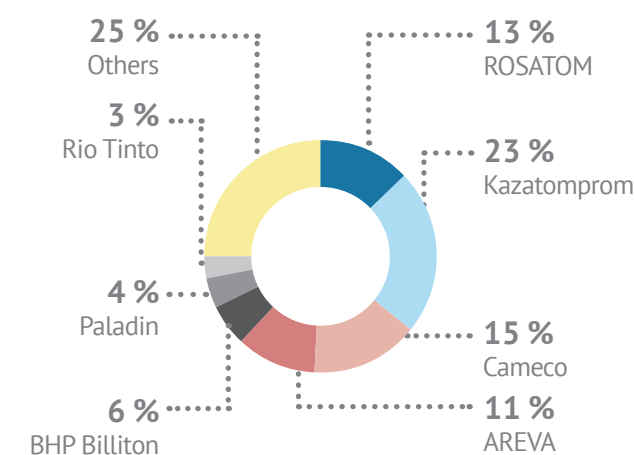
Forecast of changes in demand for uranium, thousands of tonnes



In the world market of natural uranium, a stable group of leaders has formed, which, in addition to ROSATOM (~ 13% of world production), includes “Kazatomprom” (Kazakhstan, ~ 23%), Cameco (Canada, ~ 15%), AREVA (France ~ 11%), BHP Billiton (Australia-UK ~ 6%), Paladin Energy (~ 4%), and Rio Tinto (Australia-UK ~ 3%). The share of the 7 largest players represents about 75% of the total volume of uranium mining.

In 2014, a number of new enterprises were put into operation, producing ~ 850 tonnes of natural uranium: Four Mile in Australia, (General Atomics), Nichols Ranch in the United States (Uranerz Energy) and Cigar Lake in Canada (Cameco, AREVA).

The biggest players in the market of natural uranium



During 2014, construction continued on a number of new enterprises. The first stage of construction of the mine Husab in Namibia (owned by Chinese CGN, which plans to launch production in February 2016) was completed.

Junior Exploration Companies continued development of its projects in Canada, USA, Australia, Africa and South America based on the improvement of the situation in the uranium market in the long term; however, the pace of work decreased due to difficulties with funding.

Due to uncertainties in the prospects of nuclear energy and the further deterioration of the situation, the key players in 2014 continue to review plans for existing businesses and prospective projects. Australian company Paladin Energy conserved the Kayelekera mine in Malawi and sold 25% of the company Langer Heinrich in Namibia to China's CNNC. The US Energy Fuels announced the suspension of production of natural uranium in the White Mesa factory in the United States because of the low price level. Canada's Cameco and France's AREVA stopped work on a number of promising projects at earlier stages of development.

See [“International Business”](#), and the [annual report of JSC Atomredmetzoloto](#) for 2014.

1.4.3.3. Market of uranium conversion and enrichment

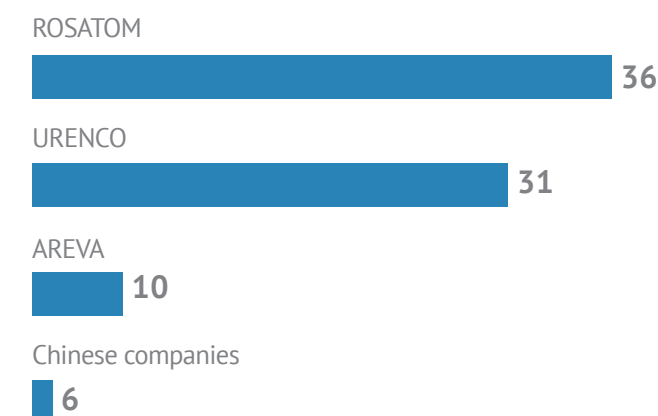
Uranium enrichment is one of the main stages of the initial stage of the nuclear fuel cycle. The products offered on the market include: enriched uranium product (EUP) and uranium enrichment services, measured in separative work units (SWU).

In 2014, the capacity of the world market for uranium enrichment services was about 51 million SWU. By 2020, demand for uranium enrichment services could rise to 62 million SWU, and by 2030 – to 84 million SWU.

The main suppliers of uranium enrichment services in the world, along with ROSATOM, are URENCO (United Kingdom, Germany and the Netherlands), AREVA (France), and Chinese companies, which together control nearly 85% of the market.

Factory Paducah of USEC (USA) closed in October 2013 due to bankruptcy of the company; in October 2014, the plant was fully transferred to the jurisdiction of US Department of Energy.

The biggest players in the market for uranium enrichment services, %



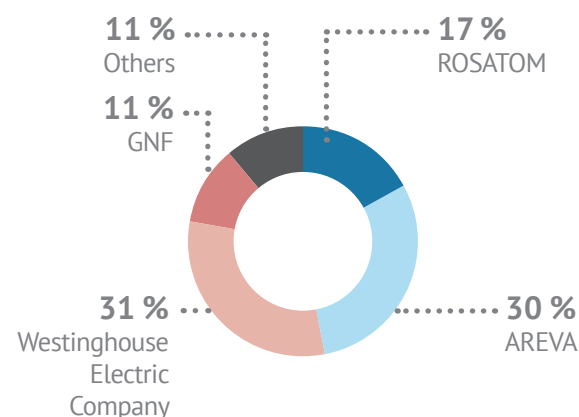
In 2014, the Corporation provided a significant part of the demand for uranium enrichment services, with a significant market share in all the main geographical segments of the market (36%). The main competitor of ROSATOM in the enrichment of uranium is a company named URENCO. By the end of 2014, the total installed capacity of URENCO was ~ 18 million SWU/year. By 2020, their capacity could be approximately 20 million SWU per year.

See [“International Business”](#), and [the annual report of JSC TVEL](#) and [JSC Technabexport](#) for 2014

1.4.3.4. The market of nuclear fuel fabrication

In 2014, the capacity of the global nuclear fuel market was about 11,000 tonnes of heavy metal (THM), of which about 8,000 THM was fuel, which requires enrichment (of which almost 1,000 THM is fuel for VVER reactors), and 3,000 THM fuel was for heavy water reactors. By 2020, with the growth of the reactor fleet, the need for services for this fabrication could increase to 13,000 THM, and by 2030 – to 15,200 THM.

The biggest players in the market of nuclear fuel fabrication, %



Group of global suppliers in the market of fabrication include: Westinghouse /Toshiba, AREVA, ROSATOM, and Global Nuclear Fuel.

The share of ROSATOM in the nuclear fuel market is 17% (by number of units of reactors, on which deliveries are made).

Westinghouse is engaged in the fabrication of nuclear fuel for almost all types of light water reactors (LWR): PWR, BWR. The main markets are the USA and Western Europe. Furthermore, Westinghouse has actively made efforts to enter and secure the segment of fuel for VVER.

AREVA produces fuel for PWR and BWR, representing 30% of the world market fabrication. The main sales region is Western Europe.

Global Nuclear Fuel (GNF) is a joint venture between GE, Hitachi, and Toshiba that represents 11% of the market. The GNF includes two enterprises: GNF-J (for the Japanese market) and GNF-A (for other markets). The company only produces fuel for BWR reactors.

The share of ROSATOM in the nuclear fuel market is 17% (by number of units of reactors, on which deliveries are made)

JSC TVEL, the key enterprise of the fuel division of ROSATOM, produces nuclear fuel for power and research reactors. The main market is that of nuclear fuel fabrication.

See [The annual report of JSC TVEL for 2014](#).

1.4.3.5. Market of power energy machinery manufacturing

In 2014, the world market of Power energy machinery manufacturing was ~ \$100 billion, represented by 60% – equipment for the thermal power industry, 25% – equipment for the oil and gas chemistry, and 15% – equipment for the nuclear power industry. By 2030, this market could exceed 145 billion US dollars.

In 2014, the largest share of investment in new plant equipment was invested in thermal energy. In the long term, up to 2030, an alignment of shares of the cost for equipment in nuclear power, thermal power and oil and gas chemistry is expected.

The Russian market of power engineering in the coming years will match the global trends, but in the long term, up to 2020, the nuclear engineering market will take the first place. In 2014, the Russian market of Power energy machinery manufacturing was ~ 7.6 billion US dollars, represented by 60 % – equipment for thermal power, 29 % – equipment for oil and gas chemistry, and 11 % – equipment for the nuclear power industry. By 2030, this market volume could increase to 15.1 billion US dollars.

The main directions of the power engineering market in Russia are connected with the plans for commissioning new generating capacities in accordance with the general scheme of the power facilities until 2020; and with a view to 2030, the development of schemes and programs of the Unified Energy System of Russia in 2013–2019,

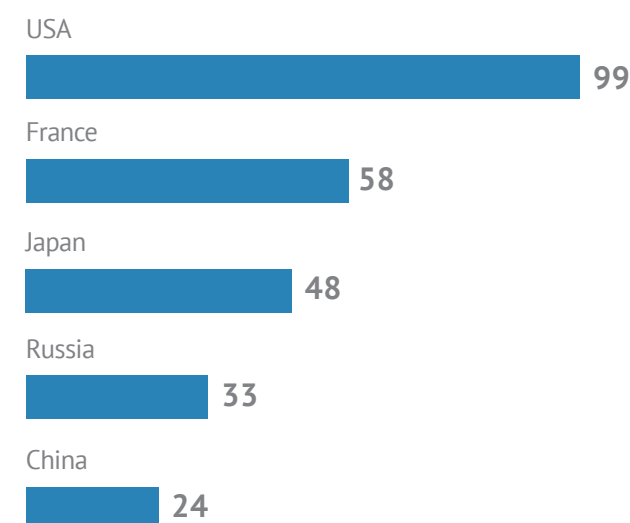
and in accordance with the Roadmap of the NPP construction, developed by ROSATOM.

See [“Machine-Building Division”](#) and [the integrated annual report of JSC Atomenergomash for 2014](#).

1.4.3.6. Market of construction and maintenance of nuclear power plants

According to the World Nuclear Association in 2014, the contribution of nuclear energy in the global energy supply was about 6%. As of December, 31, 2014, 438 power reactors with a total capacity of 375.9 GW were in use (excluding the temporary shutdown of Japanese reactors) and 70 reactors were in the process of construction.

The leading countries in the number of operating nuclear power units in 2014

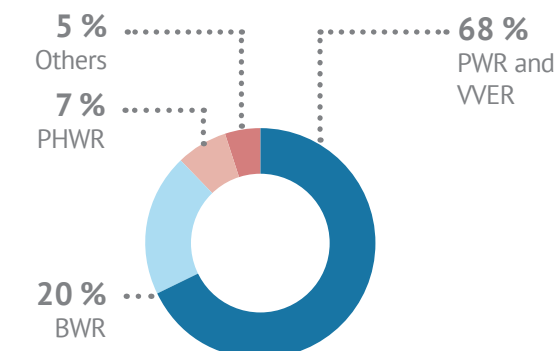


In terms of the installed capacity of nuclear power plants (25.2 GW), ROSATOM ranks second among the world's nuclear power-generating companies, after the French company EDF (75 GW).

The main type of reactors operating in the world are light water reactors (PWR, BWR, VVER) representing an 88% share of the world market

(% of total installed capacity). The share of heavy-water reactors PHWR (CANDU) is 7% of the total installed capacity.

Operating reactors in the world, % of total installed capacity



During the year, work began on the construction of two new units – in Belarus and the UAE. According to a reference (based on the assumption of supporting the development of nuclear energy) scenario from the World Nuclear Association, published in 2013, the world's nuclear fleet in 2030 will be 589 units with a total capacity of 574 GW.

The dominant regions in terms of demand for the construction of nuclear power plants are Asian countries.

The Corporation is actively strengthening its position in the construction of nuclear power plants in foreign markets, and remains the largest global player in the number of projects in its export portfolio (29 units).

In the period leading up to 2030, the main competitors of ROSATOM in foreign markets will remain AREVA and Westinghouse/Toshiba, as well as increasing competition from Chinese and Korean companies.

See [“International Business”](#), and [the annual report of JSC Concern Rosenergoatom](#) for 2014.

1.4.3.7. Market of management of radioactive waste and spent nuclear fuel, decommissioning of atomic energy utilisation facilities

Market for the treatment, recycling and disposal of RAW and SNF

The market volume of the treatment, processing and disposal of radioactive waste in 2014 was 7.5 billion US dollars. In the coming years, this market will grow gradually, due to the large number of decommissioned nuclear facilities, and in 2020, will reach a maximum (~12.4 billion dollars). In the following years, the market will be slightly reduced following the decline in the volume of decommissioned facilities, and in 2030, will be approximately 12 billion USD.

Key players in the treatment, recycling and disposal of RAW are ROSATOM, AREVA, Energy Solutions, URS, and Washington Group International.

It is expected that until 2030, the market for the treatment, recycling and disposal of spent nuclear fuel will be the most dynamic segment of the final stage of the nuclear fuel cycle, with an average annual growth rate of 2.4%. In 2014, the market volume was 3.8 billion US dollars. In 2020, the market volume is forecast at 5.9 billion dollars, and by 2030, it will increase to 10.3 billion dollars. Key players in the market of treatment, recycling and disposal of spent nuclear fuel: the State Corporation "Rosatom", AREVA and INFL.

Market for the decommissioning of hazardous nuclear and radiation facilities

In 2014, the world market for decommissioning of hazardous nuclear and radiation facilities was ~7.3 billion US dollars. This market will grow gradually, as coming years will see the main volume of decommissioning reactors; in 2019, this market will reach a maximum of ~8.7 billion dollars. In subsequent years, the number of decommissioned nuclear facilities is expected to reduce, and the market will gradually decline. In 2030, its volume is projected to be \$7 billion.

The key market players for the decommissioning of hazardous nuclear and radiation objects: ROSATOM, AREVA, Energy Solutions, URS, Washington Group International, Studsvik, CH2MHILL, and SOGEC.

See: ["Nuclear legacy" problem solving.](#)

1.4.3.8. Market of radiation technologies

In 2014, the world market for nuclear medicine was 16.3 billion US dollars, and by 2020 is expected to increase to 24 billion dollars. By 2030, the global market will grow to 43 billion US dollars. The Russian market in 2014 was 0.6 billion dollars, while in 2030, it could grow by as much as five times.

The biggest players in the market: GE, Siemens, Philips, Toshiba, and Lantheus.

By 2030, the Corporation plans to occupy about 12% of the world market for nuclear medicine.

The global environmental market (water treatment, waste management) in 2014 was 154 billion US dollars; by 2020, it is expected to grow to 200 billion dollars and by 2030, it will rise to 300 billion.

The biggest players in this market: GE, CNIM, Martin, Babcock Wilcox Volund, Doosan, and Veolia. The Russian market in 2014 was US \$6 billion, and by 2030, the market has a projected growth to \$8.2 billion. By 2030, the potential share of the Corporation's presence in the market is 2%.

It is expected that until 2030, the market for the treatment, recycling and disposal of spent nuclear fuel will be the most dynamic segment of the back end of the nuclear fuel cycle, with an average annual growth rate of 2.4%

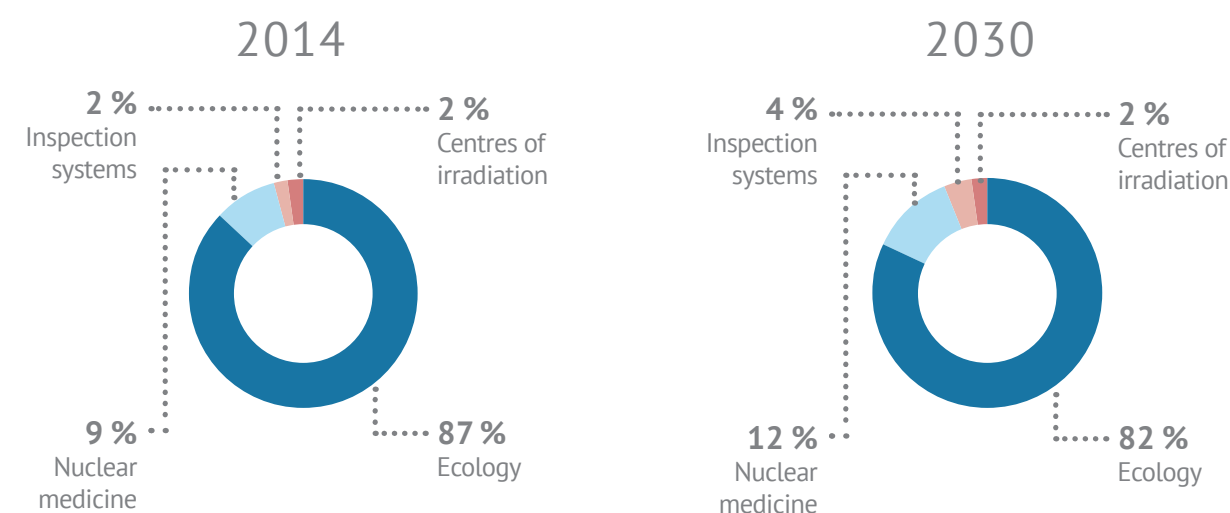
The global market for centres of irradiation in 2014 was 2.7 billion US dollars; by 2020, it is expected to rise to 5 billion US dollars, and by 2030, it will grow to 13–14 billion USD. The biggest players in the market: Nordion, IBA, Hungaroster, and Sterigenics. In 2014, the Russian market will be 8.3 million US dollars; by 2020, this will be 45 million US dollars, and in 2030, approximately 294 million US dollars. By 2030, the potential share of the Corporation's presence in this market will be 12%.

US dollars; by 2020, this is expected to increase to 4.6 billion, and by 2030, it will rise to 7.6 billion dollars. The biggest players in this market: Smiths Detection, Rapiscan, and L3 Communication. The domestic market in 2014 was 53.7 million dollars; by 2020, this is expected to increase to 83 million, and by 2030, it will rise up to 126 million USD. By 2030, the potential share of the Corporation's presence in this market will be 6%.

See ["Business diversification"](#).

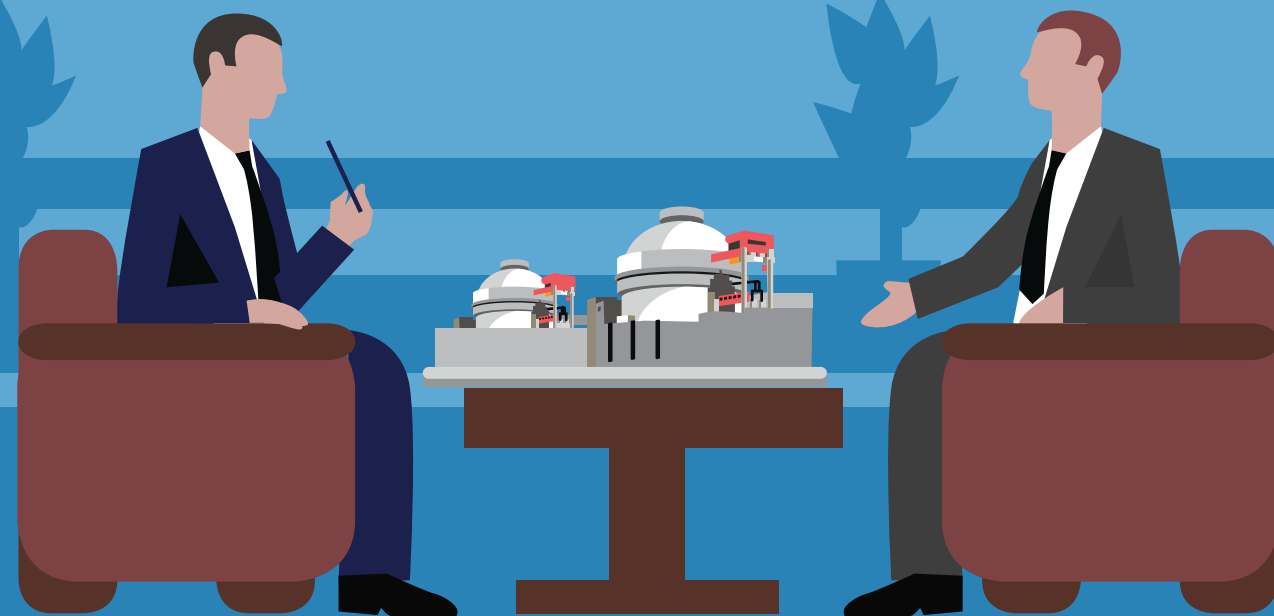
The global market for inspection systems and non-destructive control in 2014 was 3.4 billion

Forecast of development for the global market of radiation technologies



2. ONE STEP AHEAD IN 2014

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FIRST DEPUTY CEO FOR CORPORATE DEVELOPMENT AND INTERNATIONAL BUSINESS KIRILL KOMAROV

What do you think were the most significant results in the field of international business in 2014?

International business plays an extremely important role in the State Atomic Energy Corporation "Rosatom". During the year, our goal was to increase the portfolio of overseas orders up to 98 billion US dollars, which was a daunting task, of course, in the current circumstances. On the results of year-end, the portfolio amounted to 101.4 billion dollars, which means that it grew by 29 billion compared with 2013.

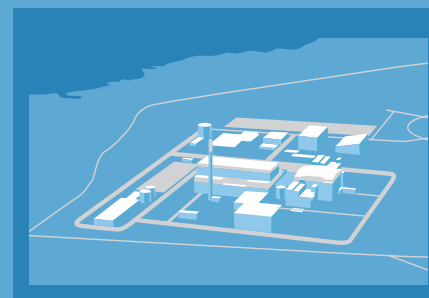
Today, there are 29 power units in the portfolio (at the end of 2013 there were 19 units). 8 blocks were added in Iran, "Bushehr", and two blocks were added in Jordan. A project on the completion of the Hungarian NPP "Paks" is underway. 3 and 4 units were constructed at the NPP "Kudankulam" in India. 3 and 4 units were constructed in "Tianwan" NPP in China.

The Finnish Parliament gave a positive decision for the construction of NPP "Hanhikivi", which was necessary to start construction. The Russian government will provide 2.4 billion euros from the NWF for the financing of the project.

In 2014 a cooperation agreement was signed with Algeria; an agreement on cooperation with Saudi Arabia was initiated. Currently, negotiations are underway in Egypt; cooperation with Indonesia is being discussed. A project for the completion of the Argentine NPP "Atucha" is planned (qualification selection for construction has already been passed). Cooperation with South Africa and Nigeria is being developed.

Negotiations with the Arab Emirates are being conducted. During the official visit of the President of Russia to Brazil a memorandum was signed on cooperation in the construction of nuclear power plants in Brazil and the construction of additional spent fuel storage facilities.

About 30 units are at the tender or negotiation stage, and experts estimate that the prospective portfolio of Rosatom in 2030 could be up to 80 units. Whereas



29

Today, there are 29 power units in the portfolio (at the end of 2013 there were 19 units). 8 blocks were added in Iran, "Bushehr", and two blocks were added in Jordan. A project on the completion of the Hungarian NPP "Paks" is underway

previously the main volume of construction was in developed countries such as the US and Europe, today the geography has changed into developing regions; the greatest demand for the construction of NPP is in Asia, Middle East, North Africa and Latin America.

How will the integrated offer of Rosatom develop?

The integrated offer is that we offer to our partners and potential customers not only the construction of NPP based on Russian technology, but also investment financing, the training and retraining of national staff, the creation of the country's nuclear infrastructure, location, fuel supply and service of nuclear power plants, reprocessing and SNF management.

The uniqueness of the proposal is that the customer receives from a single supplier the full service and access to the entire range of products and services throughout the lifetime of nuclear power plants. The strength of the proposal is also the fact that we offer products and services at very competitive prices due to current prevailing market conditions and the ruble currency. Examples of the success of this proposal include NPP projects in Hungary, Finland, Turkey, China, Belarus, India, and Iran.

The model of an integrated offer includes almost all possible elements and it is difficult to expand even further. But there is the possibility of a deeper study of the individual elements. For example, you can integrate the construction of the EPC-contract with the local sale of electricity, generated by NPP, which, of course, will require new efforts and in-depth analysis of the docking technology and local business processes. Another example is the unification of the supply of desalination complex in tandem with NPP under different projects: the VVER-1000 and VVER-1200. New offers will be connected with the NPP projects under development of medium and small power. In addition, it is necessary to reduce the phase of the elaboration of legal documents and commercial contracts in order to enter the building site within a short time frame.

How high is the level of localisation in the foreign nuclear power plant construction? What do the partners get from the cooperation with the State Corporation?

The level of localisation always depends on the degree of development of local industry and construction companies. Moreover, the localisation level rises with the development of our projects. In the construction of the Belarusian NPP it was by 30%; NPP "Paks" gave up to 40%, and in the construction of nuclear power plants in China it was 75%. The positive effect of such an approach for ROSATOM is the strengthening of partnerships with key customers and closer cooperation with national suppliers. Providing certification of local suppliers and being confident in the quality of services they provide, Rosatom could involve them further in its projects in third countries.

Equipment purchased on the local market must meet all of the criteria for safety, quality and reliability. Thus, it is possible to estimate the level of localisation of production of equipment (without the volume of construction and installation works) only after a detailed study and technical audits of companies in the country of the customer, which could potentially produce equipment for a particular NPP under construction.



When we build the station, we provide a huge incentive for the socio-economic development of the region, including the construction industry. More than one-third of the total cost of NPP is supplied to the customer's state budget in the form of a package of contracts with national companies for the supply of equipment, construction and installation and so on. We create workplaces and support the development of science and education. For example, one workplace in the construction of NPP provides to the national economy 10–15 workplaces in related industries (metallurgy, machine building, etc.).

The presence of relatively cheap electricity encourages the development of local industry. For a number of countries, the emergence of a nuclear power plant creates the preconditions for a change in the regional status and influence of the country, mainly due to the possibility of exporting electricity to neighbouring countries.

For most countries, the construction of NPP is the largest project in their history, which actually creates new elite in society. An example is South Africa's nuclear programme, which involves investments totalling approximately 40 billion US dollars. Up to half of these funds will be accumulated in the core sectors of the economy. One of our partners in South Africa has admitted that he is waiting for the results of the technology supplier selection to make a decision about what kind of foreign language his son will be studying.

There were significant changes to the organisation of the ROSATOM representation abroad in 2014. The regional centres' network was established. What is the task of this network and what are the expected results?

Everyone is well aware that an indispensable condition of the effective work of the company in the international market is the expansion of its global presence. To this end, in 2014 we established the company "Rosatom – International Network", and its mission is the creation and management of the Corporation's regional centres around the world.

In 2014, the network of regional and country offices included 8 centres in Europe, Asia and Africa. In 2015, new centres are planned to open in China, India, Latin and North America and in the Middle East.

"Rosatom International Network" coordinates the activities of all subsidiaries and affiliates of ROSATOM in foreign markets. The rationale of the centres is their proactivity: offices are constantly looking for new business opportunities for all divisions of ROSATOM by assessing the potential of specific projects and the analysis of the local market as a whole. The centres also carry out the monitoring of tenders and support the participation of subsidiaries and affiliates in them; they provide infrastructure support in the search for potential investors for the foreign projects of ROSATOM.

Another challenge faced by RIN is the strengthening of the image of Russian nuclear technology in the areas of our business interests. This includes working with the public, experts and the media. In addition, RIN organises exhibitions, specialised seminars and other activities that contribute to the effective promotion of the Rosatom's product line.

In 2014, a network of regional and country offices included 8 centres in Europe, Asia and Africa. In 2015, new centres are planned to open in China, India, Latin and North America and the Middle East

Since "Rosatom International Network" is not directly the holder of contracts and does not generate its own revenues, an indicator of its effectiveness is the success of all ROSATOM's enterprises in its foreign trade activities.

What is your forecast for the development of nuclear energy and the global nuclear market in the coming years? How will ROSATOM strengthen its presence in them?

Despite the trends in energy efficiency, most projections show that global energy consumption will rise by 2030 on the whole by 33%. The strongest growth is expected in Asia, where it could reach 54%.

Providers of different types of energy generation will fight for the satisfaction of this demand. The main competitors of nuclear energy are gas power plants and wind power. However, analytical forecasts predict the growth of nuclear power generation. It has a number of competitive advantages. Firstly, it is environmentally safe and has zero emission of CO₂. For example, just one operating nuclear power unit prevents the emission into the atmosphere of 4,6 million tons of carbon dioxide per year.

Secondly, the electricity consumers pay more attention to its value. In comparison with other sources (gas and coal, for example), nuclear energy has the lowest total cost of energy, and reduced fuel costs. The maximum index of the total present value of nuclear power projects in various regions is \$150/MWh. The priority of our new projects is to maintain this figure at \$50/MWh. This is even lower than the minimum world level. The problem is quite solvable thanks to the integrated structure of the Corporation, which allows for controlling all elements of the capital and operating costs of nuclear power plants.

There is an existing trend called "new nuclear renaissance." According to forecasts, the volume of global nuclear capacity could reach almost 600 GW, compared to the current 347 GW, by 2030. 47% growth, according to the forecasts, will be in the so-called "emerging economies" in the next 15 years, where nuclear energy is only starting, such as Asia, Middle East, Africa and Latin America.

It is obvious that the market is in dire need of a comprehensive solution that includes not only the construction of nuclear power plants, but also fuel supplies and services for the maintenance and repair throughout the life cycle of nuclear power plants, which, I remind you, exceeds 60–80 years. Forming exactly such a proposal, ROSATOM is developing a global business, so we were able to achieve significant results, about which I spoke at the beginning of our conversation.

2.1. INTERNATIONAL BUSINESS

2.1.1.

TRANSFORMATION OF ROSATOM INTO THE GLOBAL NUCLEAR INDUSTRY TECHNOLOGY LEADER

The target landmark of the strategy of ROSATOM is the achievement of global technology leadership in the nuclear industry. In the long term a substantial expansion of international business is planned, which is reflected in the targets of the Corporation and its organisations by 2030.

At the end of the reporting year, the foreign revenues of ROSATOM amounted to 5.2 billion US dollars, which is an increase of 5% compared to 2013.

101.4

Billion US dollars

overseas orders portfolio for December, 31, 2014

29

number of power units in the overseas orders portfolio

5.2

billions of US dollars

in revenue from overseas operations

40

overseas projects in 40 countries.

Over the past 4 years there was a tendency to moderate the growth of foreign revenues. The fastest growing segment of revenue is the NPP

construction abroad. Regarding the NPP construction abroad, in 2011 the share of this segment in the total amount of foreign revenues rose from 6 to 18% (more than 3 times in absolute terms). Such growth rates are associated with the transition to the stage of implementation of a number of NPP construction projects abroad, including Belarus Ostrovetskaya NPP, "Akkuyu" NPP in Turkey, and "Hanhikivi" NPP in Finland.

During the year, the Corporation continued its active work to build a portfolio of overseas orders for the ten-year period. On December, 31, 2014 it amounted to 101.4 billion US dollars, an increase of 39% compared to 2013. Compared to the year 2011 the portfolio of overseas orders has doubled, mainly due to new contracts and agreements for the construction of nuclear power plants abroad (NPP "Hanhikivi" in Finland, NPP "Paks" power unit No. 5, 6 in Hungary, "Kudankulam" NPP, power unit No. 3, 4 in India, and "Bushehr" NPP, power unit No. 2 and 3 in Iran).

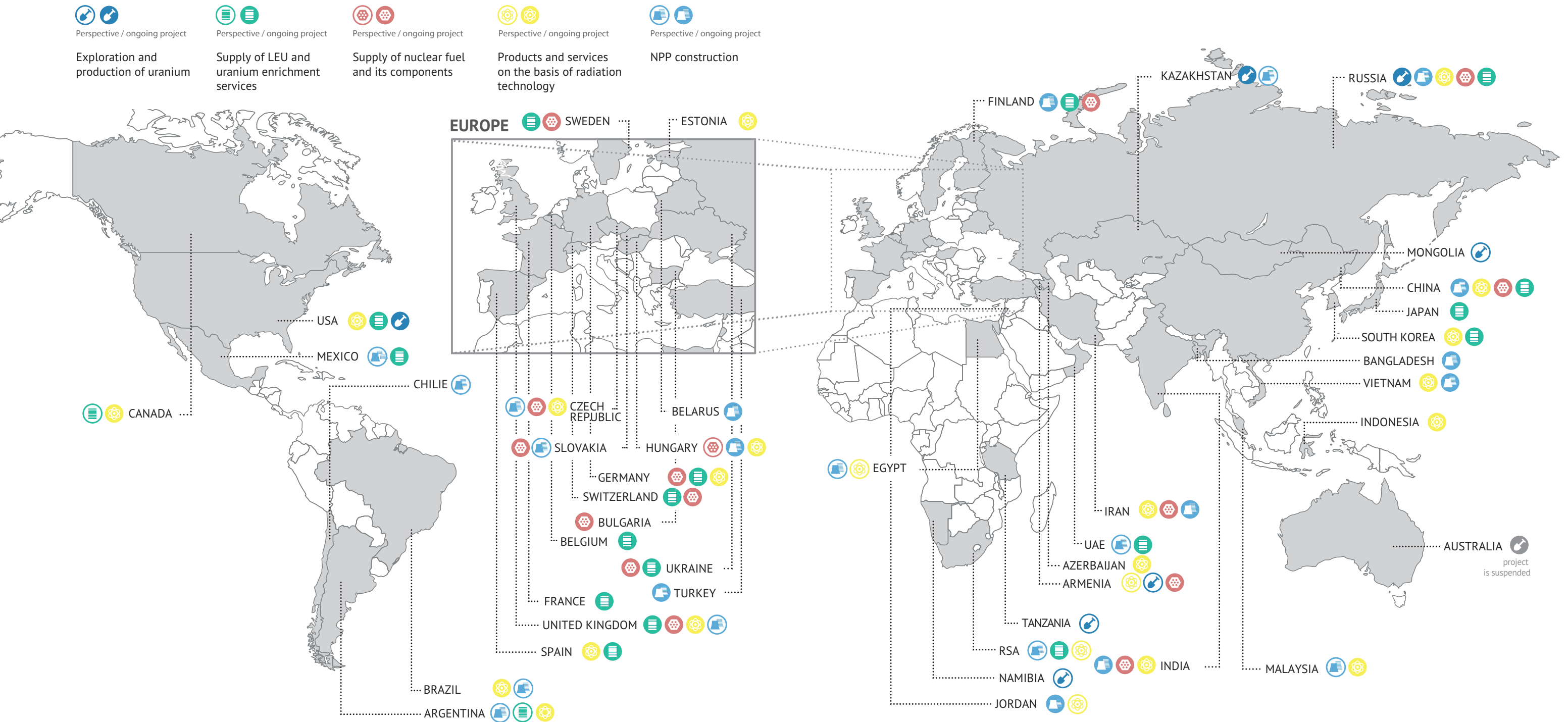
Table. The dynamics of overseas revenue, million US dollars

	2014	2013	2012
Overseas revenue including:	5202	4973	4584
construction of NPPs abroad	948	708	332
uranium production	2227	2069	2240
fuel assemblies and other activities	2027	2196	2012

Table. The dynamics of the portfolio of overseas orders, billion US dollars

	2014	2013	2012
The portfolio of overseas orders in the 10-year period (including the export operations of Russian enterprises without HEU-LEU) including:	101.4	72.7	66.5
construction of NPPs abroad	66.0	34.5	28.9
uranium production	21.8	24.2	24.7
fuel assemblies and other activities	13.6	15.0	12.9
project portfolio of the construction of NPPs abroad, the number of power units	29	19	19

Map of global presence of ROSATOM



2.1.1.1. Integrated offer of ROSATOM

The most important instrument for achieving global technological leadership is a unique integrated offer.

Integrated offer of ROSATOM

Development of the regulatory framework, infrastructure creation and work with public opinion

- Creation and development of the regulatory framework
- Construction of the nuclear fuel cycle facilities
- Management of spent nuclear fuel and radioactive waste
- Support of the socio-political programmes

Energy solutions

- Modern NPP project (Generation III +)
- The construction of NPPs and support throughout the whole life cycle (fuel, maintenance, modernisation)
- Operation and maintenance

INTEGRATED OFFER OF ROSATOM

SAFETY IS A BASIC PRINCIPLE

Knowledge, experience, human resources

- Education and training of employees (including an internship at the NPP site)
- Elaboration of the scientific research and experimental development
- Exchange of experience on the exploitation of NPP

Financial solution

- Implementation of the projects' build-own-operate
- State loans
- Cooperation on projects

Industrial solution

- Production of equipment for NPPs, localisation of maintenance
- Transfer of technology
- Accreditation of local suppliers to participate in projects of Rosatom in third countries

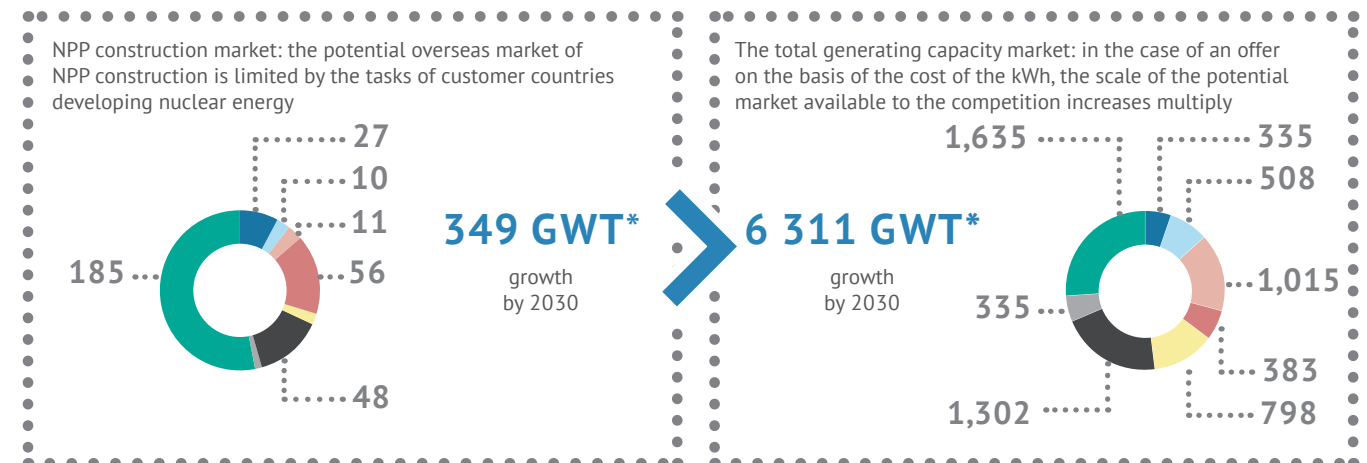
Development of the product offerings of ROSATOM on the foreign market in terms of NPP construction

... 2005 2006 2007 2008 ... 2013 2014 2015+ ...

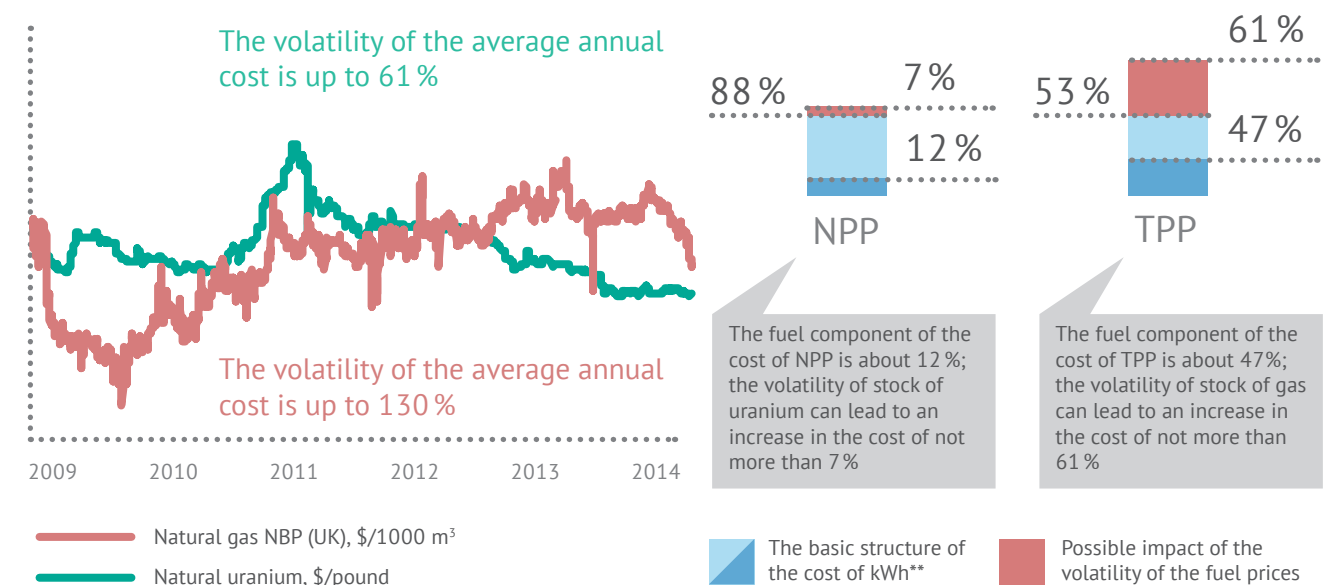
EPC-CONTRACT

INTEGRATED OFFER

COST kWh



A key feature of product offerings on the basis of kWh is a guarantee of the cost of electricity on a long-term horizon



* Source: forecast of the growth of generating capacities of the IAEA.

** LCOE structure according to FEM for the minimum competitive price calculation of NPP construction.

The basic condition for an integrated offer is safety, and that fully complies with the new “post-Fukushima” standards and safety requirements, designed to eliminate the possibility of the recurrence of accidents such as the events at the NPP “Fukushima”.

ROSATOM acts on the foreign market with an integrated offer, including a range of activities, from the supply of uranium and nuclear power plant construction, to financing and training. The offer is flexible in its elements; each solution can be formed in accordance with the requirements of a specific project. With years of experience in the construction of NPPs abroad, the Corporation offers a wide range of models of project implementation.

Cooperation on an NPP construction project in the country of the customer is possible both according to the EPC model which is the contract for the “turnkey” construction of an object with a fixed price, and in terms of the B++ model. Its classic model is BOO (build-own-operate). The BOO model of cooperation is the special case of public-private partnership (PPP). PPP involves the establishment of medium- and long-term interaction between the state and business for the implementation of projects.

2.1.1.2. Regional centres of ROSATOM

Given the emerging foreign economic situation, the Corporation has consistently carried out work to improve the effectiveness of the subsidiary companies on foreign markets in the reporting year.

To improve financial results and reduce the costs of overseas activities, the marketing offices of

ROSATOM have been transformed into a network of regional centres.

6 regional centres are created in Prague, Kiev, Johannesburg, Singapore, Paris and Astana as of December, 31, 2014. For greater concentration on certain markets there are country (regional) offices in Bratislava and Budapest with the subordination of the regional centre for Central Europe (Prague) and in Minsk with the subordination of the regional centre for Eastern Europe.

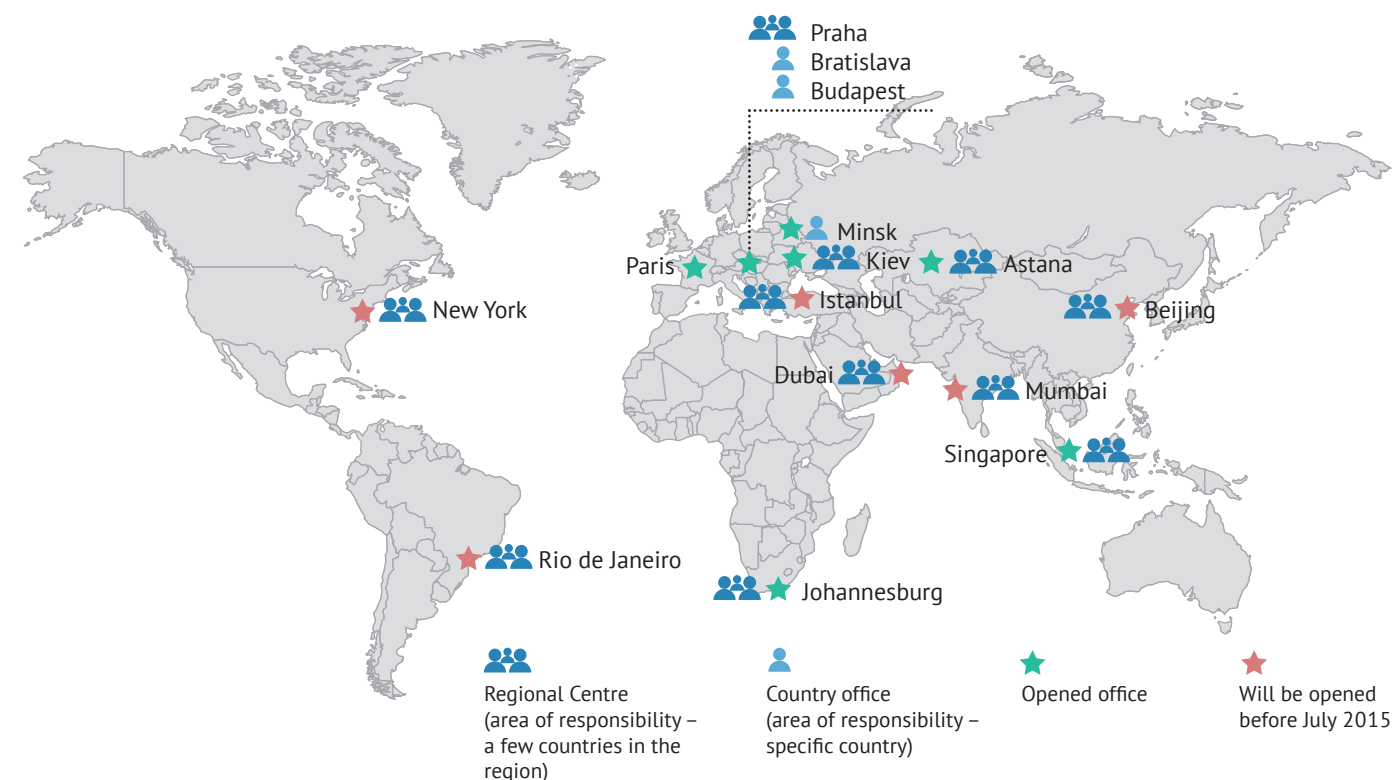
Also it was decided to organise a network management of foreign regional centres of ROSATOM in the form of a non-profit organisation. A private institution providing the development of international regional network of the Nuclear Power Complex “ROSATOM – International Network” was established for that reason.

PI “Rosatom– International Network” performs the following functions:

- identifying and promoting the development of new business opportunities for the divisions of ROSATOM,
- industry-wide marketing support and analysis of the market prospects of the products and services of divisions in overseas markets,
- industry-wide implementation of PR- and GR-strategy in the foreign markets,
- coordination of activities of divisions in the implementation of overseas orders portfolio.

To improve financial results and reduce the costs of overseas activities, the marketing offices of ROSATOM have been transformed into a network of regional centres

The network of regional centres of ROSATOM



2.1.2.

2014 RESULTS

2.1.2.1. The construction of NPPs abroad

The main growth in the portfolio of overseas orders from ROSATOM in the ten-year period was due to new contracts for NPPs' construction abroad in 2014.

The growing number of the Corporation's overseas orders is evidence of the confidence of foreign partners to Russian technologies. Russian NPP construction projects are related to generation “III+” and equipped with both active and passive safety systems. Units under construction will have a double protective shell of the reactor, a system of passive heat removal, hydrogen recombiners, a device for localisation of the core and other systems that provide NPP's in-depth defence. They fully meet the “post-Fukushima” safety requirements.

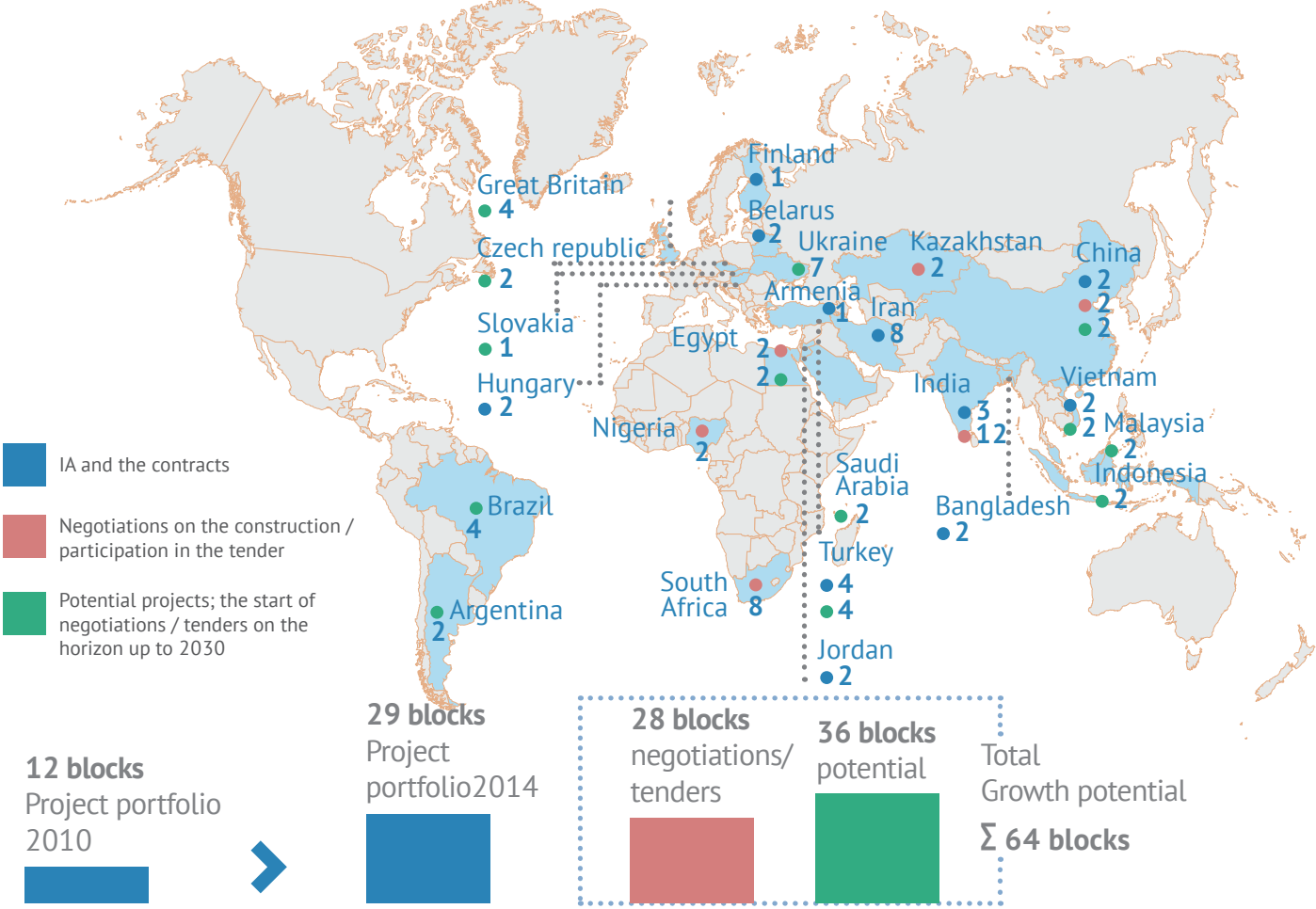
Table. Key results on the NPP construction projects

Country	Results
Hungary	<p>Signed documents:</p> <ul style="list-style-type: none"> • Agreement on the provision of the state export credit for the construction of power unit No. 5, 6 of the NPP “Paks” between the Governments of Russia and Hungary; • A commercial contract for the construction of the power units No. 5, 6 of the NPP “Paks”.

Country	Results
Vietnam	An agreement on signing of a contract for engineering surveys for the development of a technical NPP project was reached.
Iran	Signed documents: <ul style="list-style-type: none">• Protocol to the intergovernmental agreement between the Government of the Russian Federation and the Government of the Islamic Republic of Iran on cooperation in the construction of up to 8 power units;• A contract for the construction of two new nuclear reactors “Bushehr” expandable up to four units;• Contract for engineering surveys at the site of NPP “Bushehr-2”.
India	<ul style="list-style-type: none">• An Act for the provisional acceptance of NPP unit No. 1 “Kudankulam” into operation was signed (December, 27, 2014);• Work on the construction of the NPP unit No. 2 “Kudankulam” was completed; the power unit is in the second phase of revision (connection to the power grid is scheduled for October, 15, 2015);• General framework agreement for the construction of units No. 3 and 4 of NPP “Kudankulam” was signed (April, 10, 2014);• An additional agreement, as well as a contract within the GDS on the supply of Russian equipment with long manufacturing cycle and equipment of the primary supplies for the Units 3 and 4 of NPP “Kudankulam” was signed (December, 11, 2014);• A strategic vision of cooperation strengthening the peaceful uses of nuclear energy between the Russian Federation and the Republic of India was signed, determining the parties’ intentions for the construction and commissioning of at least 12 nuclear power units in the next 20 years (December, 11, 2014).
China	The construction of power units 3 and 4 of Taiwan NPP was carried out in accordance with the contract schedule. All of the key events scheduled for 2014 were implemented. On December 20th, 2014, the dome of power unit reactor building No. 3 NPP was erected, and in October 2015 the dome of power unit reactor building No. 4 is scheduled for erection.
Jordan	The company of “Rosatom Overseas” signed an agreement on the development of the construction project for the first nuclear power plant in Jordan with the Atomic Energy Commission of Jordan. RF Government Decree of December, 23, 2014 approved the IA draft on cooperation in the construction and operation of NPP consisting of two power units with VVER-1000 reactors.
Belarus	The contract for the construction of the Belarusian NPP was performed strictly in accordance with the project schedule; the commissioning of the first two power units is planned for 2018.
Kazakhstan	The Forum of border cooperation endorsed the draft intergovernmental agreement on the construction and operation of NPP.

Country	Results
Finland	<p>The Parliament of the Republic of Finland approved the Supplement to the Fundamental Consent for project implementation of construction of NPP “Hanhikivi-1.”</p> <p>Contracts on TEHPROEKT RU, procurement of long-lead equipment, including the machine compartment, construction and installation works with the development of related working documentation and delivery of the necessary equipment, including the installation of an integrated process control.</p>
Turkey	<p>The Ministry of Environment and Urban Planning in Turkey issued a positive opinion on the EIA.</p> <p>The license application for the construction of NPP and report on the parameters of the site were transferred for approval by the Turkish Atomic Energy Agency. On the basis of the application a limited construction permit and later the construction license will be granted.</p> <p>A request for proposals for the design and “turnkey” construction of marine hydrotechnical constructions is declared.</p> <p>On the NPP site are being led excavationworks, the reconstruction of infrastructure and the construction of new infrastructure facilities necessary for the project are underway on the NPP site.</p>

The positions of ROSATOM in the international market of NPP construction, the number of power units



ROSATOM continues to work on building up the portfolio of NPP construction projects abroad; projects in Egypt, South Africa and the Republic of Nigeria were in the active phase of negotiations as of December, 31, 2014.

The cooperation of “Rosatom Overseas” with international partners is expanding: a Memorandum of Understanding was signed in 2014 with the leading construction companies of Argentina (Corporación América SA) and Brazil (Camargo Correa).

In general, about 30 NPP units are at different stages of the negotiation process abroad, which can enhance the portfolio ROSATOM in the coming years.

2.1.2.2. Complex maintenance of Russian-designed NPP

On the international market for the service of Russian-designed NPPs, ROSATOM acts through a subsidiary specialised company JSC Rosatom service.

NPP “Bushehr”

During 2014 the first scheduled maintenance of equipment was held, including the equipment of the “nuclear island”, turbine unit, security equipment channels. The total number of maintenance personnel at the site exceeded 500 people. Iranian Commission confirmed the acceptance the equipment.

Armenian NPP

The project “Extending the life of the Armenian NPP” provides the extension of a 10-year design

term of unit No.2. This is the first comprehensive project of ROSATOM on the extension of the lifetime of NPPs abroad. In 2014, the amount of work on the project was defined, an agreement on the project between the Governments of Russia and Armenia was signed and a Framework contract with CJSC Armenian Nuclear Power Plant was also signed.

NPP “Kozloduy”

For work on the extension of the service life of power units No. 5 and 6 NPP “Kozloduy” in 2014 a consortium agreement was signed between JSC Rosatom Service, JSC Concern Rosenergoatom and Électricité de France. The main result is the signing of the contract between the NPP “Kozloduy” and the Consortium to perform activities on the justification of the possibility of extending the lifetime of power unit No. 5 to 60 years.

Also, a commercial service contract for power units No. 5 and 6 of NPP “Paks” was signed in 2014.

2.1.2.3. International activities in the field of natural uranium mining

Foreign assets of ROSATOM on natural uranium mining are controlled by the Corporation’s subsidiary Uranium One Holding.

The foreign enterprises produced 4,857 tons of natural uranium in 2014. The estimated mineral resource base of the enterprises of Uranium One Holding constitutes 224.1 thousand tons of natural uranium.

The foreign enterprises produced 4,857 tons of natural uranium in 2014. The estimated mineral resource base of enterprises of Uranium One Holding constitutes 224.1 thousand tons of natural uranium

Table. Uranium mining by enterprises of Uranium One Holding, tons*

	2014	2013	2012
Uranium mining, including:	4857	5086	4711
Kazakhstan	4640	4629	4386
USA	217	362	239
Australia	0	95	86

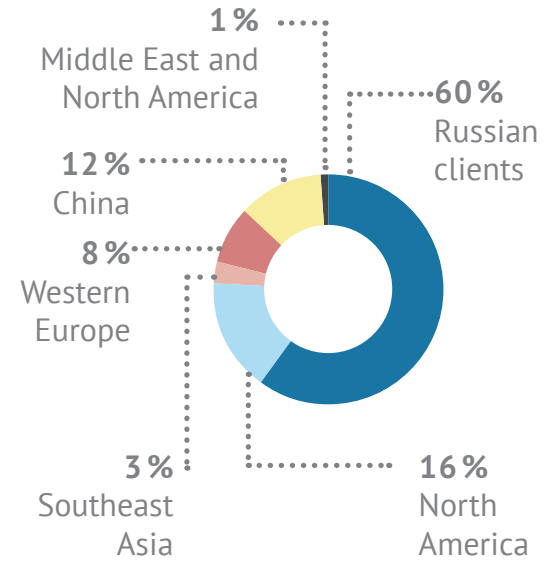
* The reduction of extraction of natural uranium in the United States and Australia in 2014 compared with 2013 was due to a change in the situation in the world market and a decline in prices for natural uranium.

Table. Mineral feedstock of enterprises of Uranium One Holding*, thousand tons

	2014	2013	2012
Mineral feedstock, including:	224.10	229.46	153.97
Measured + Indicated	136.13	141.49	94.74
Inferred	87.96	87.96	59.23

* Mineral resource base and mining of uranium, including 100% Mantra Resources Pty Limited.

Supplies of natural uranium by enterprises of Uranium One in 2014 by regions



ROSATOM and JSC NAC Kazatomprom established new joint uranium-mining enterprises LLP JV South mining and chemical company and LLP JV Khorasan-U in order to develop uranium deposits Akdala, South Inkai (section 4) and Kharassan-1 on their platform.

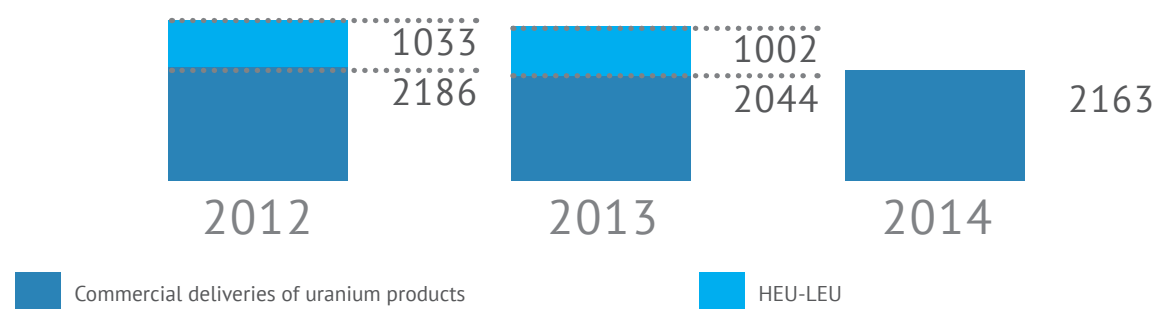
2.1.2.4. Exports of uranium products and services in the field of enrichment of natural uranium

In 2014 ROSATOM in the person of JSC Techsnabexport carried out a presence in the markets of uranium products in Germany, Spain, South Korea, UAE, UK, USA, Finland, France, Switzerland, Sweden, RSA, Belgium, Mexico, China, Japan and Ukraine.

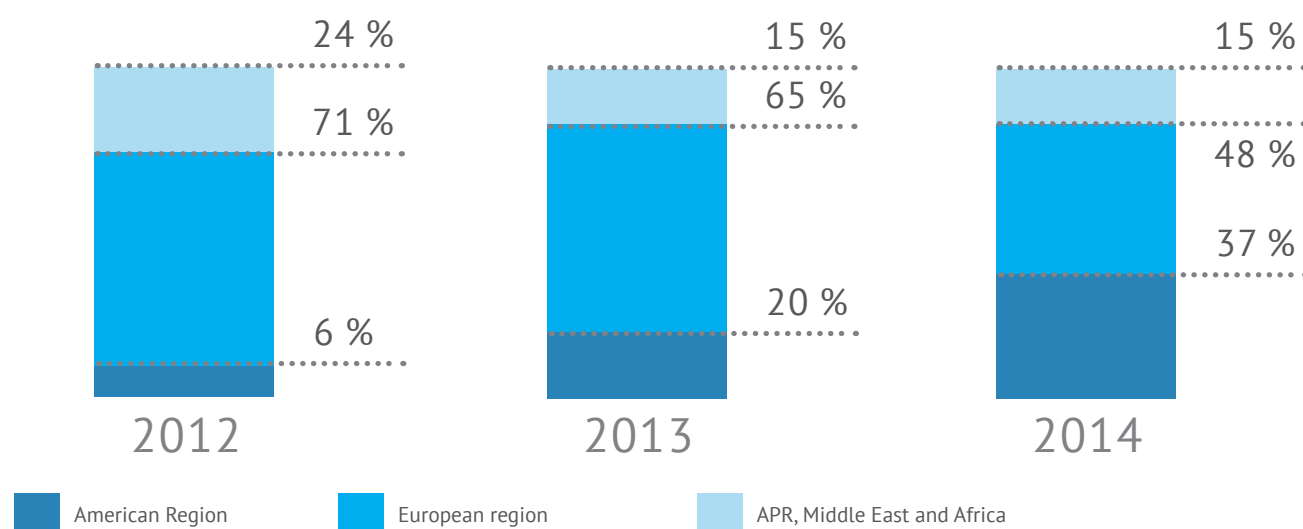
JSC Technobexport in 2014 provided about 25% of the needs of the foreign design reactors in uranium enrichment services.

Given the supply of JSC TVEL fuel for reactors of Russian design, the overall share of ROSATOM on the world market of EUP is about 36%.

The structure of exports of uranium production of ROSATOM, million US dollars



The structure of exports of uranium products by regions (excluding the HEU-LEU contractors), %



In 2014, JSC Technobexport concluded 22 deals for the supply of uranium products to a total value of about 800 million US dollars and carried out 50 deliveries of uranium products to customers in 17 countries. The total volume of the portfolio of long-term orders at constant prices is estimated at 23 billion dollars.

The volume of export of uranium products was about 2.2 billion US dollars.

Obligations under the contract between JSC Technobexport and CNEIC for technical assistance in the construction of China's 4th stage of the gas centrifuge uranium enrichment plant with capacity of 500 tons SWU/year is fully fulfilled (the certificate of completion for the warranty period of the main equipment of GCP has been signed).



During 2014 a joint Russian-Kazakh project establishing a centre for uranium enrichment successfully was implemented – the joint venture fully complied with its obligation to deliver goods in the amount of 5 million SWU, achieving its designed capacity.

Three shipments of enriched uranium from the port of Vostochny in the Primorsky region of the Russian Federation to the Republic of Korea were made (thus completing the testing of a pilot operation of a new route of transportation of uranium products to APR countries). Starting from 2015, this route will be used on a regular basis.

2.1.2.5. International activities in the field of nuclear fuel

Supply of nuclear fuel

- long-term contract for the supply of fuel to the nuclear power plant "Hanhikivi" (Finland) entered into force;
- contracts for the supply of nuclear fuel to Slovakia in 2016–2021 were signed;
- long-term contract for the supply of fuel to the power units under construction number 5 and 6 of NPP "Paks" (Hungary) was signed;
- a contract for the supply of fuel to the research reactors of the Czech Republic, Uzbekistan and Kazakhstan was signed;
- a contract for the supply of western-designed fuel to a research reactor in the Netherlands was signed;

- new logistical schemes were developed and fuel supplies to Slovakia and Hungary were implemented with air transport.
- implementation of the project for the creation of nuclear fuel based on Russian technology in Ukraine (the project "Production Plant in the Ukraine") was continued. JSC TVEL fully and in time fulfilled all the obligations. In particular, the technological equipment for the first stage of production was produced and it was preliminarily accepted by the customer – a Ukrainian-Russian joint venture; equipment was produced by means of JSC TVEL. About 80% of the preparatory work was implemented on a building site in the Kirovograd region. Project members began choosing the general contractor of construction and the start of the main construction works.
- a contract with the NPP "Kozloduy" "Development of advanced nuclear fuel cycle and justification of safe operation of blocks number 5 and 6 of NPP "Kozloduy" "EAD with a modified nuclear fuel to capacity 3120 MW" was signed.
- collaboration of JSC TVEL with AREVA for the production at the facilities of PJSC MSZ nuclear fuel and components from reprocessed uranium on technologies of AREVA for nuclear power plant in Europe with PWR and BWR reactors continued.

2.1.2.6. Problems of the reporting period and the mechanism of their solution

2014 was characterised by geopolitical instability and the increased attention of foreign political parties and the public to foreign NPP construction projects already being implemented by ROSATOM, and by the negotiations which led the Corporation to new projects. Despite a difficult information background, ROSATOM has managed not only to keep all of its projects, but also to significantly expand its portfolio of overseas orders for the construction of nuclear power plants, confirming its reputation as a reliable and stable partner for cooperation not affected by short-term geopolitical fluctuations.

ROSATOM considers one of its priorities to be the flawless and timely execution of its undertaken obligations to foreign customers and partners in

any geopolitical conditions.

There are basic problems of international business in the supply of NFC products and services of Russian producers on the western market in 2014 and connected to negative market conditions. In addition to the consequences of the accident at the NPP “Fukushima”, negative factors include the persistence of low prices for organic energy (mainly natural gas); the increase in the cost of operation of the existing NPPs and construction of new NPPs as a result of increased regulatory requirements; the continuation of subsidies and the development of renewable energy; and geopolitical instability in the world.

With regard to the market for goods and services, these factors put NFC in reducing both current and projected demand, excess production capacity, the accumulation of large stocks, and the availability of material from secondary sources. Of particular note are unfulfilled expectations at the beginning of the resumption of the operation of the NPP in Japan in 2014 – none of the remaining 48 units had been put into operation. The result was a continued decline in market prices, especially in uranium enrichment services.

The continuing effects of trade restrictions on Russian uranium products in the USA and EU countries should also be noted.

Within the project “the Production Plant in the Ukraine” the design documentation was developed, as well as the nearly completed preparatory work at the site, and manufactured technological equipment for the first phase of production.

However, the momentum was not maintained, primarily due to a lack of funding from the Ukrainian shareholder of the joint venture the State Concern “Nuclear fuel”, and therefore there was an additional issue of actions for the sum of ~84 million US dollars; at the same time JSC TVEL promptly paid its part of additional shares in the amount of 42 million US dollars.

In addition, the Cabinet of Ministers of Ukraine has

not approved the project documentation of plant construction. Despite the real backlog from the original schedule of more than 2 years, JSC TVEL is ready to complete the project and continues to consider it strategically important for both sides. Currently, Joint Stock Company TVEL expects concrete proposals from Ukrainian partners for further steps to implement the project.

In the reporting year the reputation of JSC TVEL was confirmed as a reliable supplier of fuel.

All contracts are executed on time and completely. Obligations to supply fuel to Ukrainian nuclear power plants have been fully discharged. The practice of industrial cooperation is continuing – used for Ukrainian nuclear power plants are Ukrainian uranium and steel components for FA in the fuel manufacture.

Due to Ukraine’s refusal of the transit of nuclear materials through its territory, an alternative logistical scheme for the delivery of fuel to Slovakia and Hungary by air transport was developed and implemented in a short time. Deliveries were made on time.

2.1.3.

GOALS FOR 2015 AND THE MID-TERM HORIZON

2.1.3.1. Plans for foreign NPP construction

NPP / Country	Plans for 2015
NPP “Bushehr-2”, power unit number 2, 3, Iran	Conducting R&D activities. Direct start of work is planned for the 3–4 quarter.
Kudankulam NPP, power unit number 1, 2, India	Ending warranty operation of power unit No. 1. At power unit No.2 – start loading fuel, access to the ISU and the synchronisation with the power system of India.
Kudankulam NPP, power unit number 3, 4, India	The signing of major contracts for supplies and services for the construction of power unit.
Ostrovets NPP, power unit number 1, 2, Belarus	Construction and installation works on both power units, including the installation of the integrated blocks of inner protective shell of the reactor building, bridge crane g/p 200/32 + 6.3 t and the turbine building.
Akkuyu Nuclear Power Plant, power unit number 1, 2, Turkey	Obtaining final approval from the Turkish side on use of the land. On project work: the beginning of construction and installation works and infrastructure of area, engineering research of stage RD.
Tianwan NPP, power unit number 3, 4, China	Performed construction and installation works; the key event is the installation of the reactor vessels on both units. The contribution of 2015 in degree of readiness of power unit TNPP-2 should reach 33.9 %.
Ninh Thuan NPP, power unit number 1, 2, Vietnam	Preparations for the signing of a contract for engineering surveys at the site of nuclear power plant construction.
NPP Ruppur, power unit number 1, 2, Bangladesh	Development and signing of the necessary project documentation (IJ, EIA), the signing of the contract for the construction of NPP “Ruppur” and the implementation of the priority work for the preparatory phase of construction of nuclear power plants.
Paks NPP, power unit number 5, 6, Hungary	Start of Phase 1 “preparatory period”, engineering surveys, obtaining pre-license by the Customer for the construction of NPP, development of technical project of building base.

2.1.3.2. Plans to service foreign NPPs

In 2015 it is planned to sign a contract to perform works on the basis of the possibility of extending the life of power units number 6 NPP “Kozloduy”.

As part of the first major repair of the project NPP “Bushehr” JSC Rosatom Service will perform the repair of equipment “nuclear island”, including repair of the reactor with full discharge of fuel

and UWC, turbine unit, channels of security system equipment, equipment of control systems. The planned volume of work is 2,170 persons month.

It is planned to develop a private screening programme, the results of which will form the basis for preparing the report and the training programme of Armenian NPP to an additional term of operation in order to obtain a license to operate the plant for the next 10 years.

2.1.3.3. Plans for mining natural uranium abroad

In 2015, Uranium One Holding plans to continue to work to optimise operations, improve efficiency and reduce costs. With the reduction in the price of uranium continuous improvement of the efficiency will increase cash flows in the short term and ensure business growth in the future. It is planned to increase production in the mines “Akbastau” and “Kharassan” in Kazakhstan.

In the medium term, Uranium One will continue to work on the development of the existing portfolio of assets in Kazakhstan and Africa, in order to ensure organic growth in production over the next 3–5 years. Given the possibility of increasing the volume of production at the Kazakh mines and the implementation of the project “Mkudzhu River” in Tanzania, the use of the whole portfolio of assets will allow Uranium One Holding to increase production in the medium term by 50% compared with 2013.

2.1.3.4. Plans for the supply of uranium products and nuclear fuel

- The signing of the contract documents for the supply of fuel for Slovak NPP after 2015.
- Endorsement by ESA contract for the supply of fuel for nuclear power plants “Hankikivi.”
- Participation in the preparation and

organisation of the exchange of notifications with the US side, fixing agreement on the termination of the HEU-LEU Agreement and related agreements, due to the fact that the HEU, indicated in Article 1, paragraph 1, of the HEU-LEU Agreement proceeded into LEU in full volume and all LEU delivered and handed over to commercial customers in a timely manner.

- Consultation with the US Department of Commerce for the preparation of a new amendment to the Agreement Suspending the Antidumping Investigation in respect of uranium from Russia for modification of re-export regime and regulation of the treatment of Russian natural component in the US.
- Participation in the preparation and organisation of an exchange of notes with the Japanese side on the control measures by the Japanese nuclear materials in Russia falls under the intergovernmental agreement with Japan on cooperation in the peaceful uses of atomic energy.
- Updating of the administrative arrangements for Accounting and Control of Nuclear Materials, encumbered with the “code of obligations”, in accordance with the intergovernmental agreement on cooperation in the peaceful uses of nuclear energy with Canada, Australia and the United States.

In the medium term, Uranium One will continue to work on the development of the existing portfolio of assets in Kazakhstan and Africa, in order to ensure organic growth in production over the next 3–5 years



DEPUTY CEO
FOR INTERNATIONAL RELATIONS
NIKOLAY SPASSKY

What are the key works implemented by the Corporation in the field of international cooperation in 2014?

For me personally, the past year was mainly marked by the Indian and Iranian projects. These are really strategic macro projects. India has one of the largest programs in the world for nuclear energy development today. And Iran, preparing to come out of the sanction regime, is getting ready for a massive leap in this direction.

Both Iran and India are very serious partners; complex, and sometimes heavy. They have millennia of civilisational tradition.

And they have a very specific decision-making system, in which many seemingly technical questions are raised at the state level. Together with colleagues from JSC “NIAEP” we had to do everything – dual check valves, financial transactions, the specific details of contractual obligations and the wording on civil liability for nuclear damage.

The result is the signing of two sets of documents by S. Kiriyeiko in November and December, fixing horizons of cooperation. We are talking about the construction of 8 power units of Russian design in Iran and 12 in India.

And I will mention collaboration with Uranium One on uranium topics in Kazakhstan. Here, the past year was significant – we have a long history to ensure that we have a correct, modern and legal framework for the activities of our uranium joint venture in the country.



For me personally, the past year was mainly marked by the Indian and Iranian projects. These are really strategic macro projects

Last year, the geopolitical situation in the world escalated significantly. Did it have any impact on the international activities of ROSATOM?

Of course, it had. It could not be otherwise. The international situation as a whole has become more fragile, mobile, and difficult to predict. We can see how much pressure there is from overseas on our partners to force them to renounce cooperation with ROSATOM. And all this happens against the background of significantly toughened competition for financial resources and for an order.

This is normal. Life is a cruel thing. The weak die at such times. The strong, active and adaptable not only survive, but grow stronger.

I knock on wood, but today we proved to be stronger and more dynamic than all our competitors. As a main reason for this success, I see that our proposal is really better qualitatively.

Last year, despite the context of sanctions, a record was achieved regarding a number of indicators for the international block. There was an increase in the portfolio of overseas orders. A growing number of units is planned for construction abroad. There is an intensity of the international negotiations, and a number of serious, substantive documents signed with foreign partners. Behind this is strong, continuous teamwork.

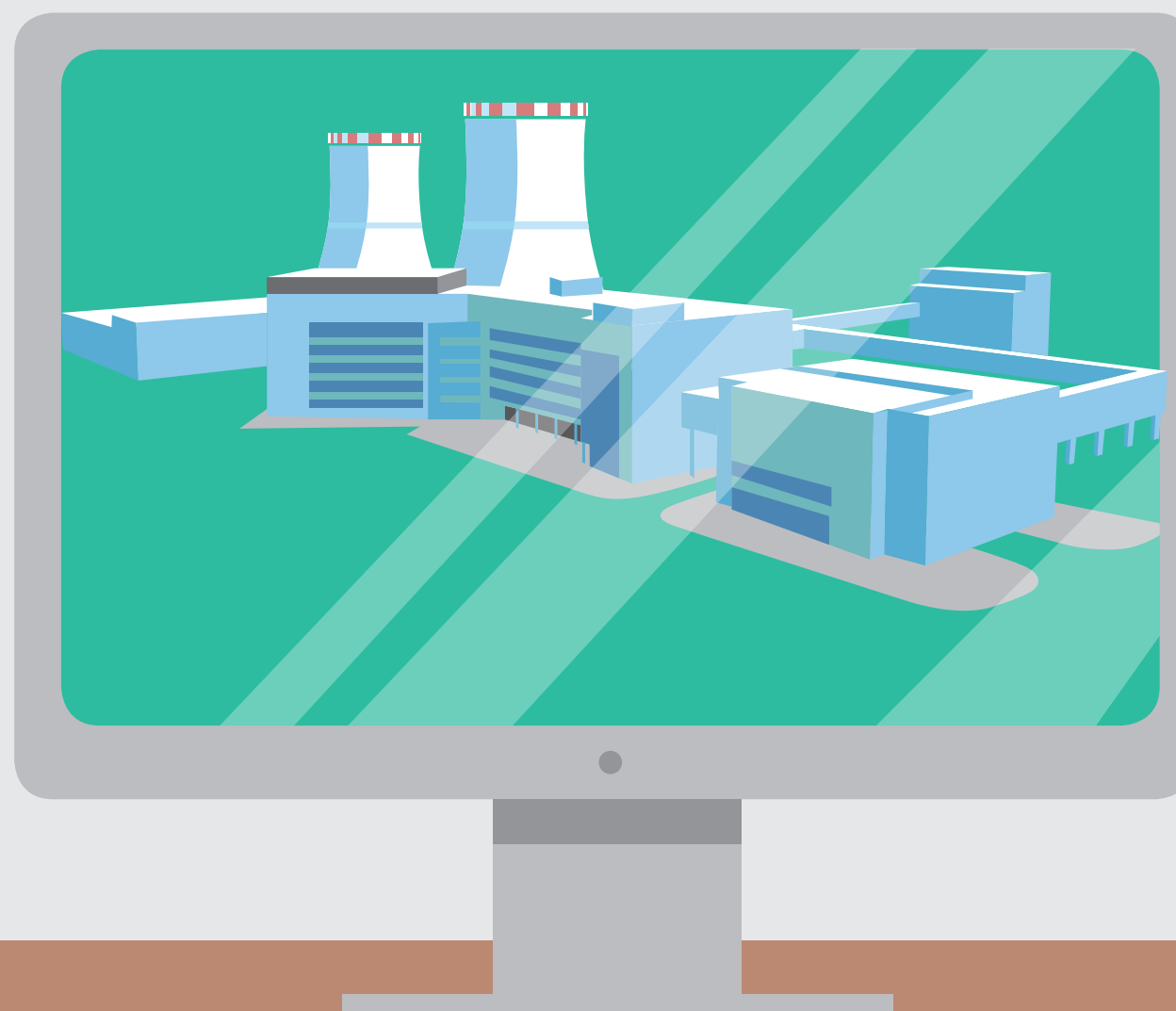
It will be very difficult to secure and furthermore to increase this success, but now it is only possible to go forward in this pledge.

11 INTERGOVERNMENTAL AGREEMENTS AND 18 INTERAGENCY ARRANGEMENTS CONCLUDED

A study visit of a group of Permanent Representatives of the Member States of the IAEA in Vienna at Kola NPP, FSUE Atomflot and Department of Sayda-Guba Northwestern Centre for radioactive waste management of "SevRAO" was organised

The strategic vision to strengthen cooperation in the peaceful uses of nuclear energy between the Russian Federation and the Republic of India was signed

The interagency Memorandum of Understanding and Cooperation in the construction of floating nuclear power plants was signed with the People's Republic of China



In St. Petersburg the XXV International Fusion Energy Conference (FEC 2014) was held with the support of the IAEA and the Government of the Russian ROSATOM

2.2 INTERNATIONAL COOPERATION

2.2.1.

STRENGTHENING THE INTERNATIONAL LEGAL FRAMEWORK FOR COOPERATION

The international activity of ROSATOM is aimed at creating favourable international legal and political conditions for the further promotion of Russian technologies to the world market of nuclear technologies, and strengthening the nuclear non-proliferation and nuclear safety, as well as active work in international organisations and forums.

In 2014 work continued on the expansion of the international legal framework for the global promotion of Russian nuclear power technology. 11 intergovernmental agreements (IA) and 18 interagency agreements were signed (in 2013 – 11 and 7, 2012 – 8 and 14, respectively).

The existing international legal framework of ROSATOM on December, 31, 2014 and plans for 2015



Results in 2014 (14 countries):

Hungary, Finland, South Africa, Kazakhstan, Armenia, Argentina, Algeria, Germany, Uzbekistan, Belarus, India, China, Japan

new IA or important interdepartmental agreements were signed



Plans for 2015 (10 countries):

South Africa, Jordan, Argentina, Egypt, Kazakhstan, France, Armenia, Belarus, Azerbaijan, and Tajikistan

are planning to sign the IA



"Framework" IA on the peaceful use of nuclear energy* (29 countries):

Australia, Algeria, Argentina, Brazil, Bulgaria, Great Britain, Egypt, Indonesia, Jordan, Kazakhstan, Canada, Kyrgyzstan, Libya, Mexico, Mongolia, the United Arab Emirates, Peru, Republic of Korea, Syria, United States, Uzbekistan, Finland, France, Czech Republic, Chile, Switzerland, Ecuador, South Africa, and Japan



IA on the construction of nuclear power plants and "framework" IA (13 countries):

Armenia, Bangladesh, Belarus, Hungary, Venezuela, Vietnam, India, Iran, China, Nigeria, Slovakia, Turkey, and Ukraine



Other IA (20 countries):

Austria, Azerbaijan, Belgium, Denmark, Germany, Iceland, Italy, Latvia, Lithuania, Moldova, Myanmar, the Netherlands, Norway, Poland, Romania, Serbia, Tajikistan, Turkmenistan, Sweden, and Estonia

1. The Republic of Belarus

signed a protocol on amendments to the IA on cooperation in the construction of nuclear power plants. The protocol envisages the replacement of the name of the contracting authority from the Belarusian side (due to its organisational transformation), and clarifies the timing of the project, as well as the obligations concerning the protection and information exchange procedure.

2. The Republic of Argentina

Signed the "framework" IA on cooperation in the use of nuclear energy for peaceful purposes. It replaces the framework that expired in 2012, and offers the prospect of building nuclear power plants of Russian design.

3. The Republic of Armenia

Signed IA on cooperation in extending the life of the unit number 2 of the Armenian NPP – the only existing nuclear power unit in Armenia, providing more than 20% of all electricity produced in the country. IA provides the execution of works by ROSATOM on the repair and modernisation of the power unit.

4. The Republic of Uzbekistan

Signed IA on cooperation in the import to Russia of spent nuclear fuel from a research reactor, which makes it possible to carry out the export in 2015 from Uzbekistan ~ 5 kg of liquid HEU of a research reactor IIN-3M (resulting in Uzbekistan not remain HEU fuel).

5. Republic of South Africa

Signed IA strategic partnership in the field of nuclear energy and industry. The agreement provides a framework for the development of a large-scale programme for the construction of South Africa's NPP (power units with Russian VVER reactors with a total installed capacity of up to 9.6 GW), and of a research reactor.

6. The Federal Republic of Germany

Signed IA on cooperation in the field of research reactors.

ROSATOM ANNUAL PUBLIC REPORT

7. The Republic of Hungary

Signed IA on cooperation in the peaceful use of nuclear energy which includes the construction of new NPPs "Paks". ROSATOM is selected as the supplier of the second stage of the NPP "Paks".

9. The Republic of Finland

Signed the IA on cooperation in the field of peaceful nuclear energy, which replaces the expired 2004 "framework" agreement, and established a regulatory basis for the implementation of the project NPP "Hanhikivi".

10. The Republic of India

Signed "strategic vision to strengthen cooperation in the peaceful uses of nuclear energy." The document opens up the possibility of building at least 12 nuclear power units on the Russian project in the next 20 years.

12. People's Republic of China

Signed the interagency Memorandum of Understanding and Cooperation in the construction of floating nuclear power plants. The document reflects the intention of the parties to collaboratively elaborate on the possibilities of cooperation in the field of floating nuclear power plants.

13. Islamic Republic of Iran

Signed an intergovernmental protocol on the construction of new nuclear power plants in Iran on Russian design, providing "turnkey" construction of eight new nuclear power units with VVER reactors and the delivery of Russian nuclear fuel for nuclear power plants throughout the entire life cycle of the power units; signed an interagency memorandum of understanding on the expansion of cooperation in the nuclear field.

8. Republic of Kazakhstan

Signed a set of documents promoting Russian-Kazakh cooperation to a new level:

- integrated programme of Russian-Kazakh cooperation in the peaceful uses of atomic energy;
- roadmap of measures to resolve the issues of subsoil use on the fields Kharassan-1 Akdala, South Inkai (section 4);

- memorandum of Understanding for cooperation in the construction of nuclear power plants in the Republic of Kazakhstan;
- memorandum of Understanding and Cooperation in the field of renewable energy (solar and wind) and the production of rare and rare earth metals.
- the IA on cooperation in the construction and operation of nuclear power plants of Russian design has been drafted.

11. Algerian People's Democratic Republic

Signed "framework" IA on cooperation in the use of nuclear energy for peaceful purposes and created a legal base for cooperation in all areas in the nuclear field, including the construction of nuclear power plants.

14. Japan

Concluded IA through an exchange of diplomatic notes on the mechanisms of control over the Japanese nuclear material, which will be at Russian plants

* Not considered inactive IA concluded before 1991.

2.2.1.1. Support of strategic projects

Political support for major projects – primarily for the construction of nuclear power plants abroad – continued in 2014.

A General Framework Agreement for the construction of reactors number 3 and 4 of NPP “Kudankulam” in the Republic of India was signed. The GFA documented conditions acceptable to ROSATOM for resolving the issue of civil liability for nuclear damage. As a part of GFA a contract was signed for the supply of equipment with long manufacturing cycle and the prioritisation of Russian-made equipment for the power units 3 and 4 of NPP “Kudankulam”. Thus, the project for the construction of the second stage of NPP “Kudankulam” moved into the phase of implementation.

The contract was signed for the construction of two new nuclear reactors of NPP “Bushehr” in the Islamic Republic of Iran with the possibility of extension up to four units.

Four contracts for execution of the preliminary stage of work on the construction of nuclear power plants in the People’s Republic of Bangladesh were prepared, three of which have already been signed and implemented.

Project support on the construction of nuclear power plant “Ninh Thuan-1” and the Centre for Nuclear Science and Technology in the Socialist Republic of Vietnam was carried out, and work was conducted on training for the nuclear industry in this country.

Infrastructure issues were resolved in preparation for the construction of the nuclear power plant “Akkuyu” in the Turkish Republic. A memorandum with the Ministry of Energy and Natural Resources of the Republic of Turkey on cooperation in the training of personnel for the Turkish nuclear industry was signed.

ROSIATOM and JSC NAC Kazatomprom established new joint uranium-mining enterprises LLP JV

South mining and chemical company and LLP “JV” Khorasan-U” in order to develop on their platform uranium deposits Akdala, South Inkai (section 4) and Kharassan-1 on the basis of mining rights to these deposits delegated to them by JSC NAC Kazatomprom.

The export of irradiated fuel assemblies of NPP “Paks” (Hungary) to the enterprise of ROSATOM for further processing was carried out. It summed up the 10-year joint work of Hungarian and Russian specialists in the aftermath of the accident, which occurred at the NPP “Paks” in 2003 (the cause of the accident was the use of equipment of western production). Transit was carried out through Ukraine.

There has been an agreement to a scheme of transportation, ensuring the safety of shipping and the Russian guards on the Ukrainian side.

In 2014, despite the worsening of the socio-political situation in Ukraine, the Corporation’s enterprises continued the programme of the exportation of spent fuel assemblies of Ukrainian NPPs to Russia.

In compliance with the decree of the President of the Russian Federation of May, 06, 2011 No. 603 ROSATOM has continued to work on the development of representatives abroad. By the end of 2014 representatives of ROSATOM acted within embassies and trade missions of Russia in the 14 countries of the world.

The main problems hindering international cooperation in 2014 were the efforts to put sanction pressure on Russia, unfair competition and economic difficulties in a number of partner countries. To neutralise these problems, ROSATOM in coordination with the Ministry of Foreign Affairs of the Russian Federation, the Ministry of Economic Development of the Russian Federation and with other departments has properly built the negotiating position, and led advocacy, including international conferences and forums. As a result, all of the Corporation’s key projects abroad in the reporting year were continued or implemented.

In 2014 political support for major projects continued, primarily for the construction of nuclear power plants abroad

2.2.2.

COOPERATION WITH INTERNATIONAL ORGANISATIONS

Table. Participation of ROSATOM in the work of international organisations

International organisation	Cooperation in 2014
The International Atomic Energy Agency (IAEA)	<p>In St. Petersburg the XXV International Fusion Energy Conference (FEC 2014) was held with the support of the IAEA and the Government of the Russian ROSATOM. The conference was attended by over 840 delegates from 39 countries.</p> <p>A study visit of a group of Permanent Representatives of the Member States of the IAEA in Vienna was organised to the Kola NPP, to FSUE “Atomflot” and to the Department of Sayda-Guba Northwestern Centre for radioactive waste management of “SevRAO”.</p> <p>ROSIATOM took part:</p> <ul style="list-style-type: none"> • in a symposium on the IAEA safeguards; • in the International Conference “Achievements in the field of nuclear forensics: the struggle with the changing threat posed by nuclear and other radioactive materials outside the regulatory control”; • at the 58th session of the IAEA General Conference (on the sidelines of the conference briefing “Russian experience and practice to support the development of nuclear infrastructure of newcomers”). <p>In connection with the decision taken at the IAEA to create a nuclear fuel bank in Kazakhstan, the development of an agreement with the IAEA on the transit of low-enriched uranium for nuclear fuel bank of IAEA through the territory of Russia was started.</p> <p>An intergovernmental agreement with the Republic of South Africa on accession of the country to the International Uranium Enrichment Centre in Angarsk was prepared.</p>
Nuclear Energy Agency of the Organisation for Economic Cooperation and Development (OECD NEA)	<p>The delegation of the Corporation participated in the conference on the extension of the framework agreement on international cooperation on research and development activities for nuclear power generation systems IV of February, 28, 2005. The conference agreed on a draft document for the extension of the term of the Framework Agreement for ten years. Russia is involved in the development of the four systems of Generation IV: fast reactors with sodium, lead coolant and coolant in the molten salts, as well as supercritical water reactor.</p>

International organisation	Cooperation in 2014
	<p>The work in the group of Russian-designed VVER reactors within the Multinational Design Evaluation Programme (MDEP) has continued, facilitating the rapprochement between Russian approaches to the licensing of new NPP projects and international practice.</p> <p>The Russian participation in the implementation of the five OECD NEA international projects aimed at solving problems of increasing the safety of Russian nuclear power plants and the creation of future generations of nuclear reactors.</p> <p>Russia's accession to the Joint Declaration on a reliable supply of medical radioisotopes is provided, the provisions of which correspond to the interests of the Russian manufacturers of medical radioisotopes.</p> <p>ROSATOM conducted the 15th meeting of the Working Group of the OECD NEA on decommissioning and dismantling on the basis of ROSATOM-CICE & T.</p> <p>The data on the Russian nuclear industry are included in the OECD NEA published in 2014 reports: "Uranium 2014: Resources, Production, Demand," "Technology Roadmap: nuclear energy", "Data on nuclear energy."</p>
The Commission of states – participants of the CIS on the use of nuclear energy for peaceful purposes	<p>ROSATOM has prepared a decision of the Council of CIS Government Heads giving NRNU MEPhI status of the base organisation of the CIS member states on training, retraining and advanced training in the use of nuclear energy for peaceful purposes. ROSATOM has prepared the approval of the Concept for Nuclear and Radiation security of CIS member states in the field of nuclear energy for peaceful purposes.</p> <p>During the year, the Corporation implemented as a customer coordinator the interstate target programme "Reclamation of areas of the Kyrgyz Republic and Tajikistan, affected by uranium mining industries." In connection with the termination of the activities of the Eurasian Economic Community, ROSATOM has translated the programme under the auspices of the CIS.</p>

2.2.3.

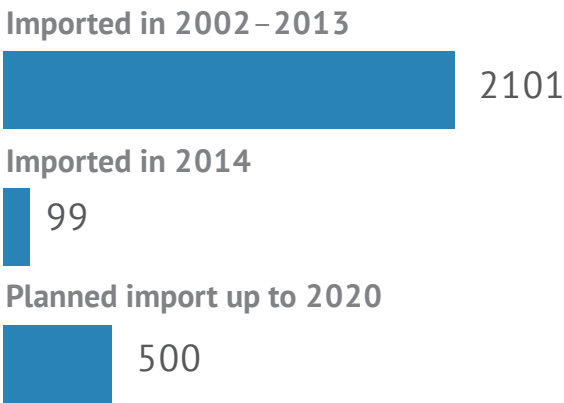
NUCLEAR NON-PROLIFERATION REGIME CONSOLIDATION

Since 2002 the programme has been implemented for the import to Russia of nuclear fuel of research reactors of Soviet manufacture. The Programme covers 14 countries – Belarus, the Republic of Bulgaria, the Hungarian Republic, Socialist Republic of Vietnam, Federal Republic of Germany, the Republic of Kazakhstan, the Republic of Latvia, the State of Libya, Poland, Romania, the Republic of Serbia, Uzbekistan, Ukraine, and Czech Republic.

As of December, 31, 2014 ~2,2 tons of highly enriched nuclear fuel had been imported to Russia (the isotopes of uranium and plutonium).

In 2014 89 kg of highly enriched irradiated nuclear fuel were exported from the Republic of Kazakhstan and the Republic of Poland, as well as 10 kg of fresh highly enriched fuel from Republic of Kazakhstan.

The volume of import of highly enriched nuclear fuel (uranium and plutonium isotopes) kg.



2.2.4.

IMPLEMENTATION OF INTERNATIONAL AGREEMENTS IN THE FIELD OF NUCLEAR ENERGY AND NATIONAL LEGISLATION ON EXPORT CONTROLS

The Export Council of ROSATOM examined ~ 200 draft contracts (agreements, contracts) promptly, without any appeal. According to the results of the examination, the conclusions were sent to the organisations of the industry.

The branch seminar "Export control in ROSATOM: challenges, ways of development" was held.

Within the framework of the implementation of the ROSATOM Production System the process of examination of foreign trade contracts of enterprises was optimised, which allowed a reduction in the time taken for their consideration by the Export Council of ROSATOM on average 4 times.

2.2.5.

GOALS FOR 2015 AND THE MID-TERM HORIZON

The plans for 2015 for the development of the international legal framework include the signing of a minimum of three new intergovernmental agreements on the construction of NPP of Russian design and implementation of other large-scale projects of cooperation with partner countries. In addition, at least three more general agreements will be concluded; they will provide the basis for the establishment of practical cooperation in the long term.

The provision of political and legal support for large international projects by divisions of ROSATOM in the nuclear fuel cycle, including uranium mining, will be continued.

Kazakhstan through the territory of the Russian Federation;

- renovation and expansion of the presence of Russian staff in the IAEA;
- development of the concept of activities of ROSATOM on the promotion of establishment and improvement of national infrastructures for nuclear power of countries which are constructing or planning the construction of nuclear facilities for Russian projects.

Medium-term objectives of ROSATOM in international activities are to promote the work with foreign states and International Organisations and the integrated offer of the Corporation to provide services in the construction and maintenance of nuclear power plants abroad, further expansion of the international treaty base of cooperation, implementation of international commitments of the Russian Federation, and strengthening the nuclear non-proliferation and nuclear safety.

The provision of political and legal support for large international projects by divisions of ROSATOM in the nuclear fuel cycle, including uranium mining, will be continued

Plans for 2015 on working with the IAEA and other relevant international organisations and on the implementation of international commitments of the Russian Federation:

- organisation of visits by the Director General of the IAEA Yukiya Amano and Director General of the OECD NEA William Megvud in Russia;
- organisation of study visit of group of Permanent Representatives of the Member States of the IAEA in Vienna on nuclear facilities of Russia;
- conclusion of an agreement with the IAEA on the transit of low-enriched uranium to low enriched uranium IAEA Bank to Republic of



DEPUTY CEO FOR INNOVATION MANAGEMENT

VIACHESLAV PERSHUKOV

ROSATOM pays great attention to application oriented science, its focus on the result and further commercialisation of the developments. What mechanisms are used to solve this problem?

The system of planning and evaluation of R&D is put into practice. Applications for investment projects based on R&D are prepared according to certain procedures. Then, a preliminary examination of applications by divisions and the thematic scientific and technical councils is conducted; projects are either finalised or rejected. After that, projects are prepared for consideration by the Investment Committee for its funding from the consolidated investment resources of the Corporation.

Implementation of the system has increased the transparency of R&D. Now we have to improve the system using tools of PSR, and then – to assess its effectiveness in the implementation of innovative projects.



We are preparing a new programme of innovation development: we analyse the results of the current programme and carry out a market-technological audit of all repartitions

What are the developments in nuclear science that provide the technological base for the long term?

The first is the use of fusion energy source. The second is that all projects relate to the processing of radioactive waste. And also there is a digital technology: computer codes and technology lifecycle management of objects and the system-dynamic modelling of nuclear power.

State-owned companies have been mandated to update the new innovative development programme. Is this a matter of concern for ROSATOM?

Yes, we are preparing a new programme of innovation development: we analyse the results of the current programme and carry out a market-technological audit of all repartitions.



The new programme is not simply updating the existing programme; its task is to take into account the results of the “old” programme, the changed conditions and new trends. The current programme was developed in the period prior to Fukushima, and this means that a new programme will feature an increased focus on the safety of nuclear power. The market situation is changed. The portfolio of overseas orders has increased greatly. The work on the preparation of the programme involves all divisions and practically all parts of the Corporation as at the output we want to get programme documentation for the implementation of the priority areas of technological development.

The paradigm has changed: previously the scientific institutes were engaged in innovations; today innovation is a common goal for the industry. Industrial divisions are customers of innovation and scientific institutions are its developers

Do such changes require a restructuring of the scientific complex?

The restructuring began in 2011. Then, most of the scientific assets of the sector were consolidated under the management company “Science and Innovation”. Now we are discussing whether or not “Science and Innovation” will be an independent division with its own product strategy and whether it will provide services to other divisions. In 2013 the approach to the management of innovative activity changed: a functional hierarchy was built in the industry and now all divisions are involved in innovative activities. The paradigm has changed: previously, the scientific institutes were engaged in innovations; today innovation is a common goal for the industry. Industrial divisions are customers of innovation and scientific institutions are its developers.

50

Within the programme of innovative development and technological modernisation more than 50 technology projects were implemented

2.3.

INNOVATIVE DEVELOPMENT

The project “Proryv” (Breakthrough) which aims to study and demonstrate the possibility of transition to a closed nuclear fuel cycle, created the experimental nitride fuel for testing in the BN-600 reactor at Beloyarsk NPP.

The scanner of road covering “Condor” won the National Prize in the field of road safety, “Safety is everyone’s business”. The quality of the road surface has been measured in 30 cities of Russia.

2.3.1.

PROGRAMME OF INNOVATIVE DEVELOPMENT AND TECHNOLOGICAL MODERNISATION

A programme of innovative development and technological modernisation has been implemented in ROSATOM for the period up to 2020 (the Programme). The programme aims to provide innovative development of the nuclear industry by improving the scientific and technological capabilities and expanding the use of nuclear technology in various industries in Russia and abroad.

The first Russian cyclotron radiochemical complex for positron emission tomography has been created



2.3.1.1. Results in 2014

The following results were achieved in 2014:

- more than 50 technology projects were implemented;
- work ensuring the creation of an innovative infrastructure, formation of scientific competencies, and development of a knowledge management system was carried out;
- work on the development of innovative technology clusters in the cities of St. Petersburg, Dimitrovgrad, Sarov, and Zheleznogorsk has continued;
- a number of programs have been implemented on staff training, development of educational programs and training programs in universities.

IMPLEMENTATION OF EDUCATIONAL PROGRAMS

The programme “Management of technological innovation” has been implemented in the Moscow School of Management, Skolkovo.

The master’s programme “Nuclear Power Technologies of New Generation” began in the NRNU MEPhI.

The faculty “Technology of a closed nuclear fuel cycle” was created in the NRNU MEPhI; its mission is training students for the “Breakthrough” project

Table. Key performance indicators of the programme of innovative development and technological modernisation

Target values of KPI	KPI of the Programme			
	2014 planned	2014 actual	2013 actual	2012 actual
The amount of R&D funding, % of revenue	4.5	4.5	4.53	4.78
Number of patents of foreign countries based on the results of research and development work, production secrets (know-how) and intellectual property (cumulative), units	47	57	40	26
Number of executed trade secrets (know-how) based on results of intellectual activities in science and technology, units / year	59	83	81	71
Revenue per person (per employee Scientific Research Institute, SRI), thousand Rub. / Year	1300	1351	1244	1222
The share of financing of R&D orders in universities of the total R&D funding, %	4.5	4.5	4.1	3.52
The percentage of the volume of R&D carried out by non-sectoral organisations, %	13	14.2	17.2	15.7

2.3.1.2. Plans for 2015

On developing new technologies:

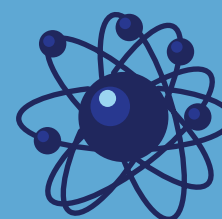
- justification of decisions to the technology of manufacturing systems ITER reactor applied to the conditions of the Russian industry;
- project development of power unit ODE BREST;
- creation of the industrial design hardware-methodical complex of logging of new generation for the direct determination of uranium in wells by prompt fission neutrons;
- release of superconducting wire for medical scanners.

On the development and implementation of new technologies:

- manufacturing of equipment for radiochemical laboratories;
- modernisation of the production of pellets for BN reactors.

On infrastructure projects:

- creation of a set of IT tools and processes for the identification, acquisition, use, control and sharing of knowledge in the field of nuclear energy;
- implementation of an information management system of corporate social network;
- commissioning of equipment for the Centre for Mathematical Modelling of technical and technological processes of railway transport and pilot production.



The project “Proryv” (Breakthrough), establishing nuclear power technologies of the new generation on the basis of a closed nuclear fuel cycle with fast reactors, has been implemented under the federal target programme “Nuclear energy technologies of the new generation for the period 2010–2015 and up to 2020”

ACTIVITIES WITHIN THE PRESIDENTIAL COUNCIL FOR THE ECONOMIC MODERNISATION AND INNOVATIVE DEVELOPMENT OF RUSSIA

2.3.2. 2.3.2.1. Projects of a new technology platform and a closed nuclear fuel cycle with fast neutron reactors

The project “Proryv” (Breakthrough)

Results in 2014

- developed a draft of power unit and the technical design of the reactor unit (RU) on fast neutrons with lead coolant BREST-OD-300,
- initiated work on the production of full-scale samples and large-scale models of the main equipment of RU BREST- OD-300,
- technical project on prototypes of equipment

- of manufacturing complex of fuel rods and FA module fabrication of fuel for fast neutron reactors,
- launched the pilot production at JSC SHC manufacturing technology mixed nitride U-Pu fuel by carbothermal synthesis of oxide powders; also the area for the production of mixed nitride U-Pu fuel by direct hydrogenation at VNIITF has been created,
- constructed and put to the test in the BN-600 and BOR-60 12 experimental FA.

Plans for 2015:

- production of a large-scale layout of the steam generator for vibration testing,
- obtaining of the results of equipment manufacturing fuel rods and FA bench tests,
- technical design development of the complex of pyrochemical nitride SNF processing (experimental design installations) head process equipment,
- results of post-irradiation examination of fuel elements after the first stage of irradiation of fuel assemblies.

Project “Creation of a multipurpose research reactor on fast neutrons” (MBIR)

Results in 2014

- Federal Service for Ecological, Technological and Nuclear Supervision (Rostekhnadzor) has given JSC “SSC RIAR” a license for the allocation of the multipurpose research reactor on fast neutrons MBIR;
- complexity of research and development activities in support of the design and engineering decisions made in the amount stipulated by the federal programme on nuclear energy of new generation for 2014;
- work of the preparatory period of construction MBIR has begun on a platform of “SSC RIAR”.

Plans for 2015:

- implementation of the planned programme of research and development in support of technical solutions for systems and equipment of research nuclear facility MBIR;
- obtaining a license of Rostekhnadzor for MBIR construction

- completion of construction and commissioning of the first stage of the MBIR physical protection system;
- Completion of the preparatory period, the beginning of construction and installation works of the main construction period of MBIR.

2.3.2.2. The project “Superconducting industry”

The project “Superconducting industry” is aimed at creating an innovative technical basis for the improvement of the energy efficiency of the economy. A wide range of production of electrotechnical equipment based on the latest technologies related to the use of unique materials such as high-temperature superconductors (HTSC) is being developed and created.

Results in 2014:

- commissioning of the equipment for testing and production of high-temperature superconductors (HTSC test stand for the current lead, cryogenic test facility for superconducting devices, laser deposition for the production of high-temperature superconductors of the 2nd generation);
- production of a prototype of HTSC transformer 1 MVA and switching of a superconducting current limiter.

Plans for 2015:

- the launch of pilot production of long-measuring high-temperature superconductors of the 2nd generation,
- prototyping of HTSC electric motor for transport systems,
- prototyping of kinetic energy storage with HTSC magnetic suspension,
- HTSC generator manufacturing with capacity of 1 MW for wind turbines.

2.3.3.

INTERNATIONAL PROJECTS IN THE FIELD OF SCIENTIFIC AND INNOVATIVE ACTIVITIES

2.3.3.1. Project of international Thermonuclear Experimental Reactor (ITER)

The project of the world’s first international thermonuclear experimental reactor is being developed by the efforts of the international community in France. Involved in the implementation of the project are the European Union, China, India, Japan, Republic of Korea, Russia and the United States.

Results in 2014:

All activities of the programme and supply assigned to the Russian Federation for the ITER project in 2014 have been carried out:

- JSC CHMZ manufactured batches of superconducting strands, totalling 40,0 tons;
- a programme for the release of superconducting strands to ensure Russian supplies of superconductors has been completed and their verification tests performed;
- verification testing of superconducting strands has been performed;
- PI ITER-Centre delivered 13 niobium-tin superconductors for toroidal field coils, 3 niobium-titanium cables poloidal field coils, 9 archival samples of toroidal field conductor, 93 archival samples of the poloidal field conductor;
- JSC NIIEFA completed equipment assembly areas of vacuum pressure impregnation and assembly of coil PF1.

For more about the cooperation with the International Forum “Generation IV” see [the Section “International Cooperation”](#).

2.3.3.2. International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO)

The INPRO project is the initiative of the President of the Russian Federation of 2000 and the independent activity of the IAEA, which is associated with the Russian nuclear industry and its achievements. The methodology has been developed within the INPRO project; training has been conducted and assistance on the valuation of nuclear energy systems has been provided.

Results in 2014

In 2014 the INPRO project was transformed into INPRO Section of the Department of Atomic Energy of the IAEA. On two dialogue forums the owners and users of technologies discussed the licensing and safety of reactors of low and medium power and the safety performance of the evolutionary power reactors.

The projects “Synergy” and the “Roadmap” (achieving the sustainable development of nuclear energy in accordance with the criteria of the INPRO methodology) were implemented on Russia’s initiative.

Plans for 2015

It is planned to start the preparation of new research on small quantity block plants. The work on the limited application of NESA methodology to the evaluation of nuclear energy systems with fast neutron reactors will continue. The application area of NESA will be expanded. A board of INPRO will be created.

2.3.3.3. The construction of the Centre of Nuclear Science and Technology (CNST) in Vietnam

According to the protocol of the 17th meeting of the Russian-Vietnamese intergovernmental commission on trade, economic, scientific and technical cooperation, Russian and Vietnamese representatives signed a general framework agreement on the construction of CNST, which reflects the stages of project implementation, including the determination of the amount and composition of the financing of CNST. Consultations were held on the preparation of an intergovernmental agreement on the financing of the feasibility study of CNST.

The Russian representatives sent the Vietnamese representatives a technical and commercial proposal on a preliminary study of three candidate areas of CNST placement, developing dossiers for approval of the selected area and the preparation of the feasibility study documentation of CNST.

2.3.4.

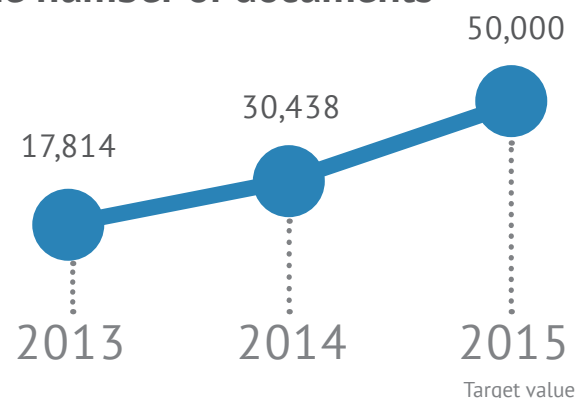
KNOWLEDGE MANAGEMENT SYSTEM

Results in 2014

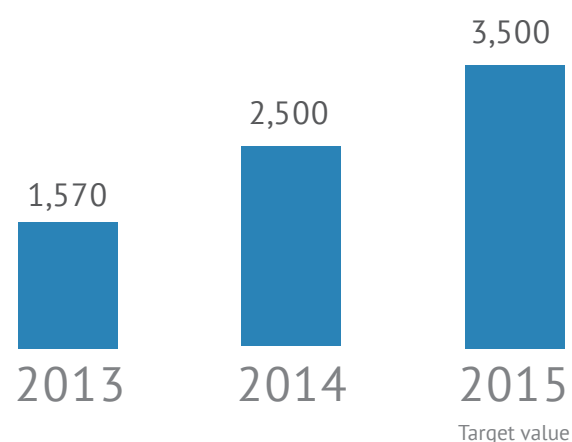
- The project "enterprise knowledge management system of the State Corporation 'Rosatom'" received the approval of the mission support of the IAEA on nuclear knowledge management,
- the functional management of scientific and technical and dissertation councils was formed in the corporate e-library,
- a methodology for ensuring compliance with the intellectual property rights of RIA holders for all placed documents was developed,
- an information system for managing the communities of practice was put into operation.

During the year the system involved more than a thousand experts (a visit of the resource by 500 unique users was supposed); it is planned to extend this practice to the entire industry.

Filling of the NTI portal, the number of documents



Involvement in the knowledge management system, people



Plans for 2015:

- approving the unified sectoral policies on intellectual property management,
- digitisation of the archive of the nuclear industry,
- formation of a single map of competencies of the nuclear industry,
- formation of a unified corporate scientific and technical library of the nuclear industry,
- creation of training programs for knowledge assets management to support higher education institutions of ROSATOM,
- involvement of carriers of critical knowledge in R&D sector, including the development of mechanisms for mentoring.

2.3.5.

MANAGEMENT OF INTELLECTUAL PROPERTY (IP), PROTECTION OF OBJECTS OF IP

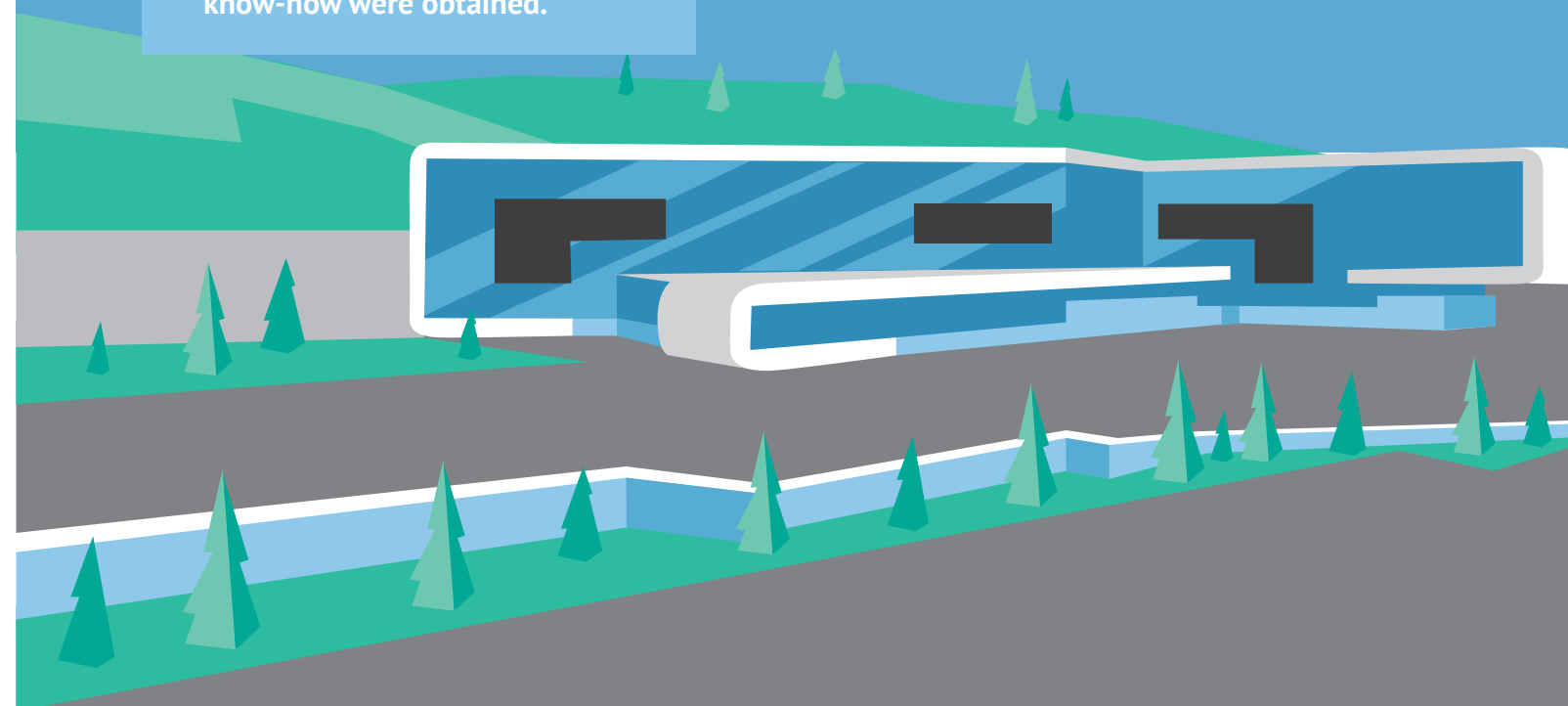
Results in 2014:

- information system of management of rights on RIA was prepared to be commissioned in industrial exploitation,
- policy of ROSATOM in the field of intellectual property was developed,
- revenue from a license agreement granting the right to use the results of intellectual activity increased by 160%.

A competence centre for the management of intellectual property was formed in order to promote common approaches for the nuclear industry towards the management of rights to the results of intellectual activity, to ensure the transfer of intellectual property and technology, as well as the timely identification and minimisation of risks in the accounting year.

In 2014 patent activity of the organisations of the nuclear industry increased by 41.8%.

1,129 patents, licenses and know-how were obtained.



2.4.

BUSINESS DIVERSIFICATION

Key results in 2014

The development of innovative projects using modern high-tech equipment for the treatment of cancer centres of proton-ion therapy was started.

A Memorandum with the Chinese company CNNC New Energy Ltd. of intent on cooperation on the project of floating nuclear power plants was signed.

A Memorandum of Intent and a shareholder agreement on the project “Creating a network of contracted centres in Tamil Nadu in India” in the field of nuclear medicine was signed.



POINT OF VIEW

DIRECTOR OF DEVELOPMENT AND
RESTRUCTURING
OLEG BARABANOV

In recent years ROSATOM has been actively working on the diversification of its business and entering new markets. What are the most significant results of the reporting year?

In 2014 the overall industry revenue growth in new areas of business was 59%, while the growth of the orders portfolio achieved 91% compared to the previous year.

In the Power Generation Division revenue growth was 25.5 billion rubles; the portfolio of orders grew by 123 billion rubles. That is basic information on NPP service and the sales of electric power.

The revenue growth and the order portfolio, compared to the indicators of 2013, in Machine-Building Division are 3.3 and 17 billion rubles, respectively. That is mostly shipbuilding.

The revenues increased by 2.3 billion rubles in NWD organisations. That was mostly the automated process control system (APCS), electrical engineering and laser technology.



In 2014 the overall industry revenue growth in new areas of business was 59%, while the growth of the orders portfolio achieved 91% compared to the previous year.

What are the priorities?

According to the strategy of ROSATOM the revenue from new businesses should reach 25% of total revenues of the Corporation by 2030. To do this, we need to solve a number of problems. We need to invest in the most promising areas of business, to create conditions for the full use of the competencies and capabilities of industry organisations, to expand the supply chain, to build the effective cooperation of industry organisations with each other and with non-sectoral partners, and to identify duplicate projects and optimise their implementation through a new business integrator. Also, we have to fully exploit the benefits of the Corporation as a vertically integrated company. Then the result will be an increase in the portfolio of orders and revenue on new products.

What new markets are considered to be promising? What products will the Corporation and its organisation be offering?

The most promising are the core areas in which the organisations of ROSATOM have a modern research, experimental and industrial base, in particular: small reactors, services, electric power sales business, isotope production, radiation technology and nuclear medicine, production of fuel assemblies for nuclear reactor of foreign design, water treatment, and energy storage system.

The competitiveness of the Corporation is provided by the specialised scientific institutes and industrial infrastructure. We have an opportunity to use traditional business achievements for the development of new directions.

Our organisations are ready to offer high-tech products and services: APCS, IT systems of support of productive activities throughout the life cycle, test instruments and equipment, electrical equipment, supercomputing technology, laser technology, security systems, production of machine tool industry, equipment for small-scale energy, geophysical equipment, products and services of nuclear medicine, non-destructive testing systems, radiation disinfection technology, isotope products, robotic systems, technologies and equipment in the field of energy efficiency, environmental protection and water treatment.

The Corporation's organizations are already present in the market in the most of the above mentioned areas. 17 product strategies in various fields were defended in 2014, a number of strategies are still under development.

2.4.1.

RESULTS OF NEW BUSINESS DEVELOPMENT

Nuclear medicine

- the projects "Creation of the centre for nuclear medicine on the basis of the Far Eastern Federal University," and "Creation of nuclear medicine centre in Snezhinsk" have been developed and transferred into the investment phase;
- the development of innovative projects using modern high-tech equipment for the treatment of cancer has been started – centres of proton-ion therapy. Joint work was organised with Russian Ministry of Health to establish a pilot centre on the basis of one of the leading cancer clinics in Russia;

- signed a Memorandum of Intent and a shareholder agreement on the project "Creating a network of contracted centres in Tamil Nadu in India" have been signed.

The irradiation centres

The project "Pilot Irradiation Centre" has been implemented, aimed at the creation in Russia of a network of specialised centres of irradiation to meet the growing demand for services in the radiation processing of goods and materials: in the FSUE NIIP and JSC NIFHI irradiation centres have been created, the main specialisation of which is the provision of services of sterilisation of medical products. Design and survey works have been carried out, and agreements have been signed for construction work.



Contracts with JSC NIITFA were signed for the supply of two units of radiation sterilisation on the basis of electron accelerators (10 MeV, 10 kW). A preliminary portfolio of orders was formed.

Low capacity Nuclear power plants

In JSC Rosatom Overseas:

- a programme has been developed for the promotion on the market of the most promising types of low-capacity nuclear power plants;
- the strategy of the programme implementation has been approved;
- the most promising LCNPP projects for the implementation under the programme of innovative development have been selected.

FNPP

- the problem of the construction of a floating self-propelled or non-self-propelled station for electric and thermal energy, as well as sea water desalination is being solved;
- a Memorandum of Intent on cooperation in the project of floating nuclear power plants with a Chinese company CNNC New Energy Ltd has been signed.

Nuclear Desalination

Market prerequisites for the commercialisation of technical solutions have been analysed:

- the parameters of nuclear power plants have been determined;
- an assessment of opportunities for technical expertise and design has been performed;
- a methodology for assessing the cost-effectiveness of potential solutions has been developed; configuration offers of solutions of desalination complex on the base have been formed:
 - high capacity NPP (capacity up to 170 thousand. m³/day.)
 - floating power unit,
 - nuclear energy source of low-capacity;
- the list of potential customers has been defined;
- the technical concept of the new product of desalination complex has been developed (capacity to 170,000 m³ of potable water per day), which is integrated with high capacity NPP

Modular power generation "RusGreenTurbine"

- the results of research "Investigation of the global market of industrial low-grade heat source";
- the work on the analysis of low-grade heat sources in industrial enterprises in Russia has been carried out;
- a contract "Conducting R&D to design and build a prototype of micro turbine MTU-500ORC installation for power generation" has been signed.

Research reactors

the target project is the construction of the Centre of Nuclear Science and Technology in Vietnam. In 2014, the General Framework Agreement with the Institute of Atomic Energy of Vietnam was signed; also, the contract for the feasibility study was agreed and initialled.

Decommissioning of nuclear and radiation hazardous facilities, facilities dealing with RAW and SNF

- the contract was concluded and the work on the project with the company JNPC (China) was done,
- a contract for consulting services at Chernobyl NPP was signed,
- the design of documentation for the project: "Andreeva Bay" on the complexity of processing and temporary storage of radioactive waste, including sections of the EIA and MEP was completed;
- the competence of United Company ASE-NIAEP as the general contractor for the modernisation and decommissioning of NPP etc. nuclear and radiation hazardous facilities through the integration of the basic design holder (JSC Atomenergoproect) was strengthened.

Thermal power

- the objects that use the products developed by JSC IK ZIOMAR and set by JSC ZiO-Podolsk have been put into operation: two CCGT-420 at Yuzhnouralsk GRES-2, TPP-9 OJSC Mosenergo gas-turbine superstructure with a gas turbine 65 MW and a heat recovery boiler, PGU-400 at Nizhnevartovsk GRES with heat recovery boiler;
- a contract was signed with LLC Company NTV-energo for the implementation of low-temperature vortex fuels combustion technology in the energy sector and industry in Russia and other countries;

- a Memorandum of Intent on cooperation on foreign markets with “Inter RAO – engineering” was signed;
- a license agreement was signed with the leading European company NEM b.v. (Netherlands) to manufacture and supply the waste-heat boilers.

Gas and oil industry

Equipment deliveries are carried out for the largest Russian energy companies:

- OJSC Gazprom (for the compressor station “Usinsk”);
- OJSC Lukoil (for the construction of the offshore oil platform LSP-2 on gas-condensate field named. Filanovsky in the Caspian Sea, for the reconstruction of the refinery “Kogalymneftegas”);
- OJSC NK Rosneft (for OJSC Verkhnechonsk-Neftegaz);
- OJSC Tatneft (for large oil refining complex in Nizhnekamsk, Republic of Tatarstan).

Special steel

- tenders were won and its contractual obligations were completely fulfilled for the shipment of components for NPP under construction;
- shipment of reactor RITM-200 shell for the nuclear-powered icebreaker LK-60;

- shipment of products for ArcelorMittal’s plants in Belgium and Poland, for the company Alstom (France), ThyssenKrupp Materials France (France), VoestAlpine (Austria), Euskal Forging SA (Spain), Bhilai Steel Plant (India).

Shipbuilding

- strengthen its presence in the market of equipment for the shipbuilding industry of the Russian Federation, primarily for the purpose of nuclear icebreakers series 22220;
- continued expansion of the range of supply of equipment, including the Navy of the Russian Federation, not related to power units.

New energy (energy storage)

- successfully performed experimental operation of intrafactory electric transport on lithium-ion batteries. It confirmed the effectiveness of economic transition to the LIB (the return of the pilot project is 2 years).

Calcium wire

- as a result of the modernisation of production and sales volumes compared with 2013 has increased by 4.2 times. More than 50% of the revenue is generated at the expense of sales at the foreign markets.

2.4.2.

GOALS FOR 2015 AND THE MID-TERM HORIZON

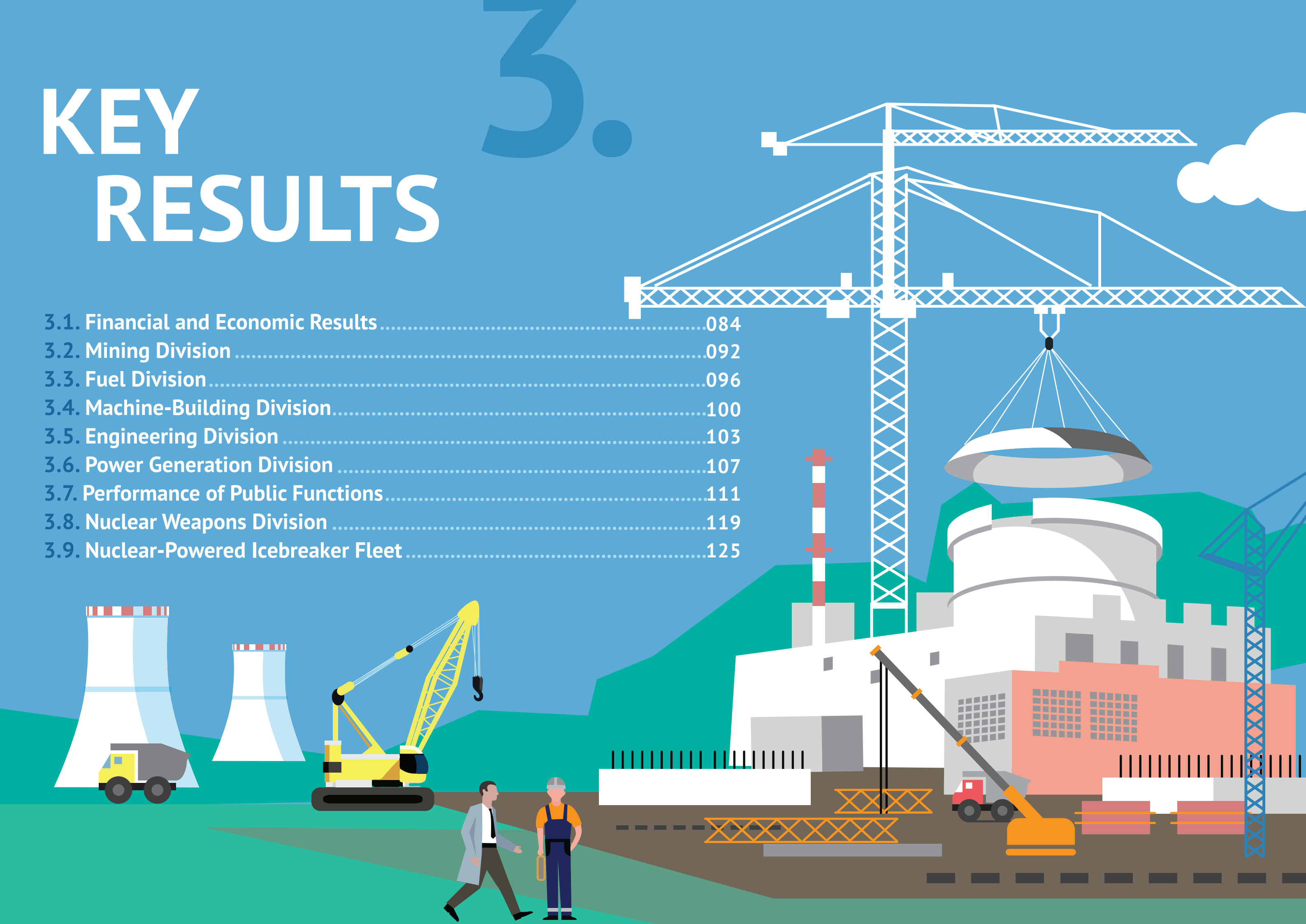
Market / field of activity	Goals for 2015 And The Mid-Term Horizon
Nuclear medicine	Preparations for the launch of the Centre of nuclear medicine in the Far Eastern Federal University in the Chelyabinsk region. Collaboration with universities about medical training for the centres. Providing a portfolio of orders for the 10-year period.
Irradiation centres	An analysis of opportunities for implementation of the project of establishing an irradiation centre abroad based on pilot irradiation centres in the Russian Federation.

Low capacity nuclear power plants (LCNPP)	Development of conceptual projects of promising LCNPP. Search for strategic partners for the promotion of LCNPP on the market. Search of customers for the construction of the pilot (reference) units LCNPP.
Nuclear Desalination	Implementation of tools for calculations of the cost parameters of decisions. Development of conceptual design of integration of desalination complex in the typical high capacity NPP project (capacity 170 thousand. m³/day), and the expansion of integrated offering. Elaboration of requirements for the integration of desalination systems for projects of low capacity and floating power unit.
Research reactors	Formation of a portfolio of projects and reference experience in implementation of projects in Russia and abroad (1 implementation of the project in 2–3 years). Formation of transparent partnership arrangements with industry companies-technology holders to develop their own technological solutions.
Decommissioning of nuclear and radiation hazardous facilities, facilities dealing with RAW and SNF	Expansion of the portfolio in the traditional markets (Russia, Europe) and emerging markets (Asia, Pacific, Africa, and others).
Thermal power	Formation of the portfolio and reference experience in implementing projects in Russia and abroad: the signing of a contract for a pilot project in South / Southeast Asia and Russia. Implementation of the project on consulting services for project management in the segment of thermal power (PMC project). Adaptation of the project management system Multi-D in the thermal generation.
Gas and oil industry	Work with potential customers. Certification / attestation among key customers.
Special steel	Participation in tenders and contracts and issuing of orders in production. Entering new commodity markets of production, in particular on the market of supporting roles for enterprises of Iran and Asia.
Shipbuilding	Participation in programs of import substitution. Development of a new type of equipment. Extension of the range of equipment for the Navy.
Consulting services for project management (PMC Services)	Formation of universal PMC offers for complex engineering projects in various sectors. Formation of the portfolio and reference experience in implementing projects in Russia and abroad. Getting a new PMC project a year (starting from 2016).
Service and modernisation of NPP	Formation of a portfolio of projects and reference experience in implementation of projects in Russia and abroad. Formation of infrastructure and partnerships for the development of specific competencies.
New energy (energy storage)	Formation of proposals for replication of the successful experience in the nuclear industry in the implementation of LIB on Internal electric transport. The launch of the investment project on organisation of production of accumulating batteries on the LIB for internal electrical transport.
Calcium wire	Work on expansion of production of calcium wire and increase of its share in the sales structure.
Service and maintenance of NPP	The increase of existing NPPs in market share from 2 to 17 % in the 2015–2019 years due to: <ul style="list-style-type: none">• supply of equipment and spare parts;• modernisation of systems and equipment,• technical support of operation and service of NPP;• extend the life of the Kozloduy NPP, Armenian NPP.

KEY RESULTS

3.

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3.1.1.

FINANCIAL AND ECONOMIC RESULTS*

3.1.1.

FINANCIAL AND ECONOMIC RESULTS OF 2014

Table. Key financial results according to IFRS, billion rubles

	2014	2013	2014/2013, %	2012
Revenue	498.8	436.1	114.4	394.8
Cost of sales	(284.1)	(278.5)	102.0	(269.2)
Gross profit	214.7	157.6	136.2	125.6
Commercial and administrative expenses	(72.2)	(75.9)	95.1	(72.3)
Other income and expenses (net)	(17.6)	(20.9)	84.2	(18.1)
Financial income and expenses (net)	(36.0)	(9.7)	371.1	1.8

* This section provides information about JSC Atomenergoprom and its subsidiaries (together referred to as the AEPK Group). The information was prepared in accordance with International Financial Reporting Standards. AEPK Group is an integrated group of companies, which consolidate the civil assets of Russia's nuclear industry and provides full production cycle of nuclear power. The list of subsidiaries includes a Russian open joint-stock company, closed joint-stock companies, limited liability companies (as defined by the Civil Code of the Russian Federation) and companies registered abroad. Summarised Consolidated IFRS financial statements and Independent Auditors' conclusions are listed in the annual report of JSC Atomenergoprom.

KEY RESULTS OF 2014

to **498.8**

billion rubles
Revenue growth of 14.4 %

to **64.5**

billion rubles
Net profit growth of 162.2%

to **167.2**

billion rubles
The increase of cash flow from operating activities by 18.8%



	2014	2013	2014/2013, %	2012
Share in net loss of companies accounted using the equity method	(5.0)	(1.9)	263.2	(0.2)
Income tax expense	(19.4)	(18.0)	107.8	(12.1)
(Loss) / profit from discontinued operations (net of income taxes)	–	(6.6)	–	2.2
Profit for the year	64.5	24.6	262.2	26.9
Other comprehensive income / (loss)	51.5	7.1	725.4	(20.3)
Total comprehensive income for the year	116.0	31.7	365.9	6.6
Net operating profit after tax (NOPAT)	105.5	42.8	246.5	23.1

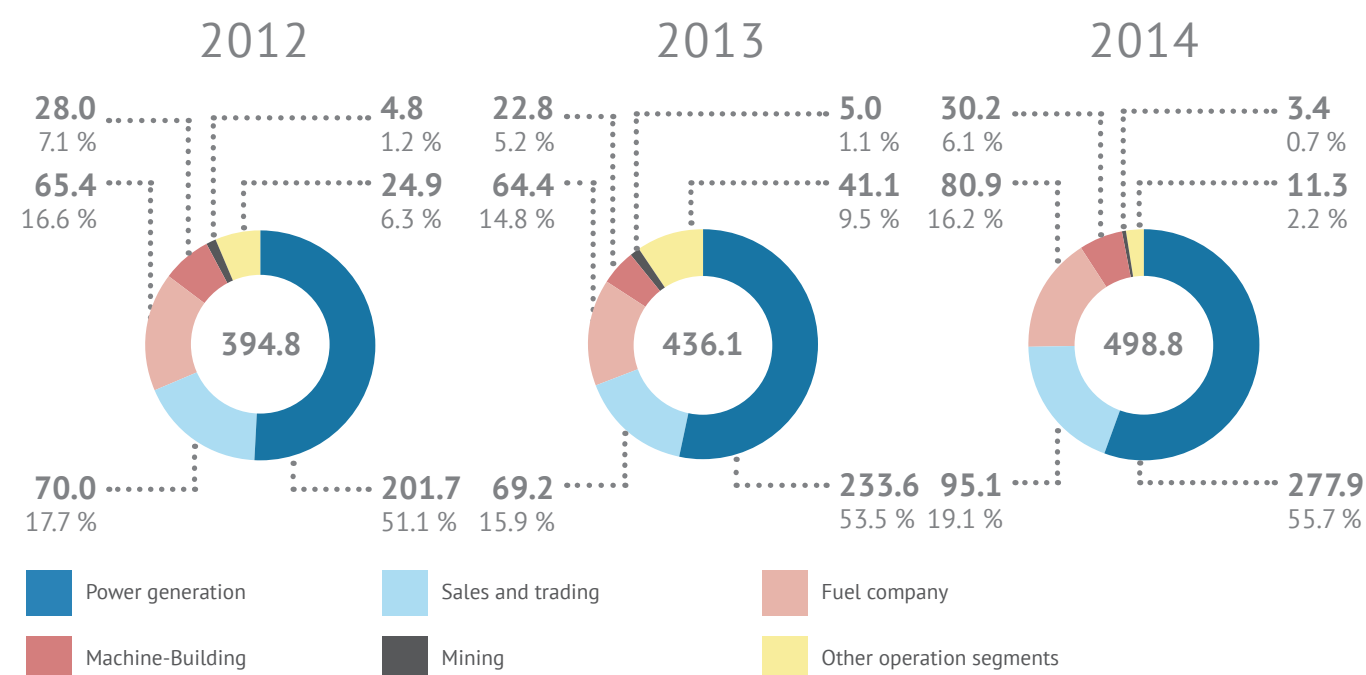
In 2014, total comprehensive income was 116.0 billion rubles, which is 84.3 billion rubles more than in the previous year (total comprehensive income in 2013 was 31.7 billion rubles). The following factors had the most significant impact on the total revenue in 2014:

- outpacing revenue growth (14.4%) compared with the growth of production costs (2.0%), which led to an increase in gross profit up to 57.1 billion. This increase in revenue is connected to the growth of power generation volumes, increase in electricity tariffs, increase in exchange rates, and an increase in the volume of overseas orders (PMO, construction of nuclear power plants and so forth.). The smaller

rate of cost growth is associated with the implementation of programs for the reduction of costs. The largest contribution to the increase in gross profit came from the operating segments "Sales and Trading" and "Electric Power";

- a positive effect, in the amount of 8.1 billion rubles, is associated with a decrease in liabilities for pension plans to employees, estimated liabilities for renewable energy, RAW, and SNF, caused by growth of the discount rate and refined assessments of spent nuclear fuel;
- significant changes in foreign exchange rates resulted in the net income.

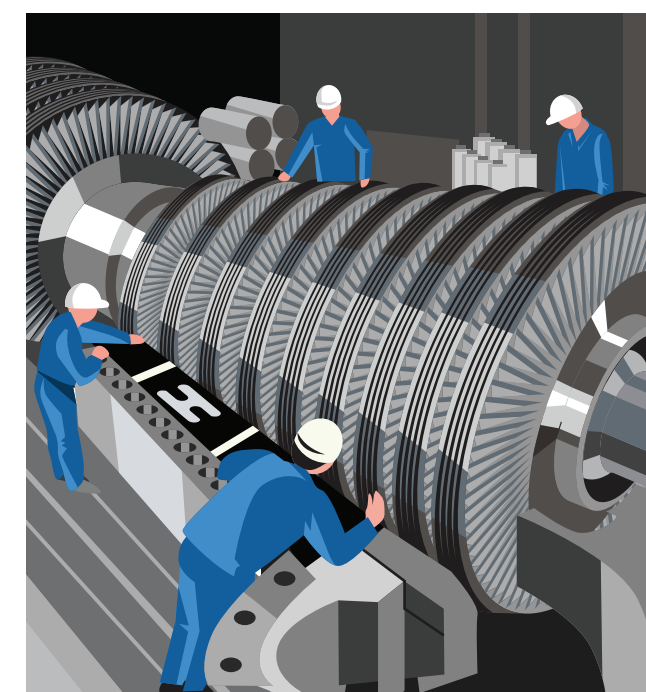
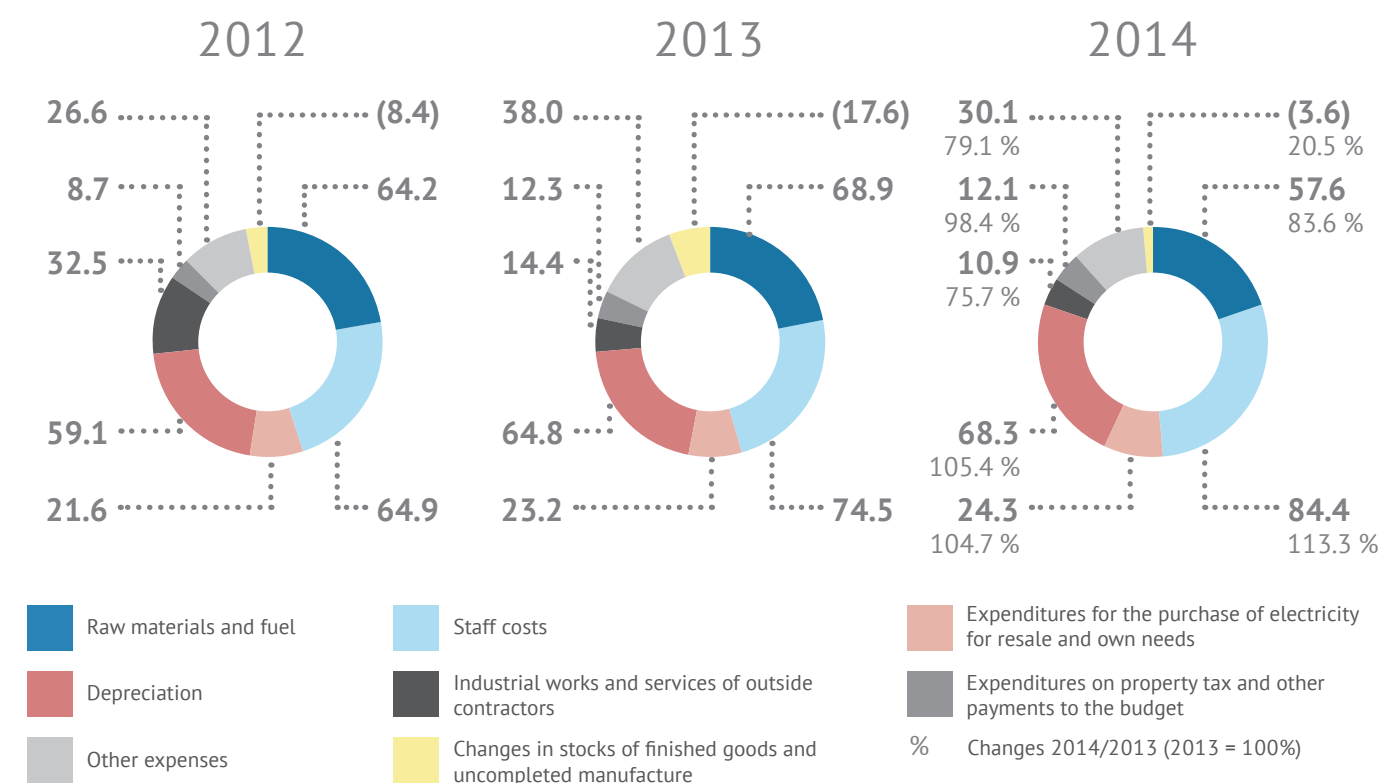
The structure of revenue from sales to external customers of the operating segments



3.1.2.

THE COST STRUCTURE

Cost of sales under IFRS, billion rubles



The dynamics of the cost (up by 2.0%, or 5.6 billion rubles, as compared with 2013) was mainly influenced by the following factors:

- growth of expenses for production staff (13.3%, or 9.9 billion rubles) mostly due to the indexation of wages
- growth of depreciation (by 5.4%, or 3.5 billion rubles) mostly due to the introduction of the fixed assets of JSC Concern Rosenergoatom
- reduction of expenditures on services and production work of outside contractors (24.3%, or 3.5 billion) achieved through cost reduction projects
- reduction of the volume of work in progress and the balance of goods (by 79.5%, or 14.0 billion rubles).

3.1.3.

FINANCIAL AND ECONOMIC INDICATORS

The increase of the quick ratio by 51% and the current liquidity ratio of 44% in the reporting year, in comparison with 2013, is mainly associated with the growth of the cash balance, as well as a significant reduction in short-term loans.

The significant growth in profitability in 2014 is mainly associated with an increase of earnings by 2.6 times for the reporting period, as compared with 2013

Table. Financial Stability Indicators

Indicator	2014	2013	2012
The ratio of debt and equity	0.36	0.35	0.35

Table. Liquidity Indicators

Indicator	2014	2013	2012
Quick liquidity ratio	1.43	0.94	1.18
Current liquidity ratio	2.16	1.50	1.91

Table. Indicators of turnover, days

Indicator	2014	2013	2012
The period of stock turnover	213	206	194
The turnover period of receivables	54	51	47
The turnover period of accounts payable	70	63	63

Table. Profitability indicators, %

Indicator	2014	2013	2012
Return on sales (ROS)	12.9	5.6	6.7
Return on assets (ROA)	2.9	1.3	1.4
Return on equity (ROE)	4.2	1.8	2.1

3.1.4.

STRUCTURE OF ASSETS

The increase of the book value of fixed assets by 112 billion rubles was mainly due to capital investment in the construction of nuclear power plants in Russia.

Investments increased by 10 billion rubles, mainly due to exchange rate differences at the beginning and end of the period for investments carried by the equity method in foreign currencies.

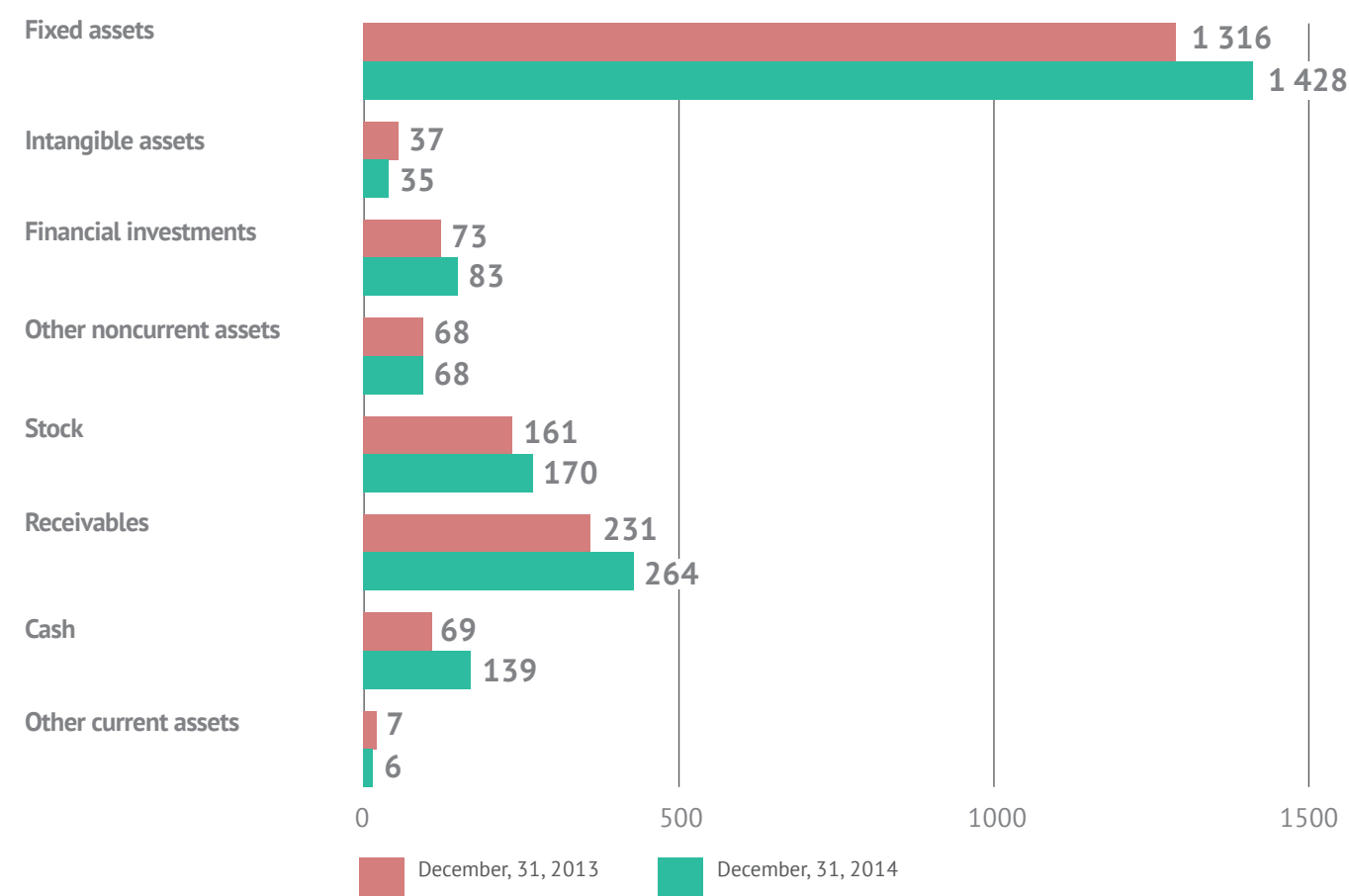
Reserves increased by 9 billion rubles, mainly due to an increase in the raw material of uranium-containing residues of the operating segment "Sales and Trading" (6 billion rubles).

Receivables increased by 33 billion rubles. The most significant changes relate to the commission agreements of an operating segment "Sales and Trading" (10 billion rubles) that is associated with new supply agreements of enriched uranium product concluded in 2014.

The increase in cash by 70 billion rubles was mainly due to the increase in the cash balance of the parent company.

There were no significant changes in other asset items in 2014 compared to 2013.

Major changes in the structure of assets, bln. Rub.



3.1.5.

CAPITAL AND LIABILITIES STRUCTURE

The growth of equity by 130 billion rubles in 2014 was primarily due to the increase in the authorised capital related to the placement of additional shares of JSC Atomenergoprom (80 billion rubles). In addition, due to the significant growth of exchange rates, there was an increase of reserve of exchange rate differences from the translation of other currencies into rubles (in foreign companies within the Group AEPK) in the amount of 52 billion rubles.

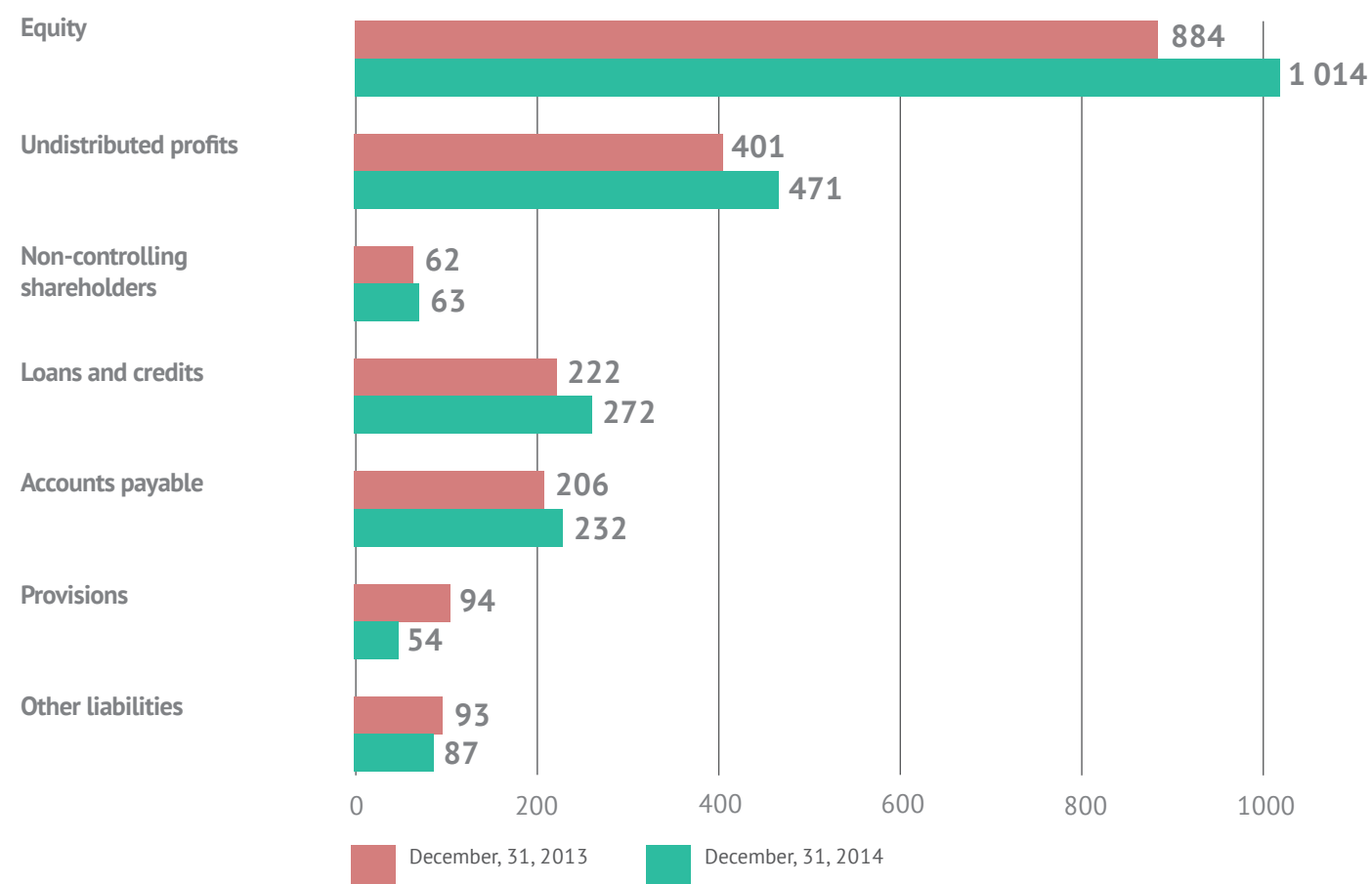
Loans and advances increased by 50 billion rubles. The funds were used to finance the construction of nuclear power plants in Russia and refinance previous loans.

The increase of payables by 26 billion rubles is mainly stipulated by the change in value of financial instruments, as well as an increase of payables for the supply of equipment for nuclear power plants.

The reduction in the amount of reserves to 40 billion rubles was mainly due to a decrease in provision for the decommissioning of fixed assets (21 billion rubles), and provision for spent nuclear fuel (23 billion rubles).

There were no significant changes in other commitment items in 2014 as compared with 2013.

Major changes in the structure of capital and liabilities, billion rub.



3.1.6.

CHANGE OF CASH FLOW

Cash flow from operating activities increased by 18.8% and amounted to 167.2 billion rubles in 2014.

AEPK Group funded capital investments mainly by cash flows from operating activities and due to receipts from the issue of shares and borrowing funds.

Table. Change of cash flow, billion rubles

	2014	2013	2014/2013, %	2012
Cash flows from operating activities before working capital changes	193.3	145.0	133.3	145.1
Changes in working capital	13.4	32.3	41.5	(38.7)
Income tax paid	(21.4)	(20.4)	104.9	(23.2)
Interest paid	(18.1)	(16.1)	112.4	(14.4)
Net cash flows from operating activities	167.2	140.8	118.8	68.8
Capital expenditures	(233.9)	(261.2)	89.5	(221.3)
Other	18.2	36.8	49.5	59.9
Net cash used in investing activities	(215.7)	(224.4)	96.1	(161.4)
Net changes in total debt	5.5	31.0	17.7	(3.4)
Proceeds from issuance of shares	79.8	79.2	100.8	58.2
Dividends paid	(10.2)	(15.5)	65.8	(9.0)
Acquisition of shares from non-controlling shareholders	–	(42.8)	–	–
Proceeds from the sale of non-controlling interest participation	10.8	17.3	62.4	–
Net cash flows from financing activities	85.9	69.2	124.1	45.8
Net increase / (decrease) in cash and cash equivalents	37.4	(14.4)	–	(46.8)
Cash and cash equivalents at the beginning of the reporting period	68.8	80.3	85.7	129.0
Effect of exchange rate changes on cash and cash equivalents	32.6	2.9	1124.1	(2.0)
Cash and cash equivalents at the end of the reporting period	138.8	68.8	201.7	80.2

3.2.

MINING DIVISION*

3.2.1.

GOALS AND OBJECTIVES OF DIVISION

JSC ARMZ is the management company of the Mining Division of ROSATOM. JSC ARMZ develops uranium mining assets in Russia that are at different stages of the life cycle: from exploration to intensive industrial exploitation.

Russian uranium mining is of strategic importance. Availability of our own production of natural uranium in Russia provides:

- reliability of supply to partners and customers
- long-term security of raw material supply for nuclear generation
- competitive production cost of uranium production

See the business model of division in the [annual report of JSC ARMZ for 2014](#) (p. 16).

KEY RESULTS IN 2014

524.7 Mineral resources base of uranium (2nd largest uranium mining companies in the world)
thousands tons

2,991 natural uranium mined
tons

100 % Implemented production programme



* This section of the report provides information on Russian uranium mining assets. Foreign enterprises in 2013 consolidated con-running uranium mining company "Uranium One Holding NV", See "[International Business](#)".

3.2.2.

THE PERFORMANCE RESULTS OF DIVISION IN 2014

3.2.2.1. Key Production Results

Table. Key Performance Indicators of Division, thous. tons

	2014	2013	2012
Mineral resources base	524,7	541,9	550,4
Mining of uranium, tons, including:	2991	3135	2862
PJSC PGHO	1970	2133	2001
JSC Dalur	578	562	529
JSC Khiagda	443	440	332

In 2014 JSC ARMZ produced 2,991 tons of uranium. The production programme for enterprises of JSC ARMZ is fully implemented.

Table. Key Performance Indicators of Division

KPI	2014, plan	2014, actual
Cost of production of natural uranium (in Russia), billion rubles	9.588	9.184
Labour productivity, mln rubles/person	1.460	1.476

The cost of uranium production has been successfully reduced by 6% as compared with the previous year at the largest uranium mining company, PJSC PGHO, in Krasnokamensk.

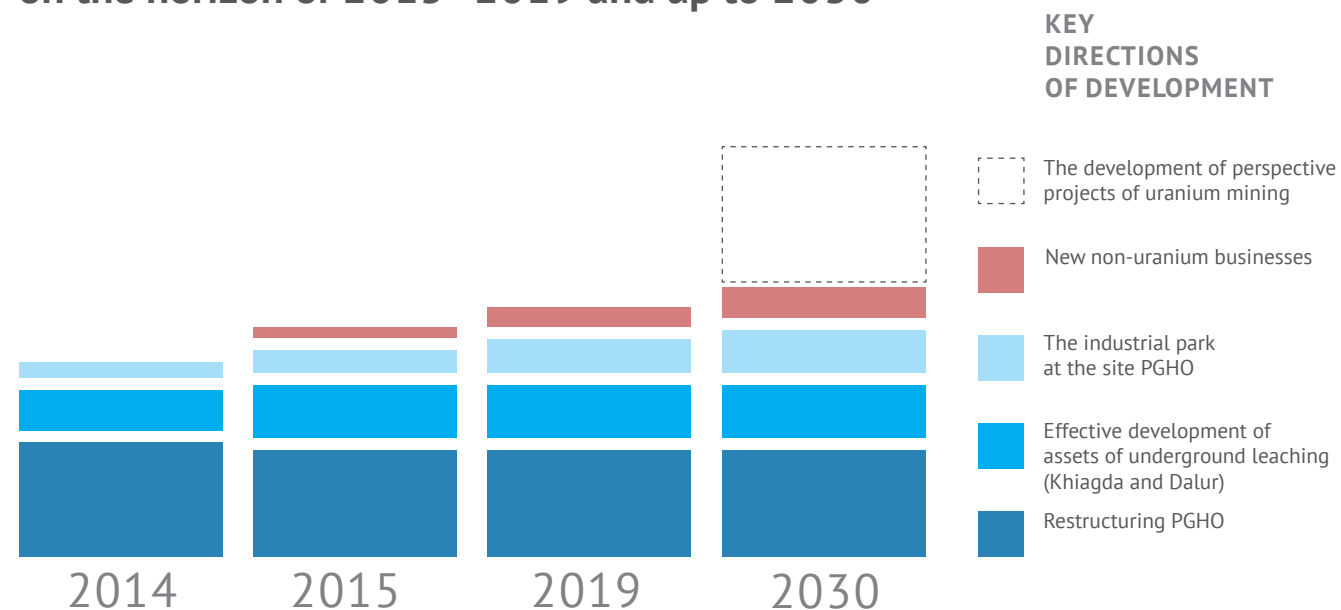
JSC ARMZ continues the development of underground leaching enterprises (JSC Dalur and JSC Khiagda), maintaining a high level of efficiency.

The JSC Khiagda, which is located at the centre of the richest on the resource potential Vitim uranium ore district, has built the main production building in 2014, it is preparing to commission the sulfuric acid plant, to develop new area, which will enable the company to reach the project capacity of over 1,000 tons of uranium per year.

JSC Dalur, together with the gradual build-up of uranium mining, has implemented an important project on the concurrent production of rare earth metals. In the future, these raw materials will allow for the organisation of industrial production of scandium concentrate up to 10 tons, and concentrate of rare earth metals up to 450 tons, per year.

For information about new business of division, see [the section of the report "Business diversification"](#) and [the annual report of JSC ARMZ for 2014](#).

The key objectives and directions of development of ARMZ on the horizon of 2015–2019 and up to 2030



Note: The area of the rectangle describes the scale of business

3.2.3.

GOALS FOR 2015 AND THE MID-TERM HORIZON

In 2015 and subsequent years, the volume of uranium mining will be maintained at a level of 3 thousand tons per year (with any adjustment based on the tasks of ROSATOM).

One of the key priorities of Atomredmetzoloto is to ensure the quality of products. In 2015, it is planned to pass the inspection audit for compliance with ISO 9001 standard (Quality Management System) and ISO 14001 standard (Environmental Management System). In addition, companies with underground leaching will produce the final products that meet "basic specifications". The works on the JSC Dalur will be completed in 2015, and on JSC Khiagda in the medium term.

Medium-term objective of Uranium Holding is the formation of a competitive uranium production and the launch of the programme of diversification. A deep restructuring of the uranium chain will be held in PJSC PGHO with the transition to the development of new deposits. At the same time a balanced cost-effective production of uranium will continue building up in the JSC Dalur and JSC Khiagda.

Together with the increase of efficiency of existing production facilities of JSC ARMZ, long-term projects ("Caldera" and "mine number 6") will continue to

develop. Their implementation will provide the PSC PGHO with raw materials of higher quality and it will create a foundation for its further development.

New large-scale projects, including the project "Elkon", are planned be put into operation gradually, tentatively in 2030, as the demand for uranium renovates and the price increase sufficiently to provide the required cost efficiency.

In 2015, it is planned to pass the inspection audit for compliance with ISO 9001 standard (Quality Management System) and ISO 14001 standard (Environmental Management System)



3.3.

FUEL DIVISION

3.3.1.

GOALS AND OBJECTIVES OF DIVISION

The Fuel Division of ROSATOM operates on conversion, uranium enrichment and nuclear fuel fabrication, providing nuclear fuel or its components to all nuclear power plants of Russian design and expanding its presence in the global market of products and services for the initial stage of the nuclear fuel cycle (NFC NA). JSC TVEL provides the management of the division.

The strategy is aimed at the division's global leadership and sustainable needs of customers of the products and services of the front end of the nuclear fuel cycle and related areas, in strict compliance with the requirements of reliability and safety, as well as environmental and social responsibility.

Strategic goals of Fuel Division:

- ensuring growth in the markets of the nuclear fuel cycle
- development of a second core business
- improvement of efficiency
- provision of social and environmental acceptability.

See division Business Model [in the annual report of JSC TVEL for 2014](#) (p. 30).



3.3.2.

KEY RESULTS OF 2014

The portfolio of contracts for 10-year term amounted to over 10 billion US dollars.

A contract with the Hungarian company "MVM Paks II" was signed for guaranteed supply of fuel assemblies.

The contracts for the supply of nuclear fuel for nuclear power plants in Slovakia for the period 2016–2021 was signed.

Tests on pilot batch of new generation gas centrifuges for uranium enrichment are initiated.

THE PERFORMANCE RESULTS OF DIVISION IN 2014

3.3.2.1. Key production results

Table. Provision of Russian design NPPs with the components of NF and FA

	2014	2013	2012
The number of Russian design reactors, provided with Russian-made fuel or its components, units.	72	69	70

Table. Key Performance Indicators of Division

KPI	2014, plan	2014, actual
Revenue from the EUP sales (including a part of the fuel assembly, tablets) in the NFC as a whole, billion rubles	50.4	69.3
The portfolio of overseas orders for 10 years, billion US dollars	10.326	10.391
Labour productivity, mln rub. / person	4.910	5.494

In 2014:

New contracts for the supply of fuel:

- approved by the Euratom Agency and entered into force on a long-term contract for the supply of fuel for nuclear power plant "Hanhikivi 1" (Finland),
- contracts were signed for complete deliveries of raw NF materials of the PC-E brand for the Czech NPP "Dukovany" since 2015
- the contracts for the supply of nuclear fuel for the NPPs in Slovakia for 2016–2021 were signed.

- the contracts for the supply of fuel for the research reactor of the Czech Republic, Uzbekistan and Kazakhstan were signed
- a contract for the supply of western design fuel for a research reactor in the Netherlands was signed.

Contracts for development:

- a contract with NPP Kozloduy Development concerning the advanced nuclear fuel cycle and justification of safe operation was signed.
- of blocks number 5 and 6 of NPP Kozloduy "EAD"

- with a modified nuclear fuel for power 3120 MW” was signed,
- The first power unit of the Tianwan NPP is transferred to in operation in eighteen months-long fuel cycle in the framework of the agreements reached between JSC TVEL and JNPC for the supply of upgraded fuel TVS-2M
- the new logistic schemes of fuel supplies to Slovakia and Hungary with air transport are developed.

Plan of JSC TVEL for the production of nuclear fuel is made in full (the claims and complaints from the consumers are absent).

For information about new business division see section of the report “[Business diversification](#)” and [the annual report of JSC TVEL for 2014](#)

3.3.2.2 International cooperation

In an effort to expand the position of JSC TVEL in overseas markets of products and services of the nuclear fuel cycle, there was signed a Memorandum of Understanding with a foreign partner, identified specific areas of cooperation and agreed further actions of JSC TVEL with the organisation of a number of European countries, Asia and Latin America in 2014.

The interaction of JSC TVEL with AREVA is continued in the part of the nuclear fuel and components from reprocessed uranium production at the facilities of PJSC MSZ on AREVA technologies for NPPs in Europe with PWR and BWR reactors.

The implementation of the Russian-Kazakh project “Centre for uranium enrichment” continued. The joint venture fully complied with the obligation to deliver the goods/services in the amount of 5 million SWU, coming to its designed capacity.

Table. Efficiency Goals of Division for 2015

KPI	Full meaning
SSDP, billion rubles	78.6
The portfolio of overseas orders million US dollars	10,300
Overseas revenue, million US dollars	1,572.0
Revenue from new products outside and inside the consolidation perimeter on a competitive basis, million rubles	4,151.0
Labour productivity (JSC TVEL and JSC Techsnabexport), million rub./person	13.02
Events of level 2 on a scale on INES, accompanied by the exposure of personnel over 50 mSv annually	No events

3.3.3. 3.3.3. GOALS FOR 2015 AND THE MID-TERM HORIZON

In 2015, it is planned to:

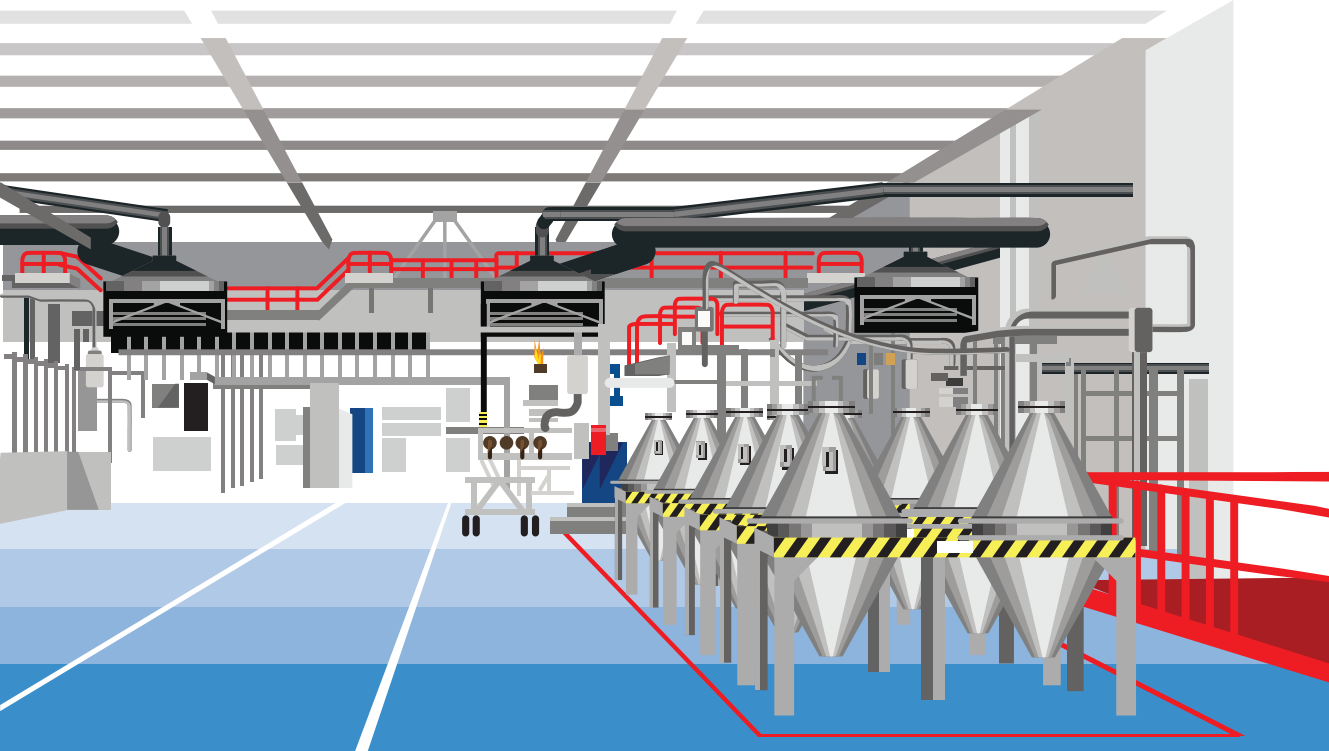
- develop and strengthen cooperation with companies and organisations interested in promoting the TVS KVADRAT project to all target markets;
- continue the work on expansion of the position of JSC TVEL in overseas markets of NFC products by promoting fuel components produced by Russian and foreign technologies;
- enhance cooperation with AREVA in terms of the production of nuclear fuel and components of reprocessed uranium;
- find the optimal solutions for the implementation of the project “Fabrication plant in Ukraine”;

- to conduct work on the reception of the contract on deliveries of Hungarian fuel approval by the Agency Euratom for the power unit No. 5, 6 NPP “Paks” and its entry into force;
- sign the contracts for the supply of the initial boot and the first reboot for each power unit of the Belarusian NPP;
- ensure the signing of the contract for the supply of fuel pellets for nuclear power plant “Tarapur” with the Atomic Energy Department of Government of India.

By 2030, the JSC TVEL will be focused on:

- increasing its market share of enrichment up to 42% (including 20% of deliveries through JSC Techsnabexport), the fabrication of nuclear fuel up to 22%, through the issue of traditional products with high consumer properties, as well as access to new nuclear markets;
- revenue growth of ~ 2 times compared to 2014 in comparable prices;
- revenue growth of non-nuclear areas (Including emerging businesses) – more than 10 times compared to 2014 in comparable prices;
- labour productivity growth of ~ 3 times compared to 2014.

It is planned to develop and strengthen cooperation with companies and organisations interested in promoting the TVS KVADRAT project to all target markets in 2015



3.4.

MACHINE-BUILDING DIVISION

3.4.1.

GOALS AND OBJECTIVES OF DIVISION

The key competence of this division is the supply of integrated solutions for the nuclear and thermal power industry, the gas and petrochemical industry, shipbuilding, and the special steels market. The holding company of Machine-Building Division is JSC Atomenergomash (AEM). The production facilities are located in the Division of Russia, Czech Republic, Hungary and Ukraine.

The key strategic objective of the division is to become a complete supplier of key equipment for NPPs (nuclear and turbine islands).

Long-term objectives (2030):

- receiving 50% of revenue at non-nuclear related markets,
- receiving 30% of revenue from foreign operations,
- increase of profitability and productivity of the average for the world power engineering industry levels.

KEY RESULTS OF 2014

The order book as of December, 31, 2014 amounted to 227 billion rubles.

The first contract for the complete supply of equipment for the four power units of "Akkuyu" NPP in Turkey was signed.

The production of elements of the reactor vessel within the VVER-TOI project was completed.

The reactor RHYTHM-200 vessel feedstock was shipped for construction of the new generation of nuclear-powered icebreakers.

Equipment for JSC Gazprom, Lukoil, JSC NK Rosneft, OJSC Tatneft was supplied.

Medium-term objectives (2019):

- reduction of fixed costs by 30%,
- revenue increase by more than 2 times,
- reduction of the length of the production cycle by 30%.

Business Model division (see: [the integrated annual report of JSC Atomenergomash for 2014](#)).

3.4.2.

THE PERFORMANCE RESULTS OF DIVISION IN 2014

3.4.2.1. Key activity results



Table. Key Performance Indicators of Division

KPI	2014, fact
Combined revenue, billion RUB	48.6
Labour productivity, million RUB/person	2.4
EBITDA, billion RUB	4.1

The most important result of the year is the signing of the first contract for the complete supply of equipment for the NPP island reactor: AEM will provide the nuclear steam supply systems for the four "Akkuyu" NPP units in Turkey.

A new design of the main circulation pump on the basis of a single-shaft arrangement of a motor with water-cooling and bearing assemblies for VVER-TOI and NPP-2006 was developed at the enterprises of JSC Central Design Bureau of Machine Building (the technology will significantly improve the fire safety of NPP).

The Volgodonsk branch of "AEM-technology" restored steam generator production. New areas were organised and new equipment was purchased. The plant manufactures a reactor for the Belarusian NPP; two core catchers were manufactured and delivered to the construction site.

This division is developing a number of new areas, namely: the thermal energy, gas and oil industries, the shipbuilding industry, and special steel.

See ["Business diversification"](#) and [the integrated annual report of JSC Atomenergomash for 2014](#).

3.4.2.2. International cooperation

JSC ZiO-Podolsk, OJSC IC ZIOMAR, and a leading European company in the field of engineering of waste-heat boilers, NEM Energy by, agreed to continue cooperation in the field of engineering of waste-heat boilers, having signed an extension of the license agreement until 2019. As part of this cooperation, the projects for the production of waste-heat boilers for the PGU-190 Novomoskovsk SDPS, CCP-420 Yuzhnoural-GRES-2 and PGU-400 Nizhnevartovsk GRES were implemented.

A Memorandum of Understanding and Confidentiality Agreement were signed between AEM and Doosan Heave Industries & Construction regarding cooperation in engineering and the supply of equipment for projects of coal dust thermal power units with 660 MW supercritical steam parameters.

In a joint venture with Alstom, it was agreed to expand the list of licensed products for inclusion in the volume of local Russian production of additional equipment and further development of its own production of LLC AAEM.

3.4.3.

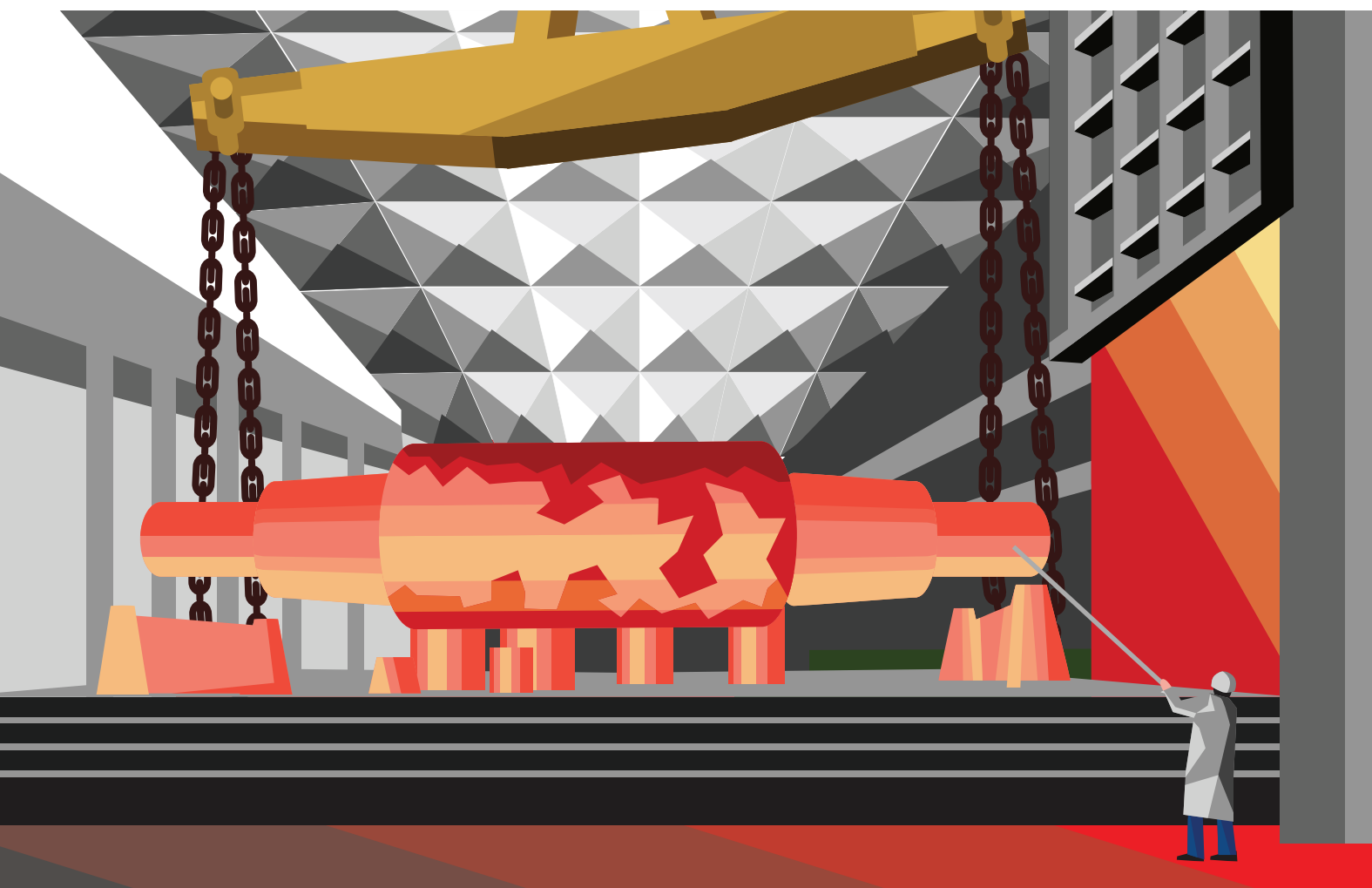
GOALS FOR 2015 AND THE MID-TERM HORIZON

2015 goals:

- increase in the efficiency of production, including through the expansion of the PSR projects and submitted proposals for the improvement and implementation of new technologies and solutions;

- revenue growth in all areas, particularly for new businesses and the further expansion of the portfolio of orders;
- timely fulfilment of all contractual obligations;
- participation in programs related to import substitution.

In the medium term, the reduction of fixed costs, increase of productivity and profitability according to EBITDA, and a reduction in the duration of the production cycle are important objectives.



3.5.

ENGINEERING DIVISION

3.5.1.

KEY RESULTS OF 2014

In 2014, in the territory of Russia, the construction of 9 NPP units continued.

There was a power start-up of power unit No. 3 of Rostov NPP (two months ahead of schedule)

Two power units of Yuzhnouralsk GRES-2 were commissioned.

The Engineering Division of ROSATOM consists of three major engineering companies: JSC NIAEP, JSC Atomstroyexport (ASE) and JSC Atomenergoproekt

JSC NIAEP is the management company – an engineering company specialising in the design and construction of nuclear power plants, mostly in Russia.

JSC Atomstroyexport – an engineering company specialising in the construction of nuclear power plants abroad.

JSC Atomenergoproekt is an engineering company specialising in the design of nuclear power plants, mainly in Russia.

GOALS AND OBJECTIVES OF DIVISION

3.5.1.1. Formation of the engineering division of ROSATOM

In 2014, the Strategy of the United Company of ASE-NIAEP for the period until 2030 was approved, which suggests the formation of competences on the basis of the United Company of ASE-NIAEP (United Company, JSC NIAEP) and JSC Atomenergoproekt engineering division of ROSATOM.

United Company is the leader of the world's nuclear engineering business, taking up 31% of the global market of NPP construction. JSC NIAEP performs a wide range of services, from design and construction to modernisation and the decommissioning of nuclear power plants and other complex engineering structures.

Representative offices and operational offices of NIAEP operate in 15 countries, and almost 80% of their portfolio of orders are projects abroad.

Division Business Model; see [the annual report of NIAEP for 2014](#) (p. 26).

3.5.1.2. Strategic goals of the engineering division

The main strategic goal on the horizon until 2030 is holding first place in the global market in terms of the number of constructed power units and the preservation of market share, taking into account the growth trends of the market in absolute terms.

Table. Strategic goals of the engineering division until 2030

Leadership in the main core of business Offer of the optimal cost decision for the kWh life cycle of the object in comparison with competitors; effective work in priority markets.	• Achievement of competitive parameters LCOE: cost and time • Development of the functions associated with interactions with customers and suppliers • Implementation of an effective project management system
Operating stability (diversification) Potential fluctuations in project portfolio, due to the postponement / cancellation of individual projects, should not affect the parameters of performance in other projects.	Significant growth of business scale, including related markets. Target options: • the share of one project in the portfolio does not exceed 5–10%
Financial stability (donor) Business that does not require financial resources of ROSATOM for its development, and is capable of generating additional resources for the development of other Divisions.	• Growth of profitability of the core business

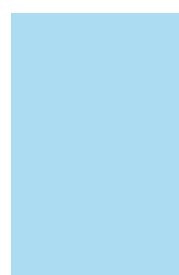
NPP construction terms

109 months



Max term competitors

60 months



Current term ASE NIAEP

52 months



Min term competitors

48 months



Target term ASE NIAEP

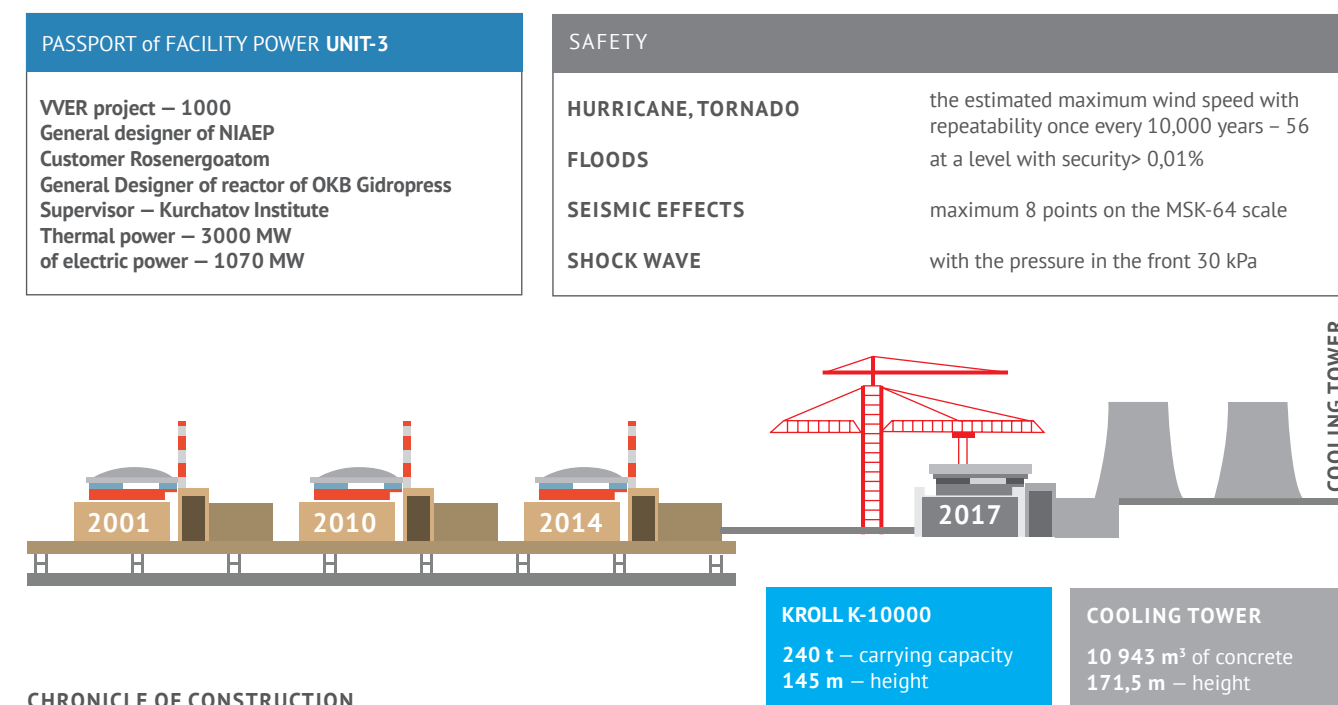
power unit construction term of ASE NIAEP
construction term for other market players

3.5.2.

RESULTS OF DIVISION ACTIVITIES IN 2014

Division labour productivity amounted to 15.4 million rubles/person in 2014

Project “Rostov NPP”



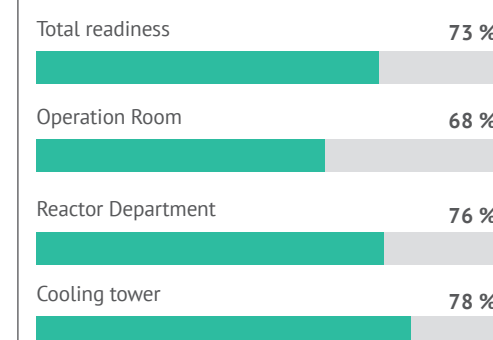
3.5.2.1. Construction of new power units and the repair of Russian NPP power units

Russia is ranked second in world in the number of power units that are being constructed in the country. In 2014, the country conducted construction projects of 9 NPP power units at five sites.

A key event in 2014 was the start-up of energy power unit No. 3 of Rostov NPP.

For the results of the construction of nuclear power plants abroad, see [“International Business”](#).

DEGREE OF READINESS OF POWER UNIT-4



3.5.2.2. Diversification of the engineering division

The main objective of the diversification of Engineering division activities is the provision of the company’s operating stability over the long term. The projected share of revenue from the main core of 2030 should amount to ~ 30%.

Priority areas include growth in certain market segments, close to the basic core of the business:

- research reactors;
- decommissioning of nuclear and radiation hazardous objects (VE D&D), construction and modernisation of objects of RAW and SNF;
- consulting services in project management.

Table. Targets of effectiveness of division in 2015

KPI	Target
The portfolio of overseas orders, million US dollars	66,836
Overseas revenue, million US dollars	1,505
The order book for new businesses, million rubles	68,897

Key activities on the reduction of the NPP construction cost:

- reduction of physical volumes in the project “VVER-TOI”
- optimisation of technical solutions at the design stage
- decrease in the price of purchased equipment

(see section “Management of Procurement Activity”)

- installation and commissioning optimisation
- increase in labour productivity (the goal is to ensure the growth of no less than 5% per year

For details of the new business division, see the section “Business diversification” and the annual report of JSC NIAEP for 2014.

3.5.3. GOALS FOR 2015 AND THE MID-TERM HORIZON

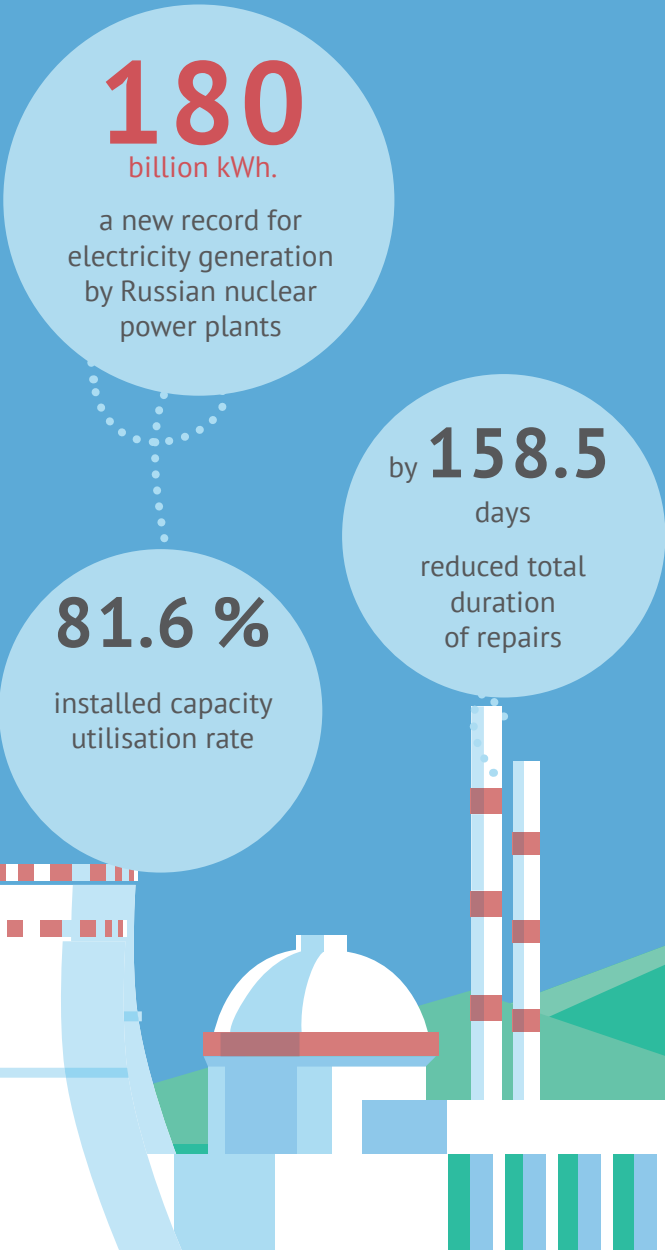
- in real terms. In view of the NPP construction projects abroad, by 2019, it is planned to bring this figure to the level of foreign peers)
- reduction of the construction time to 48 months.

Key aspects in the reduction of NPP construction time:

- improvement of construction technology
- introduction of elements of in-line construction
- the formation of a single information space
- introduction of PSR and Lean elements at all stages of the project.

3.6. POWER GENERATION DIVISION

Key results of 2014



3.6.1. GOALS AND OBJECTIVES OF DIVISION

The main activity of the Power Generation Division is the production of electricity and heat by nuclear power plants and the functions of the operating organisation of NPPs, radiation sources, storage facilities for nuclear materials and radioactive substances in the manner prescribed by law. The parent company of the division is JSC Concern Rosenergoatom (the Group), which is responsible for the safe and reliable operation of all Russian nuclear power plants.

Strategic goals of of the Power Generation Division:

- security,
- increase the scale of activities,
- increase the level of competitiveness,
- globality.

See Division Business Model in the annual report of JSC Concern Rosenergoatom for 2014 (p. 8)

3.6.2.

THE PERFORMANCE RESULTS OF DIVISION IN 2014

3.6.2.1. Key Production Results

Table. Key Performance Indicators of Division

KPI	2014, plan	2014, fact
Productivity of nuclear power plants, billion kWh	172.6	180.5
The increase in labour productivity to a level of 2013, %	5.0	5.982
The index of the investment programme of JSC Concern Rosenergoatom, %	100	96.3

Key production results:

- the main factor behind increasing the generation of electricity at nuclear power plants in 2014, in comparison with 2013 (by 8,3 billion kWh more than in 2013 and 12,2 billion kWh more than the task of the Federal Tariff Service of Russia) is the work of NPP power units No. 1 Leningrad and No. 2 Kursk at nominal power after the restoration of the resource characteristics of the RBMK reactors' graphite stack in 2013;
- works on modernisation related to ensuring the secure and stable operation of the blocks were conducted at 33 units in the set and increased power levels. Power unit No. 3 of the Kola NPP was put into trial operation at high power (107% of nominal), and the capacity increase totalled 30,8 MW. During the implementation of the programme, due to the rise of the thermal power capacity, the increase on the power unit totalled 421,6 MW;
- work on duration repair was optimised: the total duration of repairs was reduced on 158,5 days. Additional production from optimisation was ~ 1.746 billion kWh. Planned repairs were made in full;
- a programme to modernise existing nuclear power plants was implemented. In 2014, the life of the power unit number 1 of Kalinin NPP was extended for 30 years, and power unit number 4 of Kola NPP for 25 years. Altogether, during the implementation of the programme of power unit life extension, the period of operation of 21 power units was extended. In 2014, the development of working documentation and implementation of work to extend the life of 9 power units occurred: Balakovo NPP (power unit No. 1–4); Kalinin NPP (power unit number 2); Kursk NPP (power unit No. 4); Novovoronezh NPP (power unit No. 4); Smolensk NPP (power unit number 2, 3). In 2014, the working documents for modernisation of all 33 existing units were developed.

Information about new division business see in [section "Business diversification"](#) and [the annual report of JSC Concern Rosenergoatom for 2014](#).

3.6.2.2. International Cooperation in 2014

The programme of cooperation of JSC Concern Rosenergoatom and WANO Moscow Centre in 2014 was the most extensive in the history of cooperation. The main works of the year were the basic exploitation of the Regional Crisis Centre for NPPs with VVER reactors, based on Crisis Centre of Concern (19 international emergency training and exercises with the participation of the Regional Crisis Centre for VVER) and the activities of representatives of WANO at the sites of NPP of JSC Concern Rosenergoatom.

In 2014, cooperation of the Leningrad and Kola nuclear power stations with Norway, Finland and Sweden continued. Existing between the Concern and the SSM (Sweden), STUK (Finland) and IPE / NRPA (Norway), these agreements regulate mutual cooperation in different areas: emergency preparedness, decommissioning, radioactive waste management and recycling.

Within the framework of International Business, one of Strategic Initiatives Division is the development direction of "Service NPP", which aims to:

- build-up services in the life cycle of nuclear power plants,
- increase presence in the overseas market of the nuclear industry.

In the reporting year, JSC Concern Rosenergoatom actively worked to build a portfolio of overseas orders for new products over a ten-year period, which in 2014 was 3.5 times higher than the target. Revenue from business abroad was 66% higher than the same figure in 2013.

In the medium term, it is planned to cooperate and conclude contracts to provide services for the construction, operation, and maintenance of nuclear power plants in the following countries: China, Turkey, Belarus, Bangladesh, Jordan, Iran, Hungary, Bulgaria, Czech Republic, Finland, Armenia, India, Slovakia, and Ukraine.

The long-term concern is to expand its presence in the segment of providing services to external customers through new products such as:

- the production and export of isotope products;
- engineering services in the traditional energy sector.

The programme of cooperation of JSC Concern Rosenergoatom and WANO Moscow Centre in 2014 was the most extensive in the history of cooperation

3.6.3.

GOALS FOR 2015 AND THE MID-TERM HORIZON

As a result of the process of business planning for 2015, the following key performance indicators in were established for JSC Concern Rosenergoatom:

Table. Targets of effectiveness of division in 2015

KPI	Target for 2015	The objectives for the medium term (until 2019)
Labour productivity, mln kWh/person	6.26	+5 % annually
The index of the investment programme of JSC Concern Rosenergoatom, %	100	100
Nuclear power generation, billion kWh	189.45	214.4
The portfolio of overseas orders for 10 years, billion US dollars	0.467	Not set

Table. Forecast of production of electrical energy, billion kWh

	2016	2017	2018	2019
Nuclear power plants of JSC Concern Rosenergoatom	193.85	199.90	211.32	214.37
including the newly introduced energy units	15.77	28.50	35.47	47.20

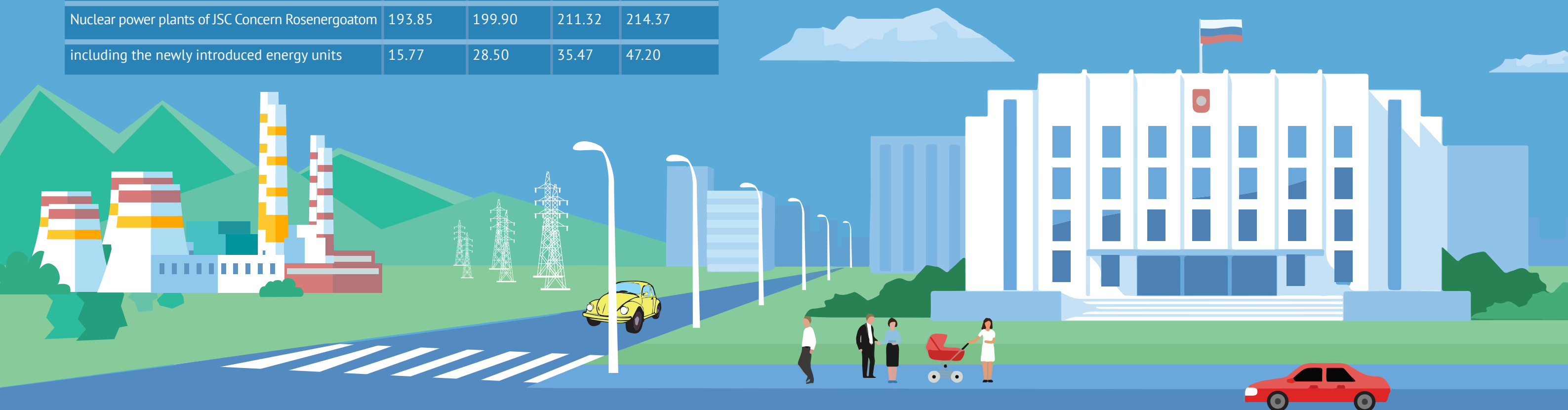
PERFORMANCE OF PUBLIC FUNCTIONS

Key results of 2014

More than 80 regulatory legal acts were adopted as a part of developing a legal framework for the stable functioning of enterprises and organisations of ROSATOM, the implementation of state authority, and administration of the federal budget.

A working group of senators of the Federation Council for the study of the question of security at existing nuclear power plants of the Russian Federation visited Novovoronezh, Leningrad and Beloyarsk NPP. The conclusion of the commission was that Russian NPPs fully meet all the post-Fukushima safety requirements.

The implementation of 7 federal target programs continued.





STATE SECRETARY – DEPUTY CEO FOR GOVERNMENT RELATIONS AND BUDGETING

TATIANA ELFIMOVA

What are main results of law-making activities in the reporting year? How does the change in the legislative framework affect the activities of ROSATOM?

In 2014, we prepared and ensured more than 20 landmark regulations and more than 10 draft laws, which cover a wide range of organisations of the nuclear industry and relate to different solutions: from infrastructure to technology.

In general, ROSATOM passed more than 200 legal acts of different levels during the year, which are aimed at the regulation of various issues directly related not only to the activities of the nuclear industry organisations, status, and powers of the Corporation, but also with the general provisions of the Russian legislation.

Effective implementation by the Corporation of its legal regulation powers in the field of nuclear energy, development and the safe functioning of organisations of the nuclear power and nuclear weapons RF complexes, and organisations engaged in the operation of ships in the Nuclear-Powered Icebreaker Fleet has allowed legal acts and legislative and other normative developing legal acts to be enacted, in addition to changes aimed at the creation of favourable conditions for the activities of branch organisations, taking into account the peculiarities of atomic energy use.

For example, the Corporation was involved in the development of one of the country's more relevant legislative acts of the Federal Law, "On Industrial Policy of the Russian Federation", which, inter alia, consolidated the status of the Corporation as one of the bodies that determine the industrial policy of the nuclear industry.



200

In general, during the year, ROSATOM passed more than 200 legal acts of different levels

In 2014, the norms of the Federal Law of 07.21.2014 No. 219-FZ "On Amendments to the Federal Law" On Environmental Protection and some legislative acts of the Russian Federation" radically changed the existing approaches of state regulation in the field of environmental protection and the formation of a new system of rationing impact on the environment. I want to note that due to the direct participation of the Corporation in the development and adoption of this law, characteristics in activities in the field of nuclear energy were taken into account, including criteria for the classification of objects having a negative impact on the environment to the proper category.

In the reporting year, the procedure for the approval of transactions related to alienation was improved, along with the possibility of alienation or transferring to the trust management of shares of companies, included into the lists of Russian legal entities, approved by the President of Russia in accordance with the Federal Law of November, 21, 1995 No. 170-FZ "On the Use of Atomic Energy", which can own nuclear materials, nuclear facilities by relevant amendments to the Federal Law of February, 05, 2007 No. 13-FZ "On peculiarities of management and disposition of property and shares of organisations operating in the field of nuclear energy, and on amendments to certain legislative acts of the Russian Federation."

What tasks are a priority in the short term?

Priorities for the future in the framework of legislative activities are: the continuation of work on the details and timing of the existing systemic legislative acts and the making of appropriate changes, which should account for the technological aspects and organisational development of the nuclear industry.

Much work will be done to make changes and additions to the regulations, along with the adoption of new regulations at various levels concerning the implementation of already-adopted federal laws in various areas.

With regard to public services, the priority of the Corporation's objectives coincide with the objectives and priorities of the whole country. First of all, it is an organisation of effective work on the provision of public services electronically, using a system of interagency electronic interaction, as well as ensuring cooperation through the official portal gosuslugi.ru, which will improve accessibility and enable them to provide remote access.

3.7.1.

LEGAL AND REGULATORY ACTIVITY

ROSATOM, in compliance with governmental powers, carries out legal regulation in the established field of activities, provides public services, exercises the powers of the Federal Property Management and its subordinate organisations, exercises the powers of the chief administrator of budgetary funds and the administrator of the federal budget, ensures the implementation of the state defence order, and participates in international cooperation in the field of nuclear energy on behalf and at the request of the Russian Federation.

In 2014, the legislative-draft activity of ROSATOM was carried out in accordance with the plan of legislative activities of ROSATOM, as well as in accordance with the plan of legislative activities of the Government of the Russian Federation, which was approved by the Federal Government to start from December, 30, 2013 No. 2590-p.

At the end of 2014, a plan of legislative activities for ROSATOM was executed.

In the reporting year, more than 80 legal acts in the sphere of activity of the State Corporation Rosatom were developed and adopted, including 17 federal laws, 13 decrees and orders of the President of the Russian Federation, 41 Resolutions of the Government of the Russian Federation, and 10 Government executive orders.

In particular, the Decree of the President of the Russian Federation was adopted, dated 26 June 2014 No. 467, and titled “On the federal nuclear organisations” related to the assignment of a federal 25-year status of a nuclear organisation for eight federal state unitary enterprises of ROSATOM.

Objectives for 2015 are: continuation of the work on the detailing and timing of existing frameworks for legislative acts, and the preparation of regulatory legal acts adopted in the implementation of federal laws in the interests of organisations and enterprises of the nuclear industry.

3.7.2.

IMPLEMENTATION OF STATE PROGRAMME OF THE RUSSIAN FEDERATION “NUCLEAR ENERGY DEVELOPMENT” AND ACHIEVEMENT INDICATORS DEFINED BY PRESIDENTIAL DECREE FROM MAY 7, 2012

During the year, ROSATOM continued implementation of the State programme of the Russian Federation “Development of Nuclear Power Industry”.

This new version of the state programme was approved in June 2014.

The state programme organically combines a set of related objectives of the nuclear industry, aimed at the fulfilment of state tasks in ensuring the country’s defence, the production of electricity in nuclear power plants, solutions of geopolitical tasks and assignments, and tasks of the President and the Government of the Russian Federation.

The development of the country’s nuclear industry comes in the following four strategic areas:

- expansion of the power generation capacity of nuclear power plants, for which you want to forward the development of enterprises throughout the production chain of nuclear energy;
- addressing the accumulated problems of the nuclear programs of past periods and prevent the further accumulation of nuclear waste;
- ensuring that the pace of scientific and technological potential of the nuclear industry is sufficient to retain its leading position in domestic and international markets;
- implementation of Russia’s geopolitical interests, including supporting the country’s nuclear arsenal at a level guaranteeing the effective implementation of the policy of nuclear deterrence, and ensuring the strategic presence of the Russian Federation in the Arctic zone.

The implementation of these strategic directions is provided by five sub-programs, and four included in the federal targeted programs (FTP). The subprograms and the federal programs are detailed to the level of individual activities, the effectiveness of which is characterised by the corresponding figures. The main indicators are:

- electricity generation in nuclear power plants (in 2014 – 180.5 billion kWh, which is 107.2% of the plan that corresponds to the approved Federal Tariff Service balance of electricity production in 2014);
- the rate of growth of realisation volume of nuclear power complex civil production (at comparable prices) to the level of 2011 (in 2014 – 113.6% with the plan 98.1%);
- the rate of growth of labour productivity in organisations of the nuclear power complex compared to the level of 2011 (in 2014 – 137.5%, the plan – 121.9%).

The most important indicators of the state programme also include the absence of unacceptable events in the nuclear facilities (unacceptable is defined as events exceeding Level 2 on the International Nuclear Event Scale INES). This indicator characterises the integral safety of the nuclear power industry, the provision of which is the undisputed priority of ROSATOM. At the end of 2014, indicators were executed.

The composition of the indicators of the state programme is formed by taking into account the need to achieve the objectives of certain decrees of the President of the Russian Federation dated May 7, 2012 No. 596 “On the long-term government economic policy”, No. 597 “On measures for realisation of the state social policy”, and number 599 “On measures to implementation of the state policy in the field of education and science.”

The Integral assessment of the efficiency and effectiveness of the state programme amounted to 105.7% for 2014.

The integral assessment of the efficiency and effectiveness of the state programme “Development of Nuclear Power Industry” amounted to 105,7% for 2014

3.7.3.

INTERACTION WITH THE RUSSIAN FEDERAL ASSEMBLY

Representatives of ROSATOM participated in the work of:

- 6 round tables
- 3 committees
- 6 parliamentary hearings
- 7 conferences and forums
- 7 expert councils, 6 working groups, and 20 committees of the State Duma and the Federation Council

All the activities planned in the framework of cooperation with the chambers of the Federal Assembly (Assembly of the Russian Federation) during the year have been implemented.

Interaction with both houses of the Federal Assembly is carried out in several directions:

- professional at the level of legislation and law;
- socio-professional at the level of interaction with the public and parliamentarians of the regions in which the State Corporation is present;
- expert and professional at the level of cooperation with Russian and foreign experts and parliamentarians in order to become familiar with the best international practices in the field of peaceful use of nuclear energy.

In terms of the development of joint activities, there were more than 20 events in the year. The most significant of these are:

- the participation of deputies of the State Duma (Duma) and the Federation Council (SF) at 13 public hearings in the territories of the placement of nuclear facilities concerning environmental impact assessments and focused on the materials of the license reasoning;

- a working visit of the State Duma deputies and senators to the Krasnoyarsk Territory. The purpose of the visit is to familiarise themselves with the activities of the Mining and Chemical Combine (Zheleznogorsk) and Electrochemical Plant (Zelenogorsk), with a focus on issues of radiation and environmental safety and security companies;
- working visits of representatives of Federal Assembly of Russian Federation to France and the Republic of Korea. The purpose of visiting is the examination of the foreign experience in the safe operation of the main objects of use for nuclear energy (Nuclear power plants, radioactive waste final disposal points etc.), and the issues concerning interaction with the local authorities and public areas adjacent to such objects;
- participation of members of Federal Assembly of RF in conferences and forums, such as ATOMEXPO AtomEco, IX International Nuclear Forum, Social Dialogue Forum, and others;
- meeting with the parliamentarians of the Turkish Republic to discuss the NPP Akkuyu draft and the issues of legislative support of nuclear energy;
- interaction with the Working Group of FA RF for the study on the state of security at existing nuclear power plants of the Russian Federation.

There were more than 20 events related to the development of joint activities with the Federal Assembly of Russian Federation in the year

Working Group (WG) was set up on its own initiative by the Federal Assembly Committee on Economic Policy. Members of the WG studied the material provided by ROSATOM, JSC Concern Rosenergoatom Nuclear Safety Institute, and the SEC NRS Rostekhnadzor, as well as materials in the Russian nuclear safety monitoring by international organisations, such as the IAEA, WANO and the International Nuclear Insurance Pool. Members of the WG attended the current Russian nuclear power plants with different types of reactors, including: Novovoronezh NPP (VVER-1000), Beloyarsk NPP (reactor BN-600 and BN-800) and the Leningrad NPP (RBMK-1000), and conducted workshops with experts at those stations. As a result of this work, a public report on the activities of the WG was presented and a unanimous conclusion of the full compliance of modern Russian NPP projects to all “post-Fukushima” safety requirements was made.

development of the Russian Federation for the period up to 2020, taking into account the continuity of investment trends in previous years.

In 2014, businesses and organisations of ROSATOM provided the implementation of measures from 7 federal target programs, and ROSATOM is a state customer and coordinator for 4 of them.

Reporting on the implementation of federal target programs in compliance with the Decree of the Government of June, 26, 1995 No. 594 in time is directed to the federal bodies of executive power.

As a result of the complex analysis of the implementation of federal target programs conducted by the Ministry of Economic Development of the Russian Federation, as well as the evaluation of their effectiveness for 2014, implementation of the federal target programme “Nuclear and Radiation Safety for 2008 and for the period till 2015”, is recognised as highly efficient.

3.7.4.

FEDERAL TARGET PROGRAMME IMPLEMENTATION

In 2014, the implementation of the actions of federal target programs and federal targeted investment programs was aimed at solving key challenges and achieving key strategic objectives and priorities for the social and economic development of the Russian economy in the medium term, determined by the budget message of the President of the Russian Federation for 2014–2016 on 13 June 2013. The Message of the President of the Russian Federation to the Federal Assembly of the Russian Federation dated 12 December 2013, by the concept of long-term socio-economic

3.7.5.

STATE PROPERTY MANAGEMENT

In the framework of the restructuring of non-core assets for 2013–2015, in 2014, 1019 real estate objects were withdrawn from the nuclear industry, including:

- 952 objects of federal real estate were transferred free of charge to local governments or to the treasury of the Russian Federation to address local issues and to provide the municipal infrastructure;
- to accommodate the refugees from Ukraine, ROSATOM gratuitously transferred property complex the recreation center “Vostok”

Rights to 268 objects of immovable property (buildings) and 19 land plots were legalised in 2014

(within the complex of 5 objects) to the administration of rural settlement Boyarkinskoe in the Ozersk municipal district of the Moscow region;

- 62 objects of federal real estate were liquidated due to the total or partial loss of consumer properties.

The donation of and liquidation of 200 facilities of federal real estate is planned for 2015.

In connection with the termination of the restructuring of non-core assets of the Programme for 2013–2015, and in the medium-term

planning, ROSATOM is developing the Forecast of restructuring of non-core assets in 2016–2018, which will be considered by the Board of ROSATOM in May 2015.

In 2015, work will continue on the registration of rights on the real estate of FSUE, in accordance with the order of ROSATOM from December, 31, 2013 No. 1/1480-P "On Approval of Uniform Rules of the industry" Organisation and control of the registration of rights to real property" (with amendments of Order of ROSATOM from September, 01, 2014 No. 1/829-P).

3.8.

NUCLEAR WEAPONS DIVISION

KEY RESULTS OF 2014

The state defence order is executed on

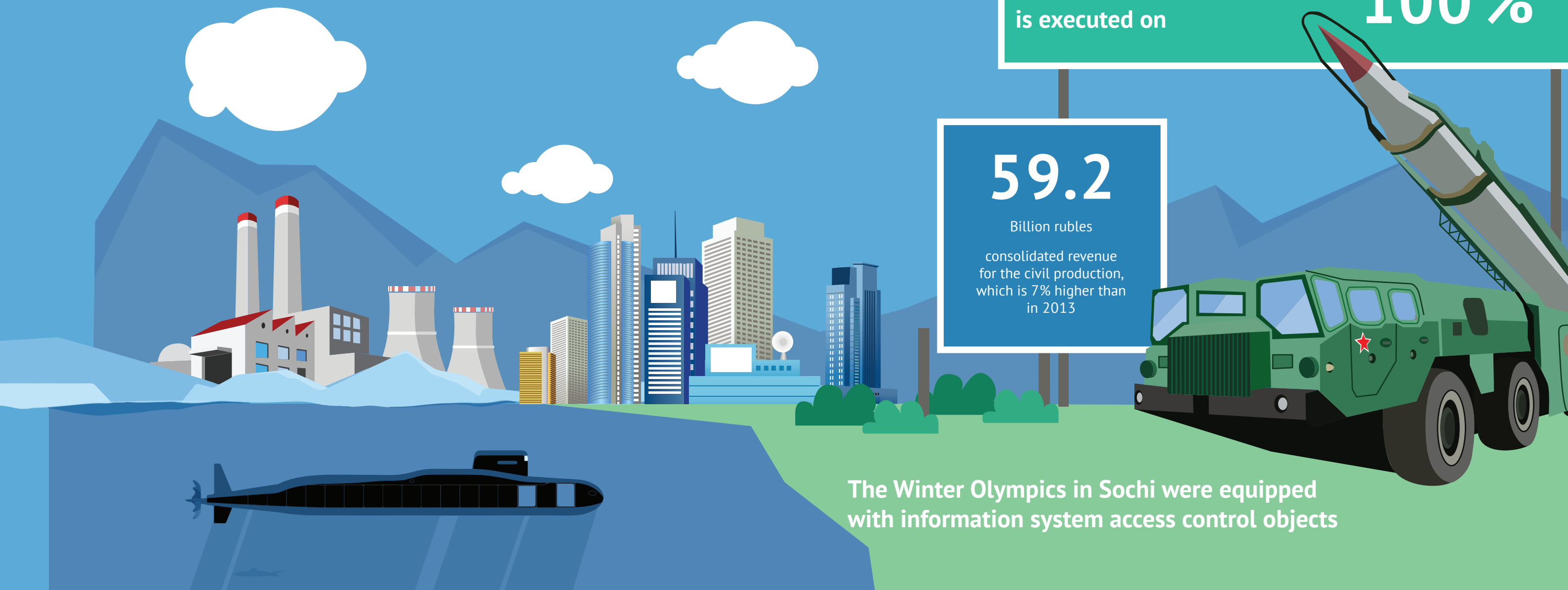
100 %

59.2

Billion rubles

consolidated revenue for the civil production, which is 7% higher than in 2013

The Winter Olympics in Sochi were equipped with information system access control objects





FIRST DEPUTY CEO FOR NUCLEAR WEAPONS IVAN KAMENSKIKH

What are the main results of the 2014 NWD for the production of civilian products?

Significant progress has been achieved in the past year in the oil and gas sector. A long-term cooperation agreement was signed with JSC NK Rosneft. Currently, 18 technical projects are under development for logging, seismic and perforating systems. The pressure meters produced by FSUE VNIIA were mounted at three sites of Rosneft for pilot operation (in the long-term supply of 15,000 by 2020). At one more object, there is an APCS pilot project of technological object (main compressor station-1 South Balytsky mine), and 48 projects are in the perspective of development and modernisation of APCS.

We also entered into a long-term cooperation agreement with JSC Rosgeologiya. Work on the creation of complex pulsed neutron analysis of the composition of rocks and the content of diamonds and rare earth metals and the creation of complex pulsed neutron logging of oil and gas wells is also being made.

The FSUE UEMZ prepared mass production of medium-voltage cells MCset 17.5 kV licensed by the world leader in the field of electrical equipment, Schneider Electric. We plan to create a centre of competence in electrical engineering on the basis of FSUE Russian Electrotechnical Institute named after V.I. Lenin and FSUE Pilot Plant VEI.

The achievement of serious results in the machine tool building by FSUE Instrument-making plant has allowed for the beginning of work on the creation of its base of machine-tool building cluster.

We also credit the contract for the supply of Argus Solution reactors by JSC Krasnaya Zvezda to the Republic of Chile to significant projects in the sphere of realisation of civil products.

What new prospects are open in front of ROSATOM in connection with the need to import substitution, including the military-industrial complex of the country?

The process of import substitution in the production of military equipment of ROSATOM, as well as in other organisations of the military-industrial complex, takes place in two steps: import substitution of goods produced in Ukraine, and import substitution of products manufactured in the countries of NATO and the European Union. The first stage is executed completely, while the second will be completed in late 2015.

The main problems are related to import substitution materials and the electronic-component base. There are specialised companies for their production, but there



were also opportunities for us. For example, TVEL has mastered the production of titanium tubes, and FSUE FSPC Production Association Start named after M.V. Protsenko has mastered the production of two units used in different types of weapons. Previously, the products had been purchased in the Ukraine.

I want to note that for our products, only high-quality components and electronic component base are used, and the problem of import substitution is not acute. However, on the basis of FSUE FRPS NIIIS named after Yu.Ye. Sedakov, an interdepartmental centre for the development and production of radiation-resistant electronic component base does operate.

The Centre already manufactures a range of products that are functional equivalents of imported Electronic Component Base. Therefore, the issue of import substitution for the NWD is not a threat, but rather a stimulus for development, allowing, in particular, the interdepartmental centre to conduct work on import substitution in the field of radiation-resistant ECB. Therefore, the creation of a complete chain will be completed in 2017 in the IEC for the production of specialised microelectronics for implementation in strategically important products of Rosatom, the Russian Space Agency and other industries.

We would also like to note the developments related to supercomputer technology.

At the moment, we have prepared proposals for the creation of hardware and software in the interests of the Russian Space Agency bureaus and enterprises, and have worked out an action plan for the implementation of domestic technology "Digital Modeling" in the pilot area of rocket and space industry in the years 2015–2016.

The basis of this technology is our software package LOGOS, which is designed for modelling a wide range of physical processes on a supercomputer, such as gas, aerodynamics, hydrodynamics, acoustics, heat and mass transfer, turbulent mixing, strength, deformation and fracture, multi-phase multicomponent filtering etc.

We plan to integrate, together with the Russian Space Agency, their developments in the field of mathematical modelling and engineering analysis to bring the LOGOS software package to the level of a software platform that provides a single technology of coherent multidisciplinary calculations of behavior of automatic control systems and the behavior of objects, as well as the modelling of physical processes and virtual experiments in a supercomputer environment for the study of design and technical solutions.

We plan to conduct similar works with the State Corporation Rostec.

In general, it should be noted that restrictions on the import of materials and parts from the EU and NATO had a positive impact on improving the efficiency of use of the Corporation's vast scientific and technological potential that is available, as well as an acceleration of the development of research, industrial and technological base. At what expense? Due to the intensive development of dual-use technologies and the introduction of advanced and breakthrough technologies.

3.8.1.

RESULTS OF 2014

Implementation of the state defence order and cooperation with the Ministry of Defence of the Russian Federation

ROSATOM, together with the Ministry of Defence of the Russian Federation and military units of the nuclear security of the Armed Forces, carries out maintenance and development of the Armed Forces of ammunition in quality and quantity at a level guaranteeing the realisation of the policy of the Russian Federation in the field of nuclear deterrence.

In 2014, the Nuclear Weapons Division (NWD) conducted research and development work, put nuclear weapons in accordance with the approved state programme of armaments for 2011–2020, and various works for the supply, equipment and maintenance of systems and tools of physical protection were conducted at 79 sites of the Ministry of Defence of the Russian Federation.

NWD enterprise restructuring

In accordance with the NWD development strategy until 2020, the stepwise restructuring of enterprises were performed. The target values of indicators characterising the state of NWD enterprises were fully achieved.

Main results of 2014:

- renewal of equipment research and production and the technological base of NWD enterprises is continued;
- the scientific and technical potential of the main manufacturers of security systems, which will build a product policy and strategy for the further development of business lines “Security Systems”, has been consolidated;
- certain structural changes occurred: eight FSUE were granted the status of federal nuclear organisations.

Activity in the civil sector

In 2014, enterprises in the NWD civilian sector conducted innovative developments in the interests of systemically industries of the Russian economy.

Key areas of work:

- provision of the information access control system for XXII Olympic Winter Games in Sochi;
- commissioning of security systems for 298 vestibules of Moscow metro stations;
- manufacture of automated process control system (PCS) sub-systems for the Belarusian NPP;
- carrying out complex testing and certification of “SCADA ATOM-NN” software for APCS NPP;
- development of import-substituting equipment for geophysical studies commissioned by JSC NK Rosneft;
- improvement of supercomputer technologies for the design and optimisation of complex technical systems of strategic industries;

The introduction of the status of the federal nuclear organisation (FNO) will allow:

- ensuring stable functioning and further development of strategic NWD and CATF organisations in which they are located;
- reducing the number of the basic enterprises of NWD;
- optimising the costs of NWD;
- unifying the organisational structure of FNO;
- intensifying work on the creation of innovative conversion products

- creation of an innovative reactor facility for fast neutrons with gas coolant for a nuclear power installation of megawatt-class of space transportation and energy module (which has no analogues in the world) for the implementation of programs for the study and exploration of outer space.

Improving the efficiency of enterprises of NWD

17 specialised technological centres (STC) for the production of high-tech products / services were created for the implementation of the unified technical policy of industrial and technological base in the companies. The volume of STC revenues increased by 10% in 2014 without additional capital investments and increasing of amount, by eliminating duplication, by the concentration of the unique modern equipment, high rate of use and the quality of its products.

The works are continuing in the Interdepartmental Centre for the development and manufacture of radiation-resistant electronic component base of NWD for the creation and delivery of specialised microelectronic devices to high-tech organisations of the Ministry of Industry and Trade of the Russian Federation, the Federal Space Agency and the State Corporation Rostec. Orders were fully executed in 2014.

The interdepartmental centre for testing the electronic component base of weapons, military and special equipment on the radiation resistance worked successfully. In 2014, the amount of testing of microelectronic products for the Ministry of Defence of the Russian Federation, the Federal Space Agency, the Ministry of Industry and Trade, and the Ministry of Education and Science of the Russian Federation grew in comparison with 2013 by 20%. The Centres of Collective Use (CCU) created within enterprises exceeded the planned volume of service provision to customers from other departments in 2014. Revenue from “other” products of CCU was 250 million rubles. Implementation of the management system for results of intellectual activity at all stages of the life cycle provided the execution by companies of NWD of about 200 RIA military, special and dual-purpose (VSDN), which is ~ 85% of all R&D performed in 2014.

The annual increase in the number of applications for the state registration of copyrightable RIA is foreseen at the level of 10–15% starting in 2014. The share of RIA VSDN received in 2013–2014 and implemented into production in 2014 amounted to more than 30%.

Provided for the state defence order (SDO), plans for the development and production of nuclear weapons in the reporting year were fully implemented

Within the framework of the SDO, import substitution measures have been taken in Russian analogues for 19 kinds of materials

The implementation of energy saving and energy programs’ efficiency in 2014 ensured the savings of energy consumption in enterprises of NWD at 24%, as compared with the base period (2009), which in monetary terms equals more than 960 million rubles

3.8.2.

GOALS FOR 2015 AND THE MID-TERM HORIZON

Main goals for 2015 are:

- 100% implementation of the SDO;
- formation of the State programme on the development of the Russian defence industry for the 2016–2025 in terms of technology development and the production of strategic materials and electronic components, including import substitution;

- obtaining additional revenue from the use of intellectual property in economic and commercial turnover.

In 2015, the following are also planned:

- harmonisation of technical proposals with OJSC Russian Railways to equip railway stations with an integrated security system;
- introduction of the software developed by ROSATOM into the productive activity of OKB Sukhoi;
- equipment production development for small-scale power;
- creation of PET centre on the basis of FSUE RFNC-VNIITF named after Academician E.I. Zababakhin to provide high-tech medical assistance to residents of the Chelyabinsk region.

3.9.

NUCLEAR-POWERED ICEBREAKER FLEET

KEY RESULTS OF 2014

1.66

million tons

**gross tonnage
of 129 vessels
navigated in the waters
of the Northern Sea Route**

The Federal State Unitary Enterprise of the nuclear-powered fleet (FSUE Atomflot) is designed to provide the operational and technological service of nuclear icebreakers and auxiliary vessels.

The structure of the Nuclear-Powered Icebreaker Fleet consists of: two nuclear icebreakers with a two-reactor nuclear power unit with capacity of 75 thousand h.p. – “Yamal”, “50 Let Pobedy”; two icebreakers – “Taimyr” and “Vaigach” with one reactor unit with a capacity of about 50,000 hp and an atomic lighter carrier-container carrier, “Sevmorput”, with a reactor unit with a capacity of 40,000 hp. The atomic icebreaker “Sovietskiy Soyuz” is in the operating reserve.

The nuclear service fleet also includes floating technical base “Imandra” and “Lotta”; ship “Serebrianka”, intended for the treatment of liquid of RAW and SNF transportation; ship “Rossita”, intended for the transportation of SNF and RAW; and floating dosimetric control post “Rosta-1”.

A contract was signed with LLC Baltic Shipbuilding plant for the construction of two new icebreakers of the new generation Series LC-60

The mission of FSUE Atomflot is to use the latest achievements of the nuclear power industry in maritime transport to foster an intensification of Arctic shipping, which is a determining factor of the recovery and development of Northern Russia

3.9.1.

RESULTS OF 2014

Navigation of vessels and shipping in the waters of the Northern Sea Route (NSR) on the Baltic and White seas

129 vessel were navigated in the waters of the NSR during 2014. The gross tonnage of vessels navigated in 2014 was 1,659,207 tonnes.

The works were carried out in winter for 80 days under the contract with FSUE Rosmorport in the waters of the Baltic and White seas. Atomic icebreaker "50 Let Pobedy" navigated 41 large-capacity vessels during its work in the Baltic Sea, and navigated 88 ships during its work in the White Sea.

Table. The volume of cargo transportation along the NSR

	2014	2013	2012
The total volume of cargo (gross tonnage), t	1,659,207	1,355,897	1,261,545
Total number of runs	129	71 (22 in ballast)	46 (13 in ballast)

The construction of new icebreakers

Under the contract for the construction of the head icebreaker in 2014:

- 124 body sections were produced, 81 sections were put on the installation, 80 building certificates were signed;
- working design documentation is being developed; the plant started loading the equipment on the stocks;
- contracts are concluded for the manufacture and supply of equipment, materials procurement, and provision of services, including the supply of the reactor facility RU RITM-200 with OKBM named after Afrikantov, manufacturing PTU with

JSC Zavod Kirov-Energomash, and delivery of a complex system of electric propulsion with FSUE Krylov State Research Centre;

- metal water protection tanks and engineering side items are manufactured.

Ensuring nuclear, radiation and environmental safety

Works on the separation of unprocessable SNF spent fuel assemblies and loading into containers TUK-120 and its placement for the long-term storage into onshore storage were conducted in 2014. On 31 December 2014, 38 places (among 50 projected) of storing TUK with SNF were filled.

A joint emergency response exercise, "Arctic 2014", was held on the territory of FSUE Atomflot. Inspections and assessments of radiation safety and radiation protection were conducted, and the assessment level was "high". A system of radar and sonar control is implemented on the water area of FSUE Atomflot in order to enhance counter-terrorism security.

Within the framework of environmental safety in 2014:

- specialists of OEC were trained under the advanced training programme in the field of environmental safety;
- Representatives of the FSUE Atomflot took part in the XV Environmental Forum on urgent issues of industrial ecology;
- Representatives of the FSUE Atomflot took part in public forum dialogues, concerning the work of the Public Council for Safe Use of Nuclear Energy.

Participation of FSUE Atomflot in international conferences and seminars:

- International Conference on Arctic Marine Shipping (Finland),
- International seminar "Northern Sea Route and Gangwon Province as the Eurasian outpost" (Republic of Korea),
- International seminar on the sustainable development of the Northern Sea Route (Japan),
- 3rd International Arctic Workshop (Republic of Korea),
- Scientific and Technical Conference ICETECH 2014 (Canada),
- International Nuclear Forum (Russia).

3.9.2.

GOALS FOR 2015 AND THE MID-TERM HORIZON

Goals for 2015:

- continuation of construction of new Project 22220 nuclear icebreakers,
- implementation of the project "Development of port fleet in the port of Sabetta for servicing OJSC Yamal SPB/Portoflot and the conclusion of an agreement for the construction of port fleet vessels,
- completion of the first stage of recovery of technical readiness for the nuclear lighter "Sevmorput",
- icebreaking support of oil test exports from the Novoportovskoye field (OJSC Gazpromneft).

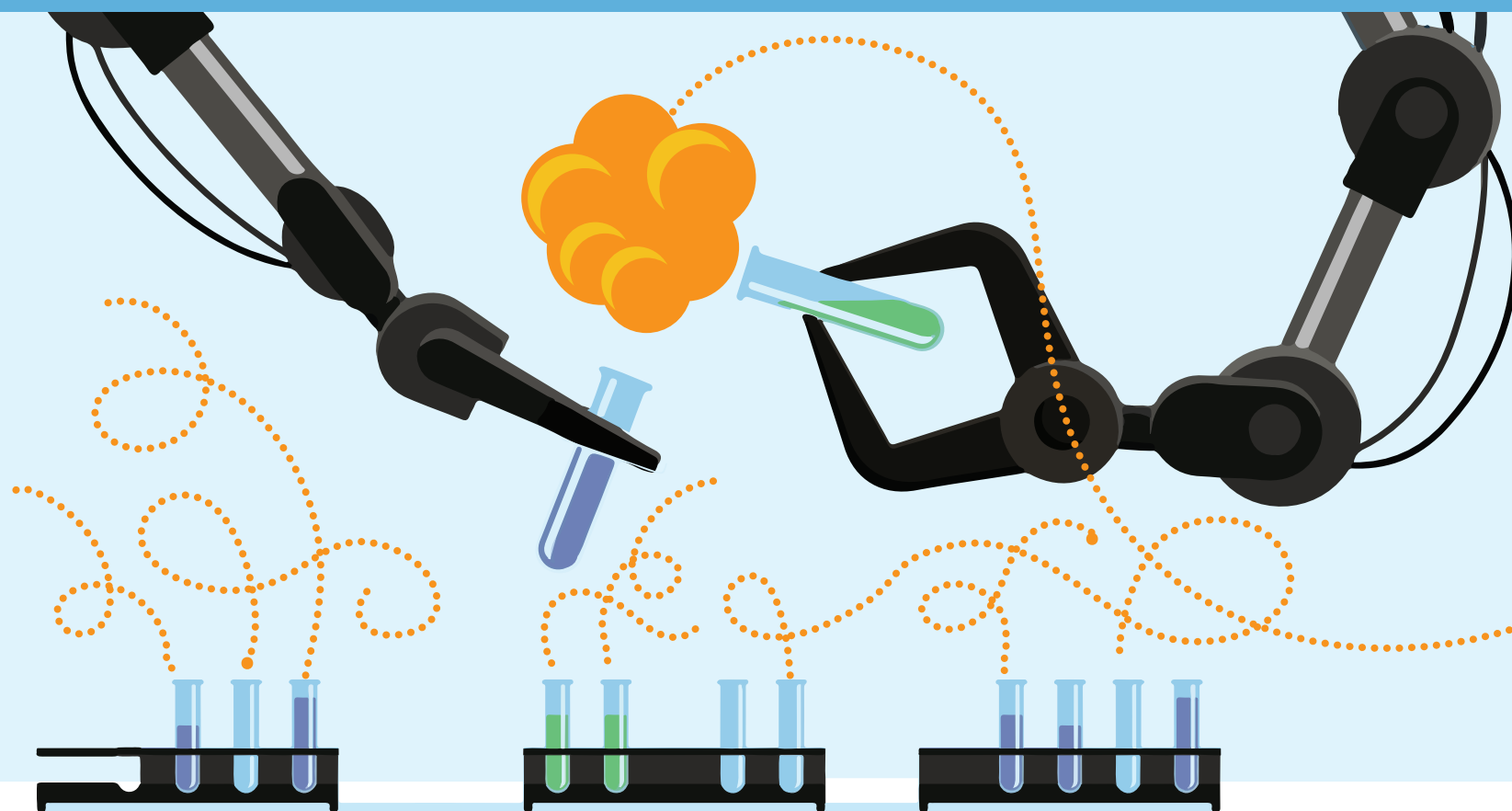
Goals for medium term:

- service support for at least 4 operating nuclear icebreakers;
- perform a life extension programme for shallow-draft nuclear icebreakers to 175–200 thousand hours;
- complete the construction of the head universal nuclear icebreaker of the new generation by 2017, at the latest, the first serial universal nuclear icebreaker in 2019, and the second serial universal nuclear icebreaker in 2020;
- identify sources of funding and begin the design and construction of coastal infrastructure facilities (creation of a transshipment complex to recharge and a floating dock with a capacity of at least 60,000 tonnes to service new icebreakers);
- completion of the project for utilisation of nuclear icebreakers of the "Arctic" type and begin the disposal of decommissioned vessels with nuclear power units.

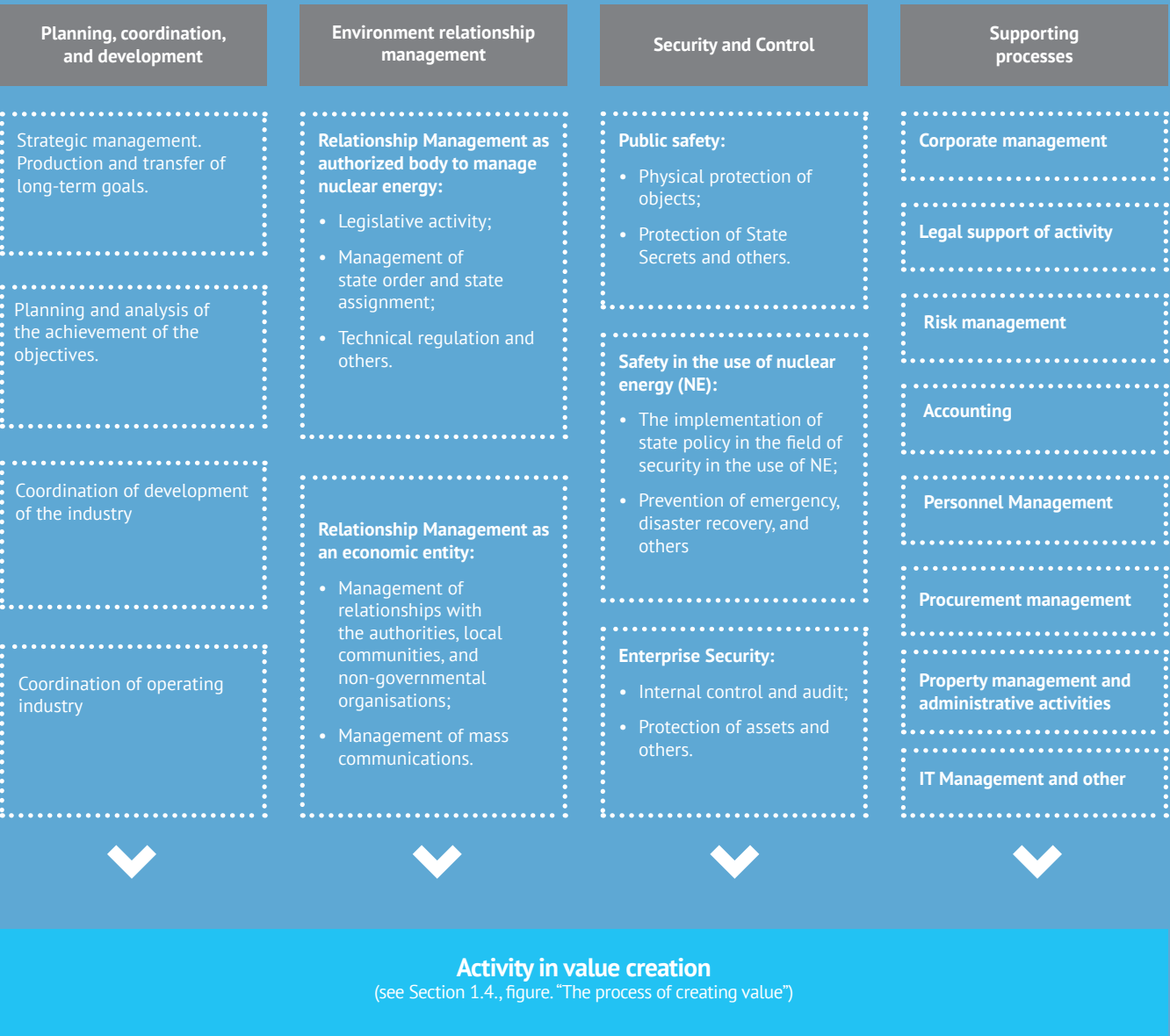
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MANAGEMENT EFFICIENCY

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Nuclear industry management processes

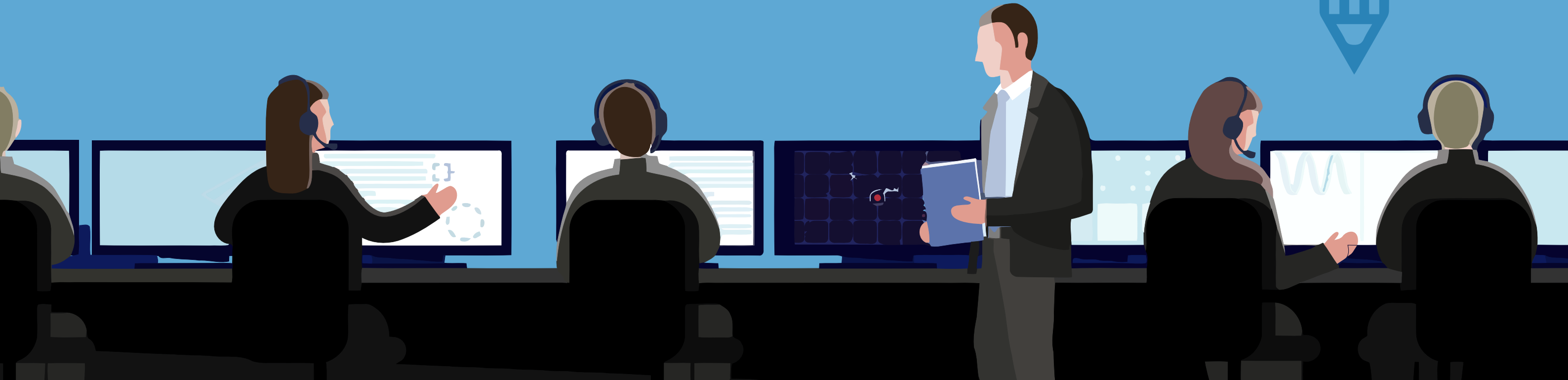


4.1.

CORPORATE GOVERNANCE

The main tasks of ROSATOM in the field of corporate governance in 2014 are:

- Approval of principles and mechanisms of the corporate and functional management, regulatory approval of interaction with all complexes and business incubators, as well as the regulation of the interaction of all divisions, facilities, and business incubators with the organisations referred to their control loop;
- Implementation of the rules in the de-bureaucratisation processes of interaction among the organisations of the branch.



4.1.1.

MANAGEMENT BODIES

4.1.1.1. The Supervisory Board of ROSATOM

In accordance with Art. 23 of the Federal Law of December, 01, 2007 No. 317-FZ “On the State Atomic Energy Corporation ‘Rosatom.’” The Supervisory Board is the supreme governing body of the State Atomic Energy Corporation “Rosatom”. [The powers of the Supervisory Board are listed on the website of ROSATOM.](#)

The Supervisory Board consists of nine persons: CEO of ROSATOM, who is a member of the supervisory board ex officio, and eight representatives of the President of the Russian Federation and the Government of the Russian Federation. The members of the Supervisory Board and chairman are appointed by the President of the Russian Federation.

The members of the of the Supervisory Board, except for the CEO of ROSATOM, are not members of the executive management of the Corporation.

The members of the Supervisory Board do not receive any compensation for participation in the work of the Supervisory Board.

During 2014, there were not any changes in the composition of the Supervisory Board

Table. The composition of the Supervisory Board (as of December, 31, 2014)

Member of the Supervisory Board	Position
Gryzlov, B. V.	Permanent Member of the Security Council of the Russian Federation and Chairman of the Supervisory Board
Borovkov, I. V.	Chief of Staff of the Military Industrial Commission under the Government of the Russian Federation Deputy Chief of the Government Staff
Brycheva, L. I.	Assistant to President of Russia Head of the Legal Department, Presidential Administration
Kirienko, S. V.	Chief Executive Officer, ROSATOM
Klepach, A. N.	Deputy Chairman (Chief Economist) Member of the Board of Vnesheconombank
Novak, A. V.	Minister of Energy of Russia
Trutnev, Yu. P.	Deputy Chairman of the Government of the Russian Federation and Representative of the President of the Russian Federation in the Far East Federal district
Ushakov, Yu. V.	Assistant to President of Russia
Yakovlev, Yu. V.	Head of the Economic Security Directorate, Russian Federal Security Service

In 2014, the Supervisory Board held 13 meetings, of which 2 were by personal attendance; 39 issues were addressed.

By its decisions, the Supervisory Board approved:

- The key activity indicators of ROSATOM in 2014;
- Annual report of the Corporation for 2013;
- Strategy of State Corporation ROSATOM for the period until 2030.

The Chief Executive Officer of ROSATOM is charged with control over the execution of the Supervisory Board and the Chairman of the Supervisory Board’s instructions.

4.1.1.2. Chief Executive Officer of ROSATOM

The functions and authority of the Chief Executive Officer are defined in the Federal Law “On the State Atomic Energy Corporation ‘Rosatom.’” The Chief Executive Officer of the Corporation is the sole executive body of the Corporation and exercises leadership over its current activities.

Sergey Vladilenovich Kirienko was appointed CEO of ROSATOM by Decree of the President of Russia No. 1663 of 1 December 2007 “On the Chief Executive Officer of the State Atomic Energy Corporation Rosatom”. [The Chief Executive Officer’s biography and scope of authority are provided on ROSATOM’s website.](#)

4.1.1.3. The Management Board of ROSATOM

The Corporation’s Management Board is a collective executive Body. The Management Board includes the CEO of the Corporation, who is a member by virtue of the position and leads the Management Board’s activities.

The functions and authority of the Management Board are defined in the Federal Law “On the State Atomic Energy Corporation Rosatom.”

Members are appointed and dismissed by the Supervisory Board upon the recommendation of the CEO of the Corporation. Management Board members work full time for the Corporation or are employees of the Corporation’s entities, joint-stock companies of the Corporation, or their affiliated companies, as well as subordinate enterprises.

During 2014 there were not any changes in the composition of the Management Board of State Corporation Rosatom.

In 2014, 47 meetings were held, of which 3 were by personal attendance; 470 issues were addressed:

- Report on the implementation by ROSATOM of key performance indicators in 2013,
- Key performance indicators of ROSATOM for 2014,
- Strategy of State Corporation Rosatom for the period till 2030.

[Biographies of the Management Board members and details on the authority of the Management Board are provided on ROSATOM’s website.](#)

Information about income, expenses, and property and property-related liabilities of the Management Board members, as well as other [employees of Rosatom and their relatives, are provided on Rosatom’s website.](#)

In 2014 47 meetings of the Management Board were held, of which 3 were by personal attendance; 470 issues were addressed

Table. The composition of the Management Board
(as of December, 31, 2014)

Member of the Management Board	Position
Kirienko, S. V.	CEO, ROSATOM
Denisov, K. I.	Deputy CEO for Security, ROSATOM
Elfimova, T. L.	State Secretary – Deputy CEO for Government Relations and Budgeting, ROSATOM
Kamenskikh, I. M.	First Deputy CEO for Nuclear Weapons, ROSATOM
Komarov, K. B.	First Deputy CEO for Corporate Development and International Business, ROSATOM
Kryukov, O. V.	Director for Public Policy on Radioactive Waste, Spent Nuclear Fuel and Nuclear Decommissioning, ROSATOM
Lokshin, A. M.	First Deputy CEO for Operations Management, ROSATOM
Nikipelov, A. V.	CEO, Atomenergomash
Obozov, S. A.	Director for ROSATOM Production System, ROSATOM
Olenin, Yu. A.	President of TVEL Fuel Company
Pershukov, V. A.	Deputy CEO for Innovation Management, ROSATOM
Romanov, Ye. V.	CEO, Rosenergoatom
Solomon, N. I.	First Deputy CEO for Corporate Functions and Chief Financial Officer, ROSATOM
Spassky, N. N.	Deputy CEO for International Relations, ROSATOM

4.1.1.4. The Audit Commission

The Audit Commission of ROSATOM controls the financial and economic activities of the Corporation.

The Statement of the Audit Commission on financial and economic activities of ROSATOM in 2014 is provided [in Appendix 3](#).

Table. The Composition of the Audit Commission
(as of December, 31, 2014)

Member of the Audit Commission	Position
Artyukhin, R. E.	Head of the Federal Treasury and Chairman of the Audit Commission
Buzina, L. F.	Deputy Director of the Department for Budget Policy of the State Military and Law Enforcement Services and the Governmental Defence Order of the Ministry of Finance of the Russian Federation
Katrenko, V. S.	Auditor of the Accounts Chamber of the Russian Federation
Rozhnov, A. V.	Deputy Head of the 12 Main Department of the Ministry of Defence of the Russian Federation
Utkin, V. K.	Office Head of the Department of Defence Industry of the Government of the Russian Federation

4.1.1.5. Commissions, boards, and committees affiliated with the governing bodies

In 2014, there were about 40 committees, boards, and commissions affiliated with the governing bodies that were acting on a standing basis in ROSATOM.

Table. Key collective governing bodies

Committee	Chairman
Strategic Committee	Kirienko, S. V., CEO, ROSATOM
Operations Committee	Kirienko, S. V., CEO, ROSATOM
Public Council	Kirienko, S. V., CEO, ROSATOM
Activity Transparency Enhancement Committee	Kirienko, S. V., CEO, ROSATOM
Staff and Incentives Committee	Kirienko, S. V., CEO, ROSATOM
Budget Committee	Solomon, N. I., First Deputy CEO for Corporate Functions and Chief Financial Officer, ROSATOM
Investment Committee	Lokshin, A. M., First Deputy CEO for Operations Management
Globalisation Committee	Komarov, K. B., Deputy CEO for Corporate Development and International Business
Public Reporting Committee	Komarov, K. B., First Deputy CEO for Corporate Development and International Business
Scientific and Technical Board	Laverov, N. P., Academician and Vice President of the Russian Academy of Sciences

4.1.2.

IMPROVEMENT OF CORPORATE GOVERNANCE SYSTEM

In 2014:

- The regulation of the interaction between ROSATOM and the divisions' managing entities, business incubators, and industrial complexes is continued;
- Mechanisms of management were introduced that, on one hand, ensure the implementation of mandated Corporation tasks to provide the unity of management of nuclear organisations located outside the Russian Federation; on the other hand, they do not contradict the requirements of the legislation of foreign states in regulating the activities of foreign companies included in the system of corporate ownership of the Corporation and do not violate their autonomy;
- Local regulations of ROSATOM were updated (in connection with the entry into force of amendments to the Civil Code of the Russian Federation) and the work on changing of the legal organisation form of the nuclear industry and bringing its constituent documents into conformity with the requirements of the legislation of the Russian Federation were organized.

In 2014, the regulation of the interaction between ROSATOM and the divisions' managing entities, business incubators, and industrial complexes was continued

4.1.3.

KEY CHANGES IN CORPORATE STRUCTURE

Key changes in corporate structure in 2014:

- Consolidation in the ownership of the State Corporation Rosatom of 100% of shares of JSC Atomstroyexport, which is a leading engineering company of foreign trade corporations for the construction of nuclear facilities abroad;
- Establishment of autonomous non-profit organisation, "Centre for radiation risk and security", together with FGBU Institute of Civil Defence (FC) and the Nuclear Safety Institute (IBRAE); its main objective is scientific, technical, and expert assistance to the Russian Emergency Situations Ministry and ROSATOM in the formulation of recommendations and proposals to the Government Commission on pre-prevention and elimination of emergency situations and fire safety, and of other public authorities for the protection of the population from the extraordinary radiological situations;
- Transfer to the ownership of ROSATOM in the form of property contribution of the RF shares of the six joint stock companies created by the transformation of FSUE by a decree of the Russian President and the Government Resolution; (Scientific-Production Association Radium Institute, named after V.G. Khlopina; Scientific Research Institute of Electrophysical Apparatus, named after Efremov; Red Banner of Labour Research Institute of Physical Chemistry, named after L.Y. Karpov; and the Federal Nuclear and Radiation Safety Centre, Management of the administrative buildings, power plant);
- Transfer in the form of property contribution of shares of 12 joint stock companies, which were recipients of budget financing on the basis of orders of the RF Government in 2013 to the ownership of the State Corporation Rosatom.

Within the formation of the e the reorganisation of a number of FSUE NWDs engineering division of the State Atomic Energy Corporation "Rosatom" are plans to optimize the structure and activities of engineering companies (JSC NIAEP, JSC Atomenergoproekt and JSC ASE), solution of this problem will ensure the effective management of rapidly growing portfolio of orders in Russia and abroad

- joining of FSUE Design Bureau of transportation equipment and the FSUE Institute of strategic stability to the FSUE Russian Federal Research Institute of Automatics, named after N.L. Dukhova "in order to implement Presidential Decree."

problem will ensure the effective management of a rapidly growing portfolio of orders in Russia and abroad;

- Corporatisation of six FSUEs;
- The reorganisation of a number of FSUEs (also the reorganisation of a number of FSUE of NWD with the status of federal nuclear organisations is assumed, which will involve the need to support the publication of the corresponding acts of the President and the Government of RF);
- Change of the mechanism of bringing to the joint stock companies of the nuclear industry the federal budget in the form of contributions to the charter capital (due to changes in the budget legislation of RF);
- Implementation of a comprehensive computerized database on the structure of corporate ownership;
- An increase in the authorized capital of JSC Atomenergoprom in order to involve the National Welfare Fund in 2015. Measures are being implemented to increase the authorized capital of JSC Atomenergoprom in favour of the Russian Federation.

4.1.4.

PLANS FOR 2015 AND THE MID-TERM HORIZON

- Within the formation of the engineering division of the State Corporation "Rosatom" are plans to optimize the structure and activities of engineering companies (JSC NIAEP, JSC Atomenergoproekt, and JSC ASE); solution of this



4.2.

RISK MANAGEMENT

KEY RESULTS IN 2014

In the corporate risk management processes were included Uranium One Holding NV and JSC Rosatom Overseas.

Risks that may affect the activities of the State Corporation "Rosatom" are proactively detected at the stage of planning, and management implemented measures for their regulation.



What risks were the most important to achieve the strategic objectives of ROSATOM in 2014?

In the first place, these are financial and commodity risks. The increase in financial risk is due to the negative economic factors and the turbulence in financial markets. And, commodity risks associated with changes in electricity prices (due to the increase of the total supply volume on the one hand and slowing economic growth in the country on the other), as well as the volatility of the goods and services of the nuclear fuel cycle in the global market due to the uncertainty of the timing of the restart of the Japanese nuclear power plant, the revision by several countries of the development programs of nuclear power and the accumulation of large stocks.

What risks do you think might affect the sustainability of the business in the long run on Rosatom?

There is a possibility of increase in political and regulatory risks due to the introduction of a politically-motivated restrictions. However, it should be noted that the characteristic of the market has mainly long-term nature of the contracts and the duration of production and logistics cycle make it unlikely to stop projects and the replacement of the supply of organisations of the Corporation.

Because of the increased competition in the nuclear market risks, lack of competitiveness of products and services can also affect the activity.

Further development of the corporate risk management system is aimed at its integration with the process of strategic management. The point of this is to provide the most proactive identification of risks arising on the strategic horizon, and effectively to manage these risks.

4.2.1.

STATE CORPORATION ROSATOM'S APPROACH TO RISK MANAGEMENT

Corporate Risk Management System development by the Corporation and its organisations started in 2010 (see more on the approach to risk management and the directions of development of the CRMS in annual report for 2013).

Table. Risk management results*

Risks and their dynamics	Risk management results
FINANCIAL RISKS	
Currency risk ↓	The weakening of the national currency increases the receipt of revenues in foreign currency, partially reduced by the growth of the cost of purchased imported goods and services.
Interest risk ↑	The increased risk is caused by the emergence of restrictions on fundraising in foreign markets, by the actions of the Central Bank to raise the key rate, and as a consequence by the growth of interest rates. To reduce the risk of loans for which there is a risk of rising rates, the repayment is made at the expense of free liquidity pool. In 2014, there are loans involved for a period of 1,5–3 years at fixed rates, which led to the maintenance of stable long-term loan portfolio
Credit risk ↑	Increased risk is caused by negative developments in the Russian economy, the turbulence in financial markets, reduction of stability of Russian banking system, untimely fulfilment of obligations to the JSC Concern Rosenergoatom on the electricity market (non-payment of electricity consumed). To minimise the risk:

* Additional information on risk management is presented in the Management of financial and investment activity, International Cooperation. International Business, Engineering Division, Electricity Division, System to countering the corruption and other offenses, Nuclear and Radiation Safety, Environmental Security, and Stakeholder Engagement, as well as reports of [JSC Techsnabexport](#), [JSC TVEL](#), [JSC ARMZ](#), [JSC Concern Rosenergoatom](#), and [JSC NIAEP](#) for 2014.

Credit risk ↑	<ul style="list-style-type: none"> limits were set for contractor banks; guarantees were used and advance payments benefiting external counterparties were limited; proposals are formed and submitted to NP "Market Council" on the improvement of the legal framework of the wholesale electricity market; a regular monitoring of accounts receivable of the sectoral enterprises was carried out while accounts receivable committees were operating in the Corporation and its organisations; the credit risk with regard to buyers and customers under contract for the delivery of products or services, which assumed payment delays, was assessed and measures were implemented to manage the credit risk depending on its assessment level
Liquidity risk ↑	<p>Increased risk is caused by: a decline in the availability of bank financing on economically acceptable conditions, reduction by international rating agencies of sovereign credit of Russia.</p> <p>To minimise the risk:</p> <ul style="list-style-type: none"> retained volume of open lines in the Russian state-owned banks; work is conducted on the issues of state with the federal executive bodies of the Russian Federation. <p>In 2014, it was assured the attraction of the necessary funds to meet all obligations. The project "The construction of nuclear power plant 'Hanhikivi 1' in Finland" is included to the list of projects approved for funding from the National Welfare Fund. The pre-export credit JSC Techsnabexport was closed from a pool of international banks under the guarantee of Atomenergoprom as a confirmation of the willingness of foreign banks to work with the enterprises of the Corporation.</p>

COMMODITY RISKS

Risks associated with the market of nuclear fuel cycle products ↑	<p>Risk growth was due to the stagnation of demand and a downward trend of prices in the NFC product and service markets, caused mainly by the delays in restarting NPPs in Japan, significant unsold inventory from manufacturers and traders of uranium products.</p> <p>Also at the background of introduced in 2014 and possible in the future sanctions of US and EU, including the financial sector, the management of a number of foreign energy companies see the risk of reduction of the reliability of Russian uranium products supplies, which negatively affects the prospects of building a portfolio of contracts.</p> <p>During 2014, the spot prices for natural uranium have not changed, long-term ones reduced by 2%; spot quotes for enrichment services decreased by 11%, long-term quotes decreased by 21%.</p> <p>To reduce the risk, the pricing policy that takes into account the current market situation is realized (the use of market-oriented pricing mechanisms and escalation in the contracts, establishment of quantitative flexibility and options in contracts with suppliers). In 2014, despite the continuing stagnation in demand and prices on the markets NFC products and services, the portfolio of overseas orders for goods and services of the nuclear fuel cycle in the 10-year period was established in the amount of 34.6 billion US dollars.</p>
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Risk dynamics:



increase



decrease



without substantial changes

Electricity market risks ▲	Risk growth is due to the slowing of Russia's economic growth and expectations of a drop in electricity consumption, gas price growth reduction, increase in the total supply volume of cheaper generation due to new (more efficient) thermal power plants, as well as increased NPPs' generation. Ability to control risk is limited. The use of derivative financial instruments, as one of the possible management tools, due to the low liquidity of trading platforms is much more difficult.
OPERATIONAL RISKS	
Risk of decreasing electricity generation ○	The balance of the FST (the minimum amount of electricity JSC Concern Rosenergoatom should produce over the year) was met at 107.2%. In fact, 180,5 billion kWh of electricity was generated, which is 5% more than in 2013. The standard value of the coefficient of violations, taking into account the loss of electricity generation as a result of violations, equipment failures in 2014 were not exceeded and remained at the 2013 level.
Industrial safety and ecology risks ○	In 2014, the sectoral enterprises operated safely (there were no operational events from the nuclear facilities that posed any danger to the public or the environment).
Investment risks ▲	The increased risk is caused by the rise in price of credit resources and restrictions on fundraising in the global market. For risk management with the purpose of its minimizing, there was established a sectoral centre of competence for the organisation of project financing involvement (JSC AtomKapital). The project management system is being improved, implementation of projects is being monitored permanently, a programme of participants' motivation increase to reduce the cost and construction time is being implemented. The system of technical and economic analysis of projects for the search optimisation of design solutions in order to reduce the project budget is adopted. In 2014, all of the key construction projects of nuclear power plants abroad were realized as planned, the investment programme of JSC Concern Rosenergoatom is executed by 96%, portfolio returns of other investment projects of the Corporation increased by 6.8%.
Political risks ▲	The main risk factors in the reporting year were the sanctions pressure on Russia due to the Ukrainian crisis and the resulting lack of predictability of foreign partners, which is in direct dependence on various external political factors. In the context of a turbulent external environment, ROSATOM has consistently built up a dialogue with foreign partners. The main focus was on the development of pragmatic bilateral relations based on the mutual interest of the parties in the energy and nuclear safety.

Political risks ▲	In 2014, all key overseas projects of the Corporation were implemented or continued as planned. The portfolio of overseas orders on December, 31, 2014 was 101.4 billion US dollars, which is 39% higher than in 2013. The main growth was provided by the NPP construction projects abroad due to new contracts for the construction of nuclear power plants (up to 10 power units as of 2013). A positive indication that renewed interest of foreign countries in the development of nuclear power was the conclusion of 11 intergovernmental agreements and 18 interagency agreements.
Risk of asset loss and damage ▲	The Corporation employed a consistent sectoral system to prevent corruption and protect assets. The increased risk is caused by the projected increase in the number and scale of attacks on the rights and legitimate interests of corporations in crisis manifestations in the economy. Activities to minimize the risk are performed on the basis of the National Anti-Corruption Plan for 2014–2015, and in accordance with the laws of the Russian Federation. In 2014, the prevention and audit measures to protect assets brought about an effect worth RUB 5.3 billion.
The risk of deterioration of the socio-political situation in the regions of the Russian Federation ▲	The increased risk is caused by complications of the situation in the Russian economy. In order to reduce the risk in 2014, the Corporation developed an information system for monitoring the socio-political and socioeconomic situation and introduced it in 22 "atomic" cities. In 2014, the deterioration of the situation in the regions was not allowed.
Reputation risks ▲	<p>Risk growth was due to:</p> <ul style="list-style-type: none"> negative outlooks regarding the economic development of Russia that entailed a reduction of budget support to Russian municipalities and subjects that host nuclear industry facilities; stably negative dynamics of global uranium processing, which made the current mining of natural uranium by the shaft method at JSC PIMCU unprofitable, along with a number of other mining projects featuring a high; cost of extraction in Russia and abroad; because of this, the Corporation had to implement programs for the improvement of mining operational efficiency, including staff number optimisation at JSC PIMCU; implementation of construction projects of radioactive waste disposal facilities by the Corporation; a background factor was the persistent instability of activities to eliminate the consequences of the accident at the Fukushima-Daiichi NPP; to achieve risk reduction, work was done to build positive attitudes among the public regarding the development of nuclear technologies through information transparency and open interaction with all stakeholders. <p>In 2014, according to a poll conducted by Levada-Centre, in Russia the average percentage of supporters of nuclear power development among the population of Russia increased insignificantly and amounted to 56%. The share of supporters of nuclear power accounted to 72% of total respondents.</p>



4.2.3.

RISK INSURANCE

One of the main approaches to risk management is risk insurance. (Information about the used types of insurance is presented in the report of the Corporation for 2013).

To increase the reliability of insurance protection, the Corporation, jointly with the insurance company, continues working on the possibility of reinsuring the property risks of the Russian organisations operating through the international pooling system. In 2013, a sizeable part of the civil liability for the nuclear damage of Russian NPPs was reinsured in the international pooling system, which confirmed that the international nuclear insurance community recognised the sufficient safety and reliability of Russian NPPs.

International insurance inspections were with the participation of experts of the international pooling system conducted at the Beloyarsk (including primary test unit number 4 with the reactor BN-800 at the stage of preparation for the power start-up of energy), Balakovo, and Leningrad nuclear power plants, as well as Novovoronezh NPP-2, which is under construction.

The inspections analysed the risks associated with the handling of nuclear fuel, NPP operation, staff skill levels, fire safety, environmental monitoring, etc. From the inspection's findings, the international experts concluded that the safety level of the inspected plants met international standards and confirmed the possibility of reinsuring the property risks of the Russian organisations operating in the international pooling system. Beloyarsk NPP was re-inspected, and Balakovo and Leningrad nuclear power plants were inspected for the third time, and the international insurance experts concluded that a sufficiently high level of safety was achieved there and that substantial work had been done to follow the recommendations of previous inspections.

In 2015, the plan is to continue insurance inspections while maintaining the core enterprises of the nuclear industry.

To increase the reliability of insurance protection, the Corporation, jointly with the insurance companies, continues working on the possibility of reinsuring the property risks of the Russian organisations operating through the international pooling system

4.2.4.

PLANS FOR 2015 AND THE MID-TERM HORIZON

- Development of methodology of the individual key risks management, and its introduction into operational and project activities,
- Further development of the CRMS, with an emphasis on its integration with the process of strategic management to maximize the rapid identification of risks arising on the strategic horizon, and the organisation of effective management of those risks.

4.3.

MANAGEMENT OF FINANCIAL AND INVESTMENT ACTIVITY

Key results of 2014

2.4 billion euros

The project "Construction of Nuclear Power Plant Hanhikivi 1 in Finland" was approved for funding from the National Welfare Fund for a sum equal to 2.4 billion euros

6.8%

The actual rate of return of the investment portfolio increased by 6.8% compared with 2013 (investments from all sources of financing in comparable terms)

~ 14.4 billion rubles

Economic benefits from the use of intra-group financing in general industry cumulatively for the period 2010-2014 amounted to ~14.4 billion rubles



FIRST DEPUTY CEO FOR CORPORATE FUNCTIONS AND CHIEF FINANCIAL OFFICER NIKOLAY SOLOMON

What do you think are the most important financial and economic results of ROSATOM in 2014?

During the year, despite the worsening of the macroeconomic Environment, the fall of the ruble, the growth rates on loans, the introduction of sanctions against Russia and so on, the Corporation was able to improve the financial and economic performance. In comparison with 2013, the cost of 1 ruble of revenue decreased by 5%. The increase in EBITDA was 29%. Labour productivity rose by 9%, return on sales by 6%, and net profit margin by 14%.

Such positive dynamics of indicators was achieved by increasing the production of electricity up to 180 billion kWh, by increasing the volume of work on the construction of nuclear power plants abroad, and an increase in the supply of products. The considerable contribution was made by comprehensive efforts to reduce production costs, increase labour productivity, and optimize working capital throughout the industry. And, of course, the profitability of industry has a positive effect through devaluation of the ruble, whereas the main effect in terms of profitability growth will be seen in 2015.

In 2014, the Corporation began to assess the adjusted indicator of adjusted free cash flow (SSDP) in place of the EBITDA indicator. What caused the choice of this indicator?

For the first time, the SSDP figure was applied in 2013. Its appearance was preceded by a discussion of the need to measure the current performance, not only on the basis of sales volumes and the level of expenses, for which the EBITDA figure is traditionally used, but also taking into account cash flow. The main objective of introducing the SSDP figure is the assessment of formation of its own investment resources, excluding loans. Based on its amount, investment decisions may be made.

In comparison with 2013, the cost of 1 ruble of revenue decreased by 5%. The increase in EBITDA was 29%. Labour productivity rose by 9%, return on sales by 6%, and net profit margin by 14%



For simplicity, you can imagine SSDP as an EBITDA figure, adjusted for changes in working capital, and the industry is predisposed to its growth with the level of vertical integration, market conditions, and the duration of production cycles. It should be noted that the State Corporation traditionally paid a lot of attention to optimize the various elements of working capital (inventories, trade receivables, and suppliers). Now the work on each of these elements, as well as the operating result (EBITDA) of each enterprise sector and the Corporation as a whole are combined through the SSDP figure. And this figure is decomposed into the KPI cards of industry executives.

What mechanisms are provided to ensure the financial stability of the State Corporation Rosatom in the medium and long term? Do you plan to attract external debt financing in the coming years?

In the coming years, the attraction of external debt financing is planned, primarily for large projects on the construction of nuclear power plants abroad, especially the project on the construction of NPP Hanhikivi-1 in Finland and NPP Akkuyu in Turkey. It is also planned to attract financing for projects to build nuclear power plants in Russia. The remainder of the investment programme is planned to be financed from the own funds.

However, taking into account the course of the Corporation for the extension of time and reducing the cost of the loan portfolio of the industry, I am absolutely convinced that we can't omit the work on diversification of financial instruments, including access, to international capital markets. Issue of securities by our "daughters" would be inappropriate, because JSC Atomenergoprom is more attractive for this. That is where all the main civil assets are consolidated, and the availability of credit ratings from international "Big Three" rating agencies at the sovereign level plays an important role as well. JSC Atomenergoprom may issue Eurobonds and, in the future, we are looking forward to this. But, the final decision on the securities issue, of course, will be accepted according to the market conditions and the international political situation.

It is also planned to attract financing for projects to build nuclear power plants in Russia

4.3.1.

MANAGEMENT OF FINANCIAL ACTIVITY

4.3.1.1. Financial strategy of State Corporation Rosatom

The financial strategy is a part of the overall development strategy of the Corporation and it will last until 2020 (hereinafter defined by the general principles). Finances are the base from which the businesses start their planning of key indicators for the medium and long term; they are a measuring instrument of the success of projects and the indicator of the health of the company.

Taking into account the scale of business of the State Corporation “Rosatom”, its impact on GDP of the country, the amount of social obligations in Russia and image / international competitiveness, financial stability has always been paid a special attention.

The main objective of ROSATOM’s financial strategy is to ensure the financial soundness of the Corporation and its organisations under changing conditions and to arrange for the most efficient financing and management of financial risks.

The objectives of the financial strategy of the work with the banks, development of the cache pool, debt management, and foreign exchange risk in 2014 are achieved even in conditions of turbulence on the financial markets. However, in some cases it was necessary to replace the tools of their achievement. To improve the efficiency of treasury functions, in 2014 the work continued in the following areas:

- Consolidation of temporary redundant cash in the pool leader accounts*;
- Increasing payment planning accuracy (rolling forecast of liquidity);
- Securing the cost of servicing the consolidated debt portfolio at a competitive level;
- Centralisation of treasury operations.

4.3.1.2. Results of performance of financial strategy and providing the creditworthiness of JSC Atomenergoprom in 2014

Cooperation with Russian and foreign banks

Key transactions:

- The syndicated loan engagement of JSC Technabexport from a pool of foreign banks was closed under the guarantee of Atomenergoprom;
- A bond issue of JSC Atomenergoprom with nominal value of 10 billion rubles, placed in 2010, was repaid, and at CJSC MICEX Stock Exchange eight issues of exchange bonds of JSC Atomenergoprom were registered, with nominal value of 100 billion rubles;
- The decree of the Government of the Russian Federation from December, 30, 2014 No. 2795-pc, provides the inclusion of the project Construction of NPP Hanhikivi 1 in Finland to the list of projects approved for funding from the National Welfare Fund.

Maintenance of credit ratings

Credit ratings from all international agencies of the Big Three were assigned to JSC Atomenergoprom, two of which (S&P, Fitch Ratings) as of December, 31, 2014 were at the level of the sovereign credit ratings of Russia.

Financing of the investment programme and the provision of liquidity

To centralize treasury operations and intra-group financing, development was continued to ensure liquidity for timely and full financing of the investment programme of the nuclear industry entities on optimal terms. Companies were able to make better use of intra-group financial resources.

Over the period of 2010–2014, the economic effect of the use of the intra-group financing was about RUB 14.38 billion in the sector as a whole.

To reduce the costs of trade finance transactions and loans, the Corporation continued using guarantees as a means of both ensuring advance repayment and contractual obligation fulfilment in purchases at its own and extra-budgetary funds and a measure of reduction of expenditures to attract financing.

Establishment of AtomCapital

Establishment of JSC AtomCapital (a 100 % affiliate of ROSATOM that functions as the pool leader for intra-group financing of FSUEs) was in 2013. Its establishment helped to optimise the debt burden among JSC Atomenergoprom and companies and organisations outside its system in 2014.

Improvement of investment attractiveness of the Russian nuclear industry

ROSATOM continued working to improve the investment attractiveness of the Russian nuclear industry, attracting strategic investors to NPP construction projects in Russia and abroad, maintaining relations with current investors and creditors, as well as establishing relations with and limits in new banks:

- Visits to the Novovoronezh and Leningrad NPP for the representatives of Russian and foreign banks, international credit rating agencies was organized;

- Representatives of the Corporation participated in the discussions on strategies for centralizing treasury at the conference “Treasury and Financial Risk Management: best practices and management solutions financial performance”;
- A roundtable was held on financing for NPP construction projects in the international forum “ATOMEXPO 2014”;
- A series of meetings was organized for the management of ROSATOM with the representatives of banks and institutional investors in Beijing and Singapore in a non-deal roadshow format.

Credit ratings of JSC Atomenergoprom as of December, 31, 2014: BBB- / Baa3 / BBB (S&P / Moody’s Investors Service / Fitch Ratings).

4.3.1.3. Goals for 2015 and the mid-term horizon

Given the existing risks of growing the debt burden under external factors it is planned to:

- Maintain strict repayment discipline as related to intragroup financing;
- Improve planning accuracy of cash flow in the medium term;
- Avoid internal competition over credit resources between entities;
- Continue centralising cash management;
- Focus on relations with the core banks as the most reliable partners in terms of availability of funding in volume both of funds and cost;
- Strictly fulfil obligations, including covenants, with existing creditors (including consortium loans) and rating agencies;
- Broadening of the array of financial instruments (in case of economical expediency) used to reduce the debt servicing cost and ensure timely and full-scale financing of the sectoral organisations’ investment programme on acceptable terms.

* Pool leader is the organisation of the Corporation, on the accounts of which is the accumulation of available funds and their subsequent reallocation between the organisations of the Corporation by the loan agreements, appointed by decision of the executive authorities of the State Corporation Rosatom.

4.3.2.

MANAGEMENT OF INVESTMENT ACTIVITIES

DIRECTOR FOR INVESTMENT MANAGEMENT AND
OPERATIONAL EXCELLENCE
EKATERINA LYAKHOVA

By what is Rosatom guided in building up and optimising its investment project portfolio?

The problem of optimizing the portfolio of investment projects is to maximize the portfolio returns and minimize the payback time. This problem is solved by changing the list of projects provided the following conditions: the amount of invested funds should not exceed the available consolidated investment resources and all works should be financially secured in the projects aimed at the fulfilment of the requirements of security.

What are the main results of investment programme performance for 2014?

*A number of measures taken, such as the optimisation of project costs with the help of technical and economic analysis and the abandonment of inefficient projects allowed in the reporting year to increase the profitability of the portfolio of the State Corporation from 10.3% to 17.8%.**

The main indicator of the efficiency of the portfolio is the so-called interval profitability of the portfolio. The meaning of this indicator is to estimate how much profit we can earn until 2030 if we invest additionally in the projects that are a part of the portfolio at the moment.

The performance of the investment programme improved as well: from 77% in 2013 to 82% in 2014. This was achieved largely due to the approval of the list of investment projects 5 months earlier than in 2013.



82%

The performance of the investment programme improved as well: from 77% in 2013 to 82% in 2014. This was achieved largely due to the approval of the list of investment projects 5 months earlier than in 2013.

Talking about the structural changes, we have synchronized process of investment planning, medium-term planning (business planning) and budgeting for the first time, and we made all that on a single economic model. This has enabled us, for example, to evaluate the economic performance under different scenarios of the investment programme of the State Corporation.

What investment areas will be priorities in 2015 and in the mid-term horizon?

The portfolio of Rosatom includes a lot of projects aimed at updating the fixed assets, infrastructure, and security. They do not bring additional income, but they are necessary for the smooth operation of enterprises.

Also, projects aimed at improving the efficiency of infrastructure provision are needed. In 2014, it was decided to form the individual limits on the development of so-called non-investment infrastructure projects, such as IT programs.

But, of course, it is a priority to invest in projects that will provide a cash flow basis for the future. These are projects that provide a high return and short payback, such as development projects for the main business and new directions. Of course, it is important to assess the risks of the project and its significance to the industry. All decisions are made on the basis of the balance of the required short-term tasks and long-term prospects.

* The actual value in 2014 compared to the planned. The investments at the expense of disposable (consolidated) investment resources (CIR), special reserve funds and other external sources are accounted at calculation.

4.3.2.1. The main approaches to investment management

- Collegial decision-making by the Investment Committee of ROSATOM and the investment committees of subsidiaries;
- Consideration of opinions of independent experts to improve the quality of investment decisions;
- Formation of a portfolio of projects of the Corporation for the year and medium term, its annual updating;
- Making decisions on projects and monitoring their implementation at the corporate level;
- Control at the corporate level of deviations from the plan of projects implementation in organisations of the sector;
- Use of the “gate” approach in the implementation and monitoring of projects;
- Complex audit of the project that allows us to generate recommendations to improve the planning and implementation of projects;
- Development of alternative ways of fund raising.

4.3.2.2 The largest investment projects and directions

Table. Key investment directions / projects

Investment areas / project description	Description
Natural uranium in Russia <small>See “Mining division” and the annual report of JSC Atomredmetzoloto for 2014.</small>	The projects are aimed at developing the raw material base and production of natural uranium in Russia and to increase operational efficiency. By 2019, it is planned to reduce the unit cost of production of natural uranium by 30% for the production of underground mining methods and by 10% for situ leaching method of mining.
Production of nuclear fuel and uranium enrichment <small>See “Fuel Division” and the annual report of JSC TVEL for 2014.</small>	The projects are aimed at modernisation and technical upgrading of the required capacity for the effective and timely execution of orders for the supply of nuclear fuel and HFCs.
Mechanical engineering <small>See “Machine-Building Division” and the annual report of JSC Atomenergomash for 2014.</small>	<p>The projects are aimed at improving the operational efficiency and ensuring the products’ production for nuclear and thermal power and petrochemical industry.</p> <p>The result is the concentration of the main production in 3–4 areas, the consolidation of scientific and engineering assets, and the sale of non-core assets and surplus property.</p>

Building of NPPs in Russia

See “Engineering Division” and the annual report of JSC NIAEP for 2014

Beloyarsk NPP, power unit number 4	The result is the construction of 800 MW power unit in Zarechny town, Sverdlovsk region.
Rostov NPP, power units number 3, 4	The result is the construction of two power units of 1070 MW each in Volgodonsk, Rostov region.
Novovoronezh NPP-2, power units number 1, 2	The result is the construction of two power units of 1198.8 MW in Novovoronezh Voronezh region.
Leningrad NPP-2, power units number 1, 2	The result is the construction of two power units of 1170 MW each in Sosnovy Bor, Leningrad region.
Kursk NPP-2, power units number 1, 2 (in the planning stage)	The result is the construction of two power units of 1255 MW each on the project VVER-TOI in Kurchatov of the Kursk region.

Building of NPPs abroad

See “International Business”

NPP Hanhikivi 1	The project includes the construction and operation of one NPP power unit of the Russian project NPP-2006 with capacity of ~1,200 MW in Finland. Within the project, the Corporation acts as a general contractor, a long-term service provider for the supply of fuel and service, as well as a shareholder of the customer-project company.
NPP Akkuyu	The result is the construction and commercial operation of NPP consisting of four power units of 1200 MW capacity each in Turkey.

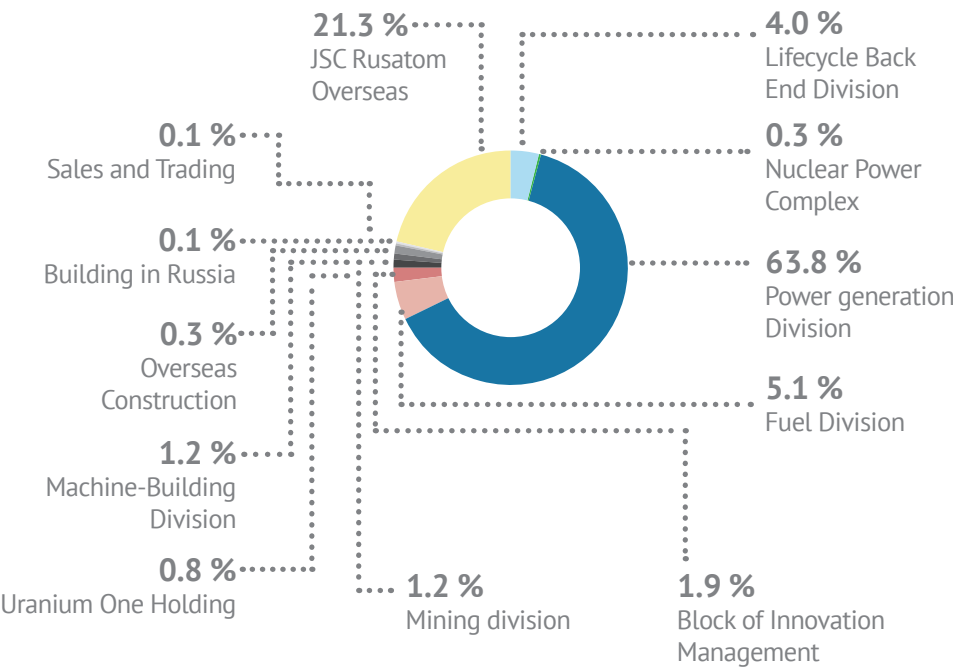
Nuclear energy technologies of new generation

See “Innovative Development”

Building multi-purpose research reactor on fast neutrons MBIR	The project is aimed at expanding experimental capabilities of the base of Russian research reactors.
Development of technology and development of production of uranium plutonium oxide fuel for fast neutron reactors (MOX fuel)	The project is aimed at improving the efficiency of natural uranium by involvement in the nuclear fuel cycle fissile materials obtained by SNF reprocessing.
“Proryv” (Breakthrough) – experimental demonstration power complex	The programme is aimed to demonstrate the circuiting of the nuclear fuel cycle on the basis of a fast-neutron reactor. The result is the creation of a pilot demonstration power complex, which includes the construction of three facilities: BREST power unit with a fast neutron reactor, module of fabrication / re-fabrication, processing module.
Research and development in the field of controlled thermonuclear fusion	Project is aimed at conducting a full-scale research of equipment performance and refinement of technological process.

Investment areas / project	Description
Nuclear technology for non-energy markets See "Business diversification"	
Nuclear medicine	The result is the creation of equipment for nuclear medicine and infrastructure to provide services using the manufactured equipment, the creation of high-tech industries for the production of radiopharmaceuticals for PET diagnosis.
Diagnostic Centre of Nuclear Medicine in Snezhinsk	The project is aimed at creating a medical centre of positron emission tomography in order to provide health care services to residents of the Chelyabinsk region and the commercial launch of the cyclotron radiochemical complex created in FSUE VNIITF.
Pilot centres of irradiation	The project will provide a new service offering sterilisation of medical products.
Management of RAW and SNF See "Solving the problem of the nuclear legacy"	
The construction of the dry storage of irradiated nuclear fuel	The project will allow us to unload near-station storages of irradiated nuclear fuel at NPPs in Russia and improve the reliability of the storage of SNF.
Construction of storage facilities for safe storage of medications of Radium State Fund of Russia	The result is the construction of the complex repackaging and storing of medications of State Radium Fund.
Creation of pilot demonstration centre for SNF reprocessing, based on innovative technologies	The project is aimed at creation of a system of closed fuel cycle with the SNF managing. The result is the construction of a plant for SNF reprocessing, which will increase the volume of reprocessing in 2020 to 250 tonnes per year in U (currently 90 tons / year are processed on RT-1).
The Nuclear-Powered Icebreaker Fleet See "Nuclear-Powered Icebreaker Fleet"	
Continuation of the construction of new Project 22220 nuclear icebreakers	The result is construction of three versatile, new-generation nuclear-powered icebreakers.
Port fleet	The project is aimed at the organisation of the port fleet in the Arctic zone of the Russian Federation in the port of Sabetta (Yamalo-Nenets Autonomous District).

The structure of investments in the context of business trends in 2014*



Project funding

Since 2013, the State Corporation “Rosatom” has pursued a policy for the development of the third core of business using the mechanisms of project financing. The approach allows us to realize significant industry tasks:

- Reducing the need for our own investment resources of the sector up to 20–30% of the generic investment requirements of approved projects;

- The ability to develop effective projects not related to the basic core of business;
- Increase the share capital of the Corporation profitability (IRR portfolio of projects) through the use of leverage in project financing;
- Improving the quality of investment projects implemented through the external independent examination and control by financial and strategic investors;
- Projects implementation risk sharing with foreign investors involved in co-financing.

As of December, 31, 2014, more than 20 projects in various stages of study, totalling more than 50 billion rubles, were in the portfolio of the State Corporation “Rosatom”, the implementation of which is expected on account of the project funding

* Investments, the actual amount of funding (with VAT) in the direction of civil projects from all sources, excluding intergroup turnover in the circuit of organisations of ROSATOM on a path of consolidated companies in accordance with prevailing budgetary perimeter as of December, 31, 2014.

4.3.2.3. Problems of the reporting period, and mechanisms of their solution

Table. The main problems of investment management and methods for their solution

Problems	Methods of solution
The deficit of investment resources, which limits the ability of the portfolio of projects, forcing it primarily to fund obligations	<ul style="list-style-type: none">• Promotion of external financing;• Development of the employees' motivation system of the industry;• Refusal or suspension of a number of projects based on the results of testing of business plans of organisations in several scenarios;• Optimisation of project budgets using technology and price audit of projects.
Handling large volumes of information, long-term procedures	<ul style="list-style-type: none">• Development of information system of project portfolio management. All key users are connected to the information system of project portfolio management that enables regular monitoring of controllable parameters of projects in the format of plan-fact-forecast in automatic mode;• Improvement of the reporting system and the quality of graphics of the upper level of investment projects;• Development of a system of delegation of authority.
Quality of justifications for the investment requirements	<ul style="list-style-type: none">• Development of standardisation of requirements for project management, supporting materials, and improvement of quality control procedures for the materials;• Development of the Institute examination of the projects;• Development of industry knowledge base for investment and project activities.
Significant changes in the external environment (macro parameters)	Increase of investment efficiency;; the search for new technological and design solutions for ongoing projects aimed at optimizing investment costs, the accuracy improvement of investment and project planning, the strengthening of control over the targeted use of funds, and the rejection of inefficient projects.

4.3.2.4. Goals for 2015 and the mid-term horizon

It is planned to conduct work aimed at increasing the efficiency of the project portfolio through the development of the management system and improvement of the quality of project documentation in the short and medium term, including:

- The search for new technological and design solutions that optimize project budgets;
- Implementation of additional motivation system for members of investment project activities that promote the search of optimisation of design solutions, improving the profitability of investment of projects;
- Improvement of the system of projects' implementation control, including the strengthening of personal responsibility for the implementation of projects;
- Improvement of the automation solutions for reporting system in the area of investment

and project management, improvement of the functional information system for monitoring and scenario analysis of the project portfolio;

- Delegating more authority and responsibility to divisions on investment decisions;
- Improving the quality of investment analysis and planning, project management, accuracy, and transparency of the calculation of indicators;
- Development of a functional knowledge management system in the field of investment and project activities;
- Improvement of the efficiency of processes of investment management, investment services work, the adjustment of existing processes, and completion of regulatory framework and guidance documents.



4.4.

ROSATOM PRODUCTION SYSTEM



POINT OF VIEW

DIRECTOR FOR ROSATOM
PRODUCTION SYSTEM
SERGEY OBOZOV

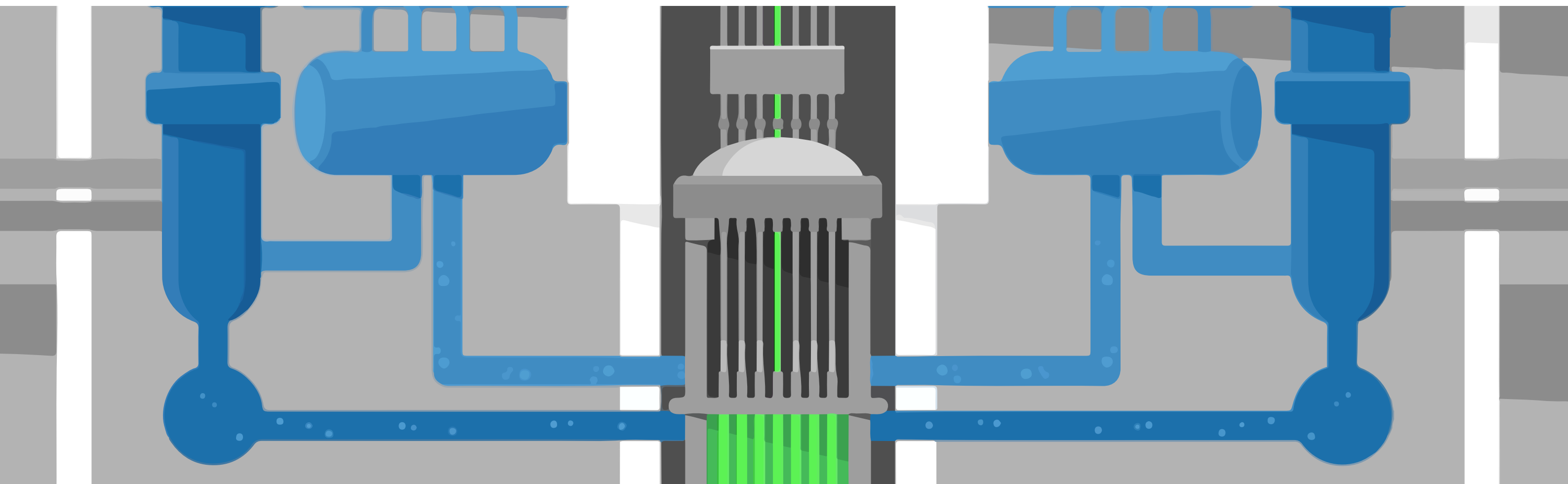
2014 became, for us, representative and effective in terms of the number of projects implemented by top managers of the State Corporation "Rosatom". Now the production system became an interweaving of projects and suggestions for improvement that come from the bottom of the enterprises, with projects of leaders that have downward direction. An example is the personal PSR project of CEO Sergei Kiriyenko, the purpose of which is the optimisation of the life cycle of a nuclear power plant construction from the memorandum for its construction abroad to industrial exploitation. So far, this cycle is 12 years, reserves were found to reduce it to 6 years 9 months. Now it is important to achieve this on all Russian and foreign constructions. An ambitious goal is to reduce the cycle of NPP construction up to 6 years.



KEY RESULTS OF 2014

68,000 Approximately **68 thousand** suggestions for improvement were implemented.

97 More than 97 industrial PSR projects were implemented.



4.4.1.

PRIORITY GOALS FOR 2014

ROSATOM Production System (PSR) is a culture of lean manufacturing and a system of continuous improvement of the processes to gain a competitive advantage at the world level. The main goal of the PSR is the reduction of all types of losses in the production and business processes, and improvement of the efficiency of the State Corporation "Rosatom".

Work on the development of the PSR in 2014 was focused on projects aimed at reducing inventory levels, increasing productivity, reducing time of processes, and reducing production costs.

Priority goals for the year:

- Mega flows (opening of projects that integrate enterprises of industry at inter divisional level),
- Production planning (creation of the centre of division inter planning),
- The PSR-enterprises (the creation of the first prototypes of the PSR-enterprises),
- Development of the PSR leaders,
- Implementation of the PSR in all areas of organisations;
- Implementation of the corporate culture of frugality.

4.4.2.

KEY PERFORMANCE RESULTS

Table. The results of the implementation of projects aimed at increasing production efficiency, including the PSR

Division / complex / Enterprise	The results of the implementation of projects	Shortening, days
Fuel Division	1. Gas centrifuges production time was reduced at PJSC KMZ.	500 ➤ 189
	2. Fuel production time was reduced at PJSC MSZ for:	
	RBMK (high-power channel-type reactor):	29 ➤ 22.5
	• Time of the process was reduced;	➤ 27.3
	• Work in progress was reduced.	
	Reactor facility VVER-440:	33.4 ➤ 24.2
	• Time of the process was reduced;	53.7 ➤ 38
	• Work in progress was reduced	

Division / complex / Enterprise	The results of the implementation of projects	Shortening, days
FSUE FYAO GHK	Reduced time of reception of spent nuclear fuel RBMK-1000	28 ➤ 18
Power Generation Division	Reduced time to replace the fuel channels and restore the graphite stack at Leningrad NPP	129 ➤ 55
Machine-Building Division	Reduced time for the manufacture of steam generators at the JSC OKBM Afrikantov	122 ➤ 90
The block of Innovation Management	Reduced time for preventative maintenance of VK-50 reactor at JSC NIIAR	21 ➤ 16
Engineering Division	Reduced installation time of polar crane rails at Rostov NPP	66 ➤ 45
NWD	Reduced time for assembly of electromechanical steering actuators on the FSUE Production Association Sever	21 ➤ 14

NWD

11 industrial, 11 division, and more than 250 plant PSR projects were realized on the enterprises of NWD in 2014

Required equipment manufacturing time was reduced by more than 2 times for the production of parts made of special alloys, and the downtime of critical equipment decreased more than 3 times at FSUE Mayak. As a result, volumes of work in progress in the flow declined sharply from 50 to 25 days.

The time of manufacture of containers for special items was reduced by 68% at the FSUE Kombinat

Elektrokhimpribor within the framework of the same project; as a result, for the first time over the past few years, assembly line does not feel the deficits of them.

Fuel Division

The number of employees who submitted suggestions for improvement increased by 4,2 times, up to 68.5 thousand PPU in 2014, compared with 16.3 thousand in 2012 and 40.2 thousand in 2013. The economic effect from the implementation of proposals was 474 million rubles.

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The results of major PSR projects of Fuel Division

PJSC MSZ

"Production on the principles of pulling system in the flow of fuel fabrication for RBMK and VVER reactors."

17%

Labour productivity growth by 17% on RBMK

10%

Labour productivity growth by 10% on VVER-440.

PJSC KMZ

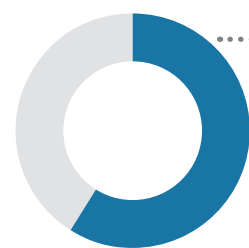
"Reducing the cost of production of gas centrifuge components in conditions of decline in production"

12.8%

The result: reduction of cost of production for the 15 parts by 12,8%.

JSC PA ECP

"Optimisation of the supply of PAF of JSC PA ECP to the JSC CHMZ"



..... The result: reduced tanks turn-around time by 59 %

Power Generation Division

PSR project was launched to optimize operations, to replace the fuel channels and restore the graphite stack of the reactor at power unit number 2 of Leningrad NPP, which was stopped for scheduled overhaul in order to reduce all costs, including the time spent on the overhaul of power unit (up to 180 days instead of 229 planned).

Machine-Building Division

Programme of division reconfiguration is implementing at JSC Atomenergomash that includes compaction of areas, exclusion of non-core assets, unused facilities and lands. Income from the sale of non-core assets in 2014 was 2.4 billion rubles. Number of PSR projects in 2014 was 91 (increase compared to 2013 by 2.2 times). The majority of projects are implemented at the JSC OKBM Afrikantov and JSC OKB Hidropress, which launched the process of formation of PSR-enterprises. The cumulative effect of projects is more than 354 million rubles at the cost of implementation less than 12 million rubles.

JSC TsKBM in the reporting year developed a new design of the main circulation pump on the basis of a single-shaft layout, water-cooled motor, and bearing assemblies for VVER-TOI and NPP-2006, which will significantly improve the fire safety of nuclear power plants by replacing oil lubrication with water. It is a personal PSR project of CEO of JSC Atomenergomash Andrey Nikipelov, who set a target to achieve a reduction of the pump manufacturing time by 20% from 900 to 720 days (time of manufacture of individual parts of the pump have been reduced from 210 to 170 days).

Lifecycle Back End Division

Personal Project of Director for Public Policy on Radioactive Waste, Spent Nuclear Fuel and Nuclear Decommissioning Oleg Kryukov "Cutting up of nuclear submarines reactor units" aimed at reducing the time of cutting blocks of nuclear submarines from 60 to 28 days. That will allow completion of the cutting of nuclear submarine reactor units by 2020, instead of the planned 2025. The application of new approaches on enlargement of nuclear submarines' hull sections to be cut have reduced the operating time from 60 to 30 days.

Block of Innovation Management

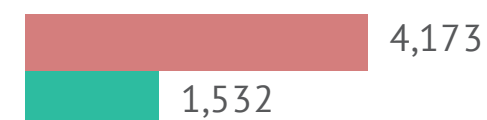
Personal PSR project of Deputy Chief Executive Officer for Innovation Management Vyacheslav Pershukov aimed at reducing the cost of MBIR. The initial cost of the project was 48 billion rubles. The reserves to reduce the cost by 7 billion rubles were found after the analysis of functional and work with future suppliers. The goal is to bring the cost up to 34 billion rubles.

JSC Institute of Reactor Materials is one of the champions of PSR. More than 70% of the staff is involved in the implementation of 10 projects (5C system covers more than 83% of work places). In particular, within the project on reduction of

losses during transportation and manufacturing operations of the active zone of the reactor IVV-2M, only through the introduction of improvement proposals was the reduction of the time from 40 to 32 hours achieved.

Dynamics of accepted proposals for improvement, quantity

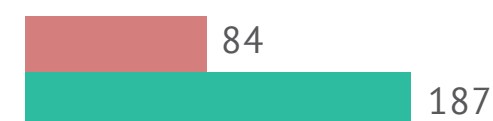
Mining division –63 %



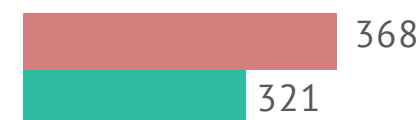
Machine-Building Division +201 %



Block of Innovation Management +122 %



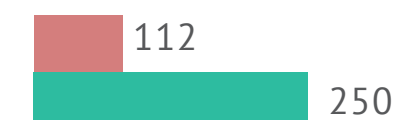
Lifecycle Back End Management Division –13 %



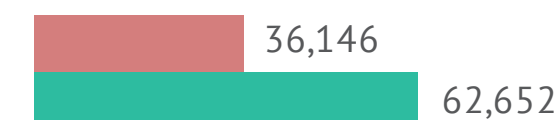
2013

2014

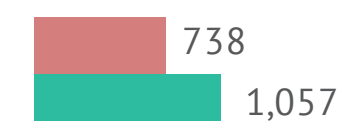
Engineering Division +123 %



Fuel Division +57 %



NWD +43 %



TOTAL +43 %



4.4.3.

GOALS FOR 2015 AND THE MID-TERM HORIZON

The main focus in 2015 will be on PSR-enterprises and on the creation of PSR sample in the building.

Main objectives: development of the process of building PSR-enterprises and to achieve maximum results in the PSR-enterprises* within the strategic objectives of the State Corporation "Rosatom" and the objectives of the enterprise.

By the end of 2015, the experience will be implemented in the rules of work on construction PSR-enterprises, which will be a handbook for replication to other companies within the industry.

* Reference. PSR-enterprises of the State Corporation "Rosatom", JSC KMZ, PJSC MSZ, JSC UEHK, Smolensk NPP, Balakovo NPP, JSC TsKBM, JSC OKBM Afrikantov, and JSC IRM.

4.5.

MANAGEMENT OF PROCUREMENT ACTIVITY

KEY RESULTS OF 2014

19.5 ×

billion rubles

The overall economic effect of the competitive procurement procedures

13.4% ×

Reduction of costs for the purchase of goods (works, services) per unit of production by 13.4%

99% ×

The share of electronic procurement

13% ×

The share of purchases from small and medium-sized businesses is 13% (from the concluded contracts)





DIRECTOR OF PROCUREMENT DEPARTMENT

ROMAN ZIMONAS

The procurement system of ROSATOM has been highly praised several times by both the Government of Russia and the expert community. What do you think is the reason for such a success?

In our work, we are guided by six basic principles: compliance with the legislation and basic principles of business organisation, the strict requirements for product quality and optimality of cost, transparency of activity and the use of anti-corruption mechanisms. All these principles are interrelated elements of the procurement system, which in combination allow the achieving of optimal consumption of resources and maximum economic effect. The procurement system in six years allowed saving about 250 billion rubles. This is the total amount of savings obtained through a variety of optimisation mechanisms, including the benefit from the price reduction of competitive procedures, control of the initial maximum prices and economy on construction and installation works. During this time, the volume of open competitive procedures increased from 20 to more than 550 billion rubles a year (according to the results of 2014). And it is important that 99% of procurement takes place on electronic trading platforms.

At the national level, special attention is paid to support of small and medium businesses. Does Rosatom procurement system allow supporting this business?

Rosatom enterprises are interested in attracting reliable and responsible suppliers, among manufacturing companies and large construction companies as well as among small and medium businesses. In 2014 a number of decisions aimed at the development of cooperation there were implemented with small companies: the form of procurement documentation was typified, the site of Rosatom published a list of products for purchase only at small and medium businesses, financial barriers are removed, and a "single window" system is established. There have also been reduced and simplified forms of procurement documentation; the work was carried out to change the selection criteria in making such purchases. For example, we have decided not to install requirements such as availability of financial resources in case of requirement to secure the contract, performance of the whole volume of work by procurement party by own forces, presence of experience, personnel and logistical resources for these procurement participants.



A special working group was established in the Council for Transparency of ROSATOM, that examines the involvement of SMEs in the procurement of nuclear industry enterprises, analyses the procurement practices with the participation of smaller organisations, analyses and identification of the causes impeding the cooperation.

All these measures are producing results. If in 2013 the share of small and medium enterprises was 11% in 2014 it was already 13% of the total procurement of nuclear industry enterprises. 19,314 contracts were concluded totalling more than 70 billion rubles.

What are the areas of the procurement system of Rosatom in the short term?

Within the development of the procurement system of ROSATOM, we continue the project on management of consolidated needs of the industry. The enlargement of complex orders, purchased equipment and materials for the nuclear industry, as well as long-term contracts are our priorities in 2015.

This will allow us to fix prices for the long term, unifying the technical characteristics of the acquired products, implementing the increased quality control directly in the production process, ensuring the delivery "just in time" and reducing the inefficient stocks in the warehouses of our businesses.

70 billion rubles

In 2013 the share of small and medium enterprises was 11% and in 2014 it was already 13% of the total procurement of nuclear industry enterprises. 19,314 contracts were concluded totalling more than 70 billion rubles

4.5.1.

FULFILMENT OF THE PROCUREMENT PROGRAMME

4.5.1.1. Fulfilment of the Procurement Programme

In 2014, according to the Annual Procurement Programme, “Rosatom” and its organisations planned from their own funds to hold 37,500 competitive procurements; 37,000 competitive purchases were held for an overall amount of RUB 432 billion with an economy of RUB 17.1 billion (6.9% of the amount of the competitive purchases). There were signed contracts with 15,697 contractors. The main part of procurement of material and technical resources and equipment of domestic production (89%) makes equipment valued at over 100 million rubles.

In 2013, ROSATOM planned to hold 806 competitive procurements with federal budget funds allocated to it and in accordance with the Annual Procurement Programme. 806 competitive procurements were held totalling RUB 125.4 billion; procurement savings were RUB 2.4 billion (2 % of the competitive procurement amount).

The main document that regulates the procurement activities of ROSATOM is the Uniform Nuclear Industry Procurement Standard (UNIPS)

Management and control bodies:

- Central Procurement Commission,
- Department of Internal Control and Audit,
- Central Arbitration Committee of the Corporation and arbitration committees of divisions
- Controlling Committee.

Procurement websites:
www.rosatom.ru/en/about/procurement_policy/
www.zakupki.rosatom.ru

Table. Amount of competitive procurements of ROSATOM and total efficiency*, RUB billion

	2014	2013	2012
Total amount of public placement of competitive procurement requests, including	557.4	509.50	389.00
using ROSATOM’s own funds	432	379.00	313.00
using federal budget funds	125.4	130.5	76.00
Total effect, including:	19.5 (5.3 %)	22.0 (6.2 %)	20.0 (5.14 %)
efficiency of own funds (% of the total amount of competitive procurement)	17.1 (6.9 %)	20.3 (6.7 %)	18.0 (5.76 %)
efficiency of placement of an order using federal budget funds (% of the total amount of competitive procurement)	2.4 (2.0%)	1.7 (3.4%)	2.0 (2.55%)

* The percentage of savings, which demonstrates actual savings on the competitive procurements which led to contract signing, is provided. Only released procedures are taken into account.

Also in the reporting year:

- was executed the order of Prime Minister to disclose information on contractors – 100% of the information was disclosed (disclosure of information on 23 642 counterparties);
- to prepare the application of the provisions of the Federal Law of April, 05, 2013 No. 44-FZ “On the Contracting System of Procurement of Products, Works and Services for the Public and Municipal Needs” was initiated a three-year plan of public procurement (procurement schedules on the means of federal budget, according to the new rules of three years plan, are on the site zakupki.gov.ru);
- was introduced a categorical control logistics in 48 organisations of the Corporation. Also were conducted procurement procedures for different categorical strategies by 109.6 billion rubles, the economic effect amounted to 3,2 billion rubles, the number of procedures has decreased by more than 40%. In 2014, the coverage of categorical management was 117 billion rubles according to published procedures with strategies;
- was held VI International Forum of Nuclear Industry Suppliers “ATOMEX 2014” (Moscow). The forum was attended by over 500 delegates from Germany, Finland, France, Russia, Czech Republic, Bangladesh, Japan and Turkey.

ROSATOM was awarded the diploma of the Federal Antimonopoly Service “For the development and implementation of modern and transparent rules on procurement of the State Corporation Rosatom, ‘the creation of best practice of 223-FZ performance’”

4.5.1.2. Perfection of procurement system

In 2014, the Uniform Nuclear Industry Procurement Standard introduced several changes, including:

- the exclusion of the provisions on acceptability of self-determination of the customers about the procurement cost of up to 100 thousand. Rubles, including VAT;
- the tightening up of provisions on the purchase by a single supplier, including the reduction of additional purchases volume from a single supplier from 30 to 10%, a number of reasons for purchases from a single supplier is refined by the additional terms of possibility of their implementation only if there is no time to conduct a competitive procurement;
- limited opportunities for private purchases and purchases from a single supplier of products included in the list of special goods, works and services for the nuclear industry.

In 2014 two meetings of the Council for Transparency were held to improve the transparency of the activities of ROSATOM, which resulted in a significant change in UNIPS, directed to:

- protection against the risk of corruption,
- improvement of the quality of the purchased products,
- shortening of the procurement procedure

4.5.1.3. Expansion of access of small and medium businesses to procurement procedures

Within the framework of plan “Expansion of access of small and medium-sized enterprises to the procurement of infrastructure monopolies and state-owned companies”:

- amended the provisions on procurement, to support purchases from small and medium-sized enterprises (SMEs);
- management performance indicator was introduced (the share of purchases from SMEs).

Within the framework of Russian Government Decree of December, 11, 2014 No. 1352 “On peculiarities of participation of small and medium enterprises in the procurement of goods, works and services of certain kinds of legal entities” list of products purchased exclusively at small and medium-sized businesses was approved, a separate standard form procurement documentation for SMEs was developed, which includes the form “Information about being small and medium-sized businesses”.

Forms of procurement documentation were simplified, a separate template for procurement among the participants which are SMEs was developed, and optimisation of the selection criteria in procurement, where only SMEs are participants, was worked out in order to increase the access of SMEs to the procurement procedure.

At the end of 2014 the share of purchases from SMEs was 13% of the total number of concluded contracts. The total sum of contracts that were signed with such organisations amounted 70 billion rubles.

In 2015, after the entry into force of the Decree of the RF Government of December, 11, 2014 No. 1352, the organisations of ROSATOM, falling within the scope of this decision, plan to buy products from small and medium business that worth more than 31,3 billion rubles.

4.5.2.

GOALS FOR 2015 AND THE MID-TERM HORIZON

- Reduction in purchase prices of 100 largest positions by at least 10% compared with the nominal prices of 2013;
- Conducting of more than 900 competitive procurement procedures at the budgetary resources amounting to 15.9 billion rubles;
- Achieving of 18% share of purchases from SMEs (for customers who are subject to the Resolution No. 1352 since July, 01, 2015);
- Transition to the long-term contracts for the procurement of equipment with long manufacturing cycle (long-term contracts will reduce the number of procurement procedures, optimise the cost of procurement, obtain additional savings by retaining the growth rate of prices for equipment, reduce appeal of procurement risks and reduce the delivery times);
- Development of categorical strategies for services and works of industrial and technical nature (planned coverage of categorical procurement management work, services, material and technical resources and equipment in 2015 will amount to 337 billion rubles for the performed procedures).

4.6.

INTERNAL CONTROL SYSTEM



4.6.1.

CHARACTERISTICS OF THE INTERNAL CONTROL SYSTEM

The internal control system of Corporation and its institutions is based on:

- COSO model (The Committee of Sponsoring Organisations of the Treadway Commission),
- the requirements of the IAEA,
- standards in the implementation of internal control in public organisations, proposed by the Committee for Internal Control Standards of the International Organisation of Supreme Audit Institutions (INTOSAI),
- Normative legal acts of the Russian Federation.

Industry vertical of specialised internal control bodies includes 280 employees in 47 companies and covers more than 450 organisations.

The purpose of the system of internal control and audit (SICA) is to increase assurance regarding the achievement of strategic objectives of ROSATOM and the effectiveness of corporate governance, and to ensure the unity of management of the nuclear industry.

A legal and institutional framework for the implementation of departmental control over compliance was established in accordance with the Federal Law of April, 05, 2013 No. 44-FZ "On the contract system" in ROSATOM with the legislation of the Russian Federation and other normative legal acts of the contractual system in procurement, with regard to customers subordinated to it. In the Audit Department was created the Office of institutional control; its checks are also included to the master plan of control measures.

4.6.2.

RESULTS OF 2014

The main objective of the Internal Control Service in 2014 was the efficiency improvement of the monitoring activities. By using the PSR mechanisms, there were optimised the processes of internal audit and internal financial audit, preparation of the consolidated plan of audits, preparation of SICB reporting for reduction of terms and simplification of procedures.

In 2014, works on the preparation of maps of internal financial control in accordance with the RF Government Decree of March, 17, 2014 No. 193 were started. Maps were designed for processes associated with the movement of the federal budget and aimed at minimising the risk of misuse and inefficient use of budget funds and correctness of budgetary accounting. 19 maps of internal financial control were implemented during 2014.

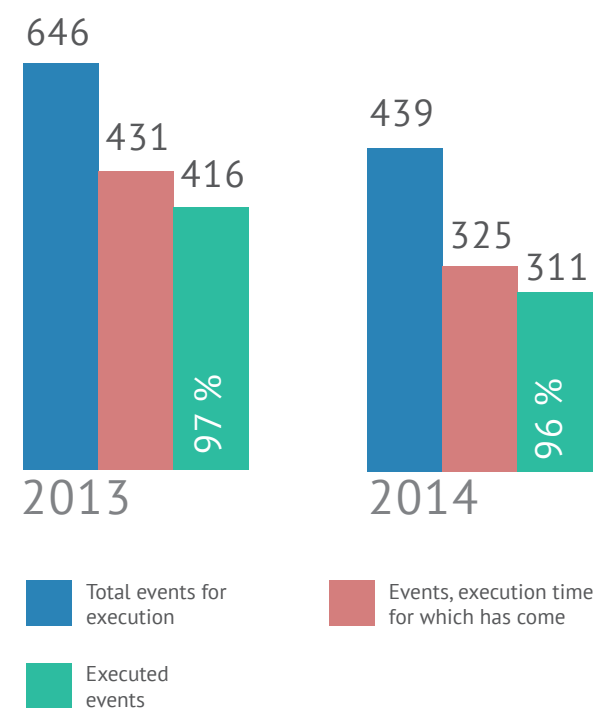
External regulatory authorities carried out 9 inspections, including 4 inspections of the Accounting Chamber of the Russian Federation. The facts of misuse and illegal use of budgetary funds and property were not identified.

External regulatory authorities carried out 9 inspections, including 4 inspections of the Accounting Chamber of the Russian Federation. The facts of misuse and illegal use of budgetary funds and property were not identified

4.6.2.1. Implementation of corrective actions

A mechanism for elimination of detected violations and shortcomings was created by the adoption of a binding list of instructions of CEO and the conclusions of the Chief Inspector of ROSATOM.

Implementation of corrective action based on the results of SICA inspections

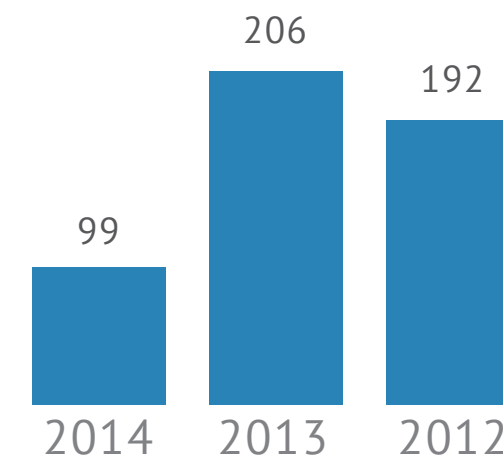


4.6.2.2. Control of stakeholders

In 2014, the Central Arbitration Committee of ROSATOM and the arbitration committees of the Power Generation and Fuel Divisions received 1062 appeals from suppliers about violation of the Uniform Industry Procurement Standard, 711 appeals were examined, 269 appeals found to be justified (38% of examined appeals).

The economy of 99 million rubles was achieved in the reporting year due to the results of the arbitration committee of the Corporation and its organisations.

Direct savings from decisions of arbitration committees, million rubles



4.6.3.

GOALS FOR 2015 AND THE MID-TERM HORIZON

- increasing the efficiency of control activities by optimising the organisational structure of and processes of SICA control activities;
- increasing the objectivity of control activities;
- promoting the efficiency of industry-specific business processes, prevent inefficient and unreasonable expenditure of funds, the development of the functions of internal consulting.

4.7.

CORRUPTION AND OTHER LEGAL OFFENCES COUNTERING SYSTEM



4.7.1.

CORRUPTION AND OTHER LEGAL OFFENCES COUNTERING SYSTEM

In 2014 ROSATOM exhaustively fulfilled the requirements of federal laws and legal acts of the President and the Government of the Russian Federation in the field of combating corruption and other violations, including the National Anti-Corruption Plan for 2014–2015, approved by the Decree of the President of the Russian Federation from April, 11, 2014 number 226.

Requirements of anti-corruption legislation were finalized and detailed by published in ROSATOM legal acts (5 normative legal acts and 16 local regulatory acts). The control over their execution was organised by the authorised departments and by the industry management. All employees and partners of ROSATOM can obtain information about anti-corruption measures (including on regulatory documents in this area) [on the official website](#).

By the end of 2014, the number of employees that had passed the training and retraining on countering the corruption in the industry reached 294 people.

The execution of legislation requirements on restrictions, prohibitions and obligations imposed on the workers, who are substituting positions in public corporations, was ensured. In 2014, data on revenues, expenditures, assets and property obligations in accordance with the current legislation were provided by 229 employees of ROSATOM. Relevant information was posted on the official website of ROSATOM. On the results of audit of submitted information, meetings of the Commission on compliance of requirements for duty position and conflict of interest settlement were held, the results of which a number of workers were given disciplinary responsibility.

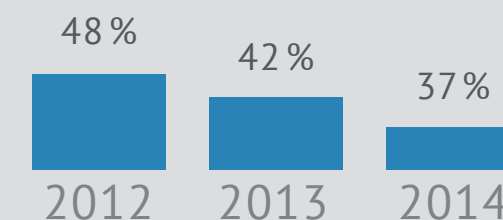
In 2014, the State Corporation Rosatom's hotline for receiving reports of corruption and other offenses continued to operate. Ongoing work in the past year was characterised by increased confidence from the applicants (the share of anonymous reports has decreased from 42 % in 2013 to 37 % in 2014) and increased effectiveness of their inspection; in 44 % was found the confirmation of received messages.

4.7.2.

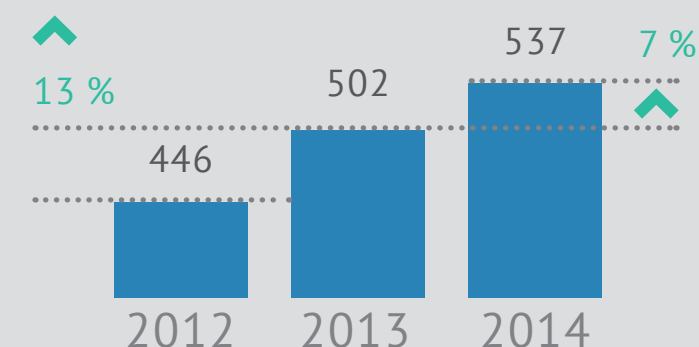
GOALS FOR 2015 AND THE MID-TERM HORIZON

Having considered 537 complaints received in 2014 through hotline for corruption and other offenses 74 employees were involved in disciplinary proceedings, including 53 heads. 7 employees and 4 managers were dismissed. Materials on 69 hotline reports were sent to law enforcement authorities.

The share of anonymous messages received through “hot line”



Dynamics of the number of messages received through “hot line”



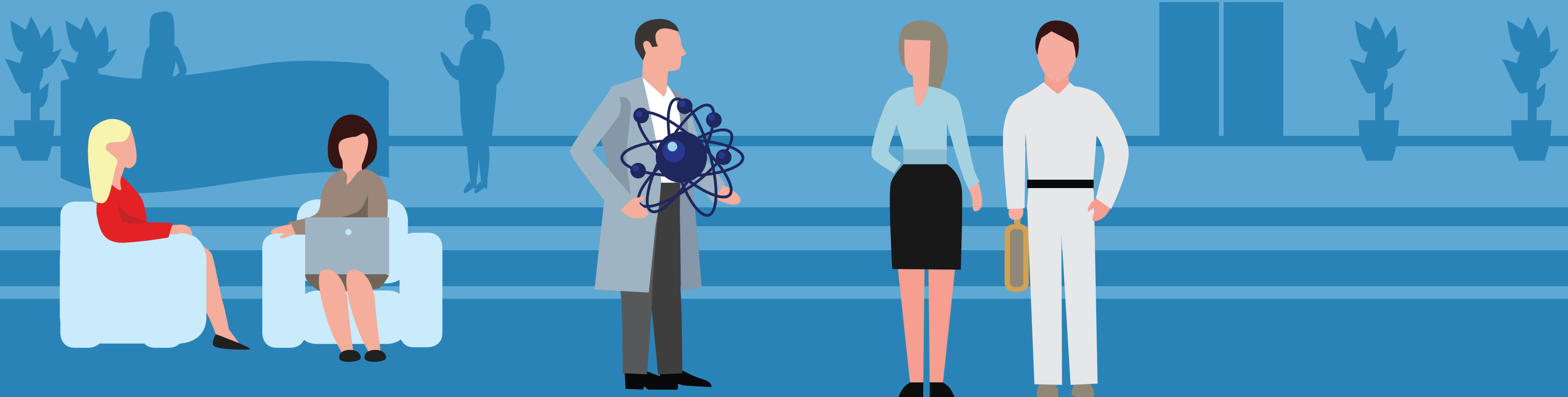
In 2015 Rosatom will continue:

- its implementation of anti-corruption procedures in the organisations of the industry;
- An anti-corruption training for employees of ROSATOM and its organisations;
- to improve the methodological and organisational support of anti-corruption work;
- activities for the assessment of corruption risks and securing of compliance with the principles of anti-corruption policy of ROSATOM

5. WORKING IN ONE TEAM



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5.1. HUMAN CAPITAL DEVELOPMENT



POINT OF VIEW

Over the past few years ROSATOM implemented a number of large-scale projects in the area of HR management in the nuclear industry. According to the results of various surveys, for example, personnel involvement surveys, these works turned to be effective. What are these projects?

A few significant projects laid a reliable foundation for the successful implementation of the human resource policy.

In particular, we gradually replaced different reward systems at enterprises by the Unified remuneration system (URS) that is based on the best world and Russian practices. Today URS is used at over 160 organisations of the industry.

An instrument to manage the operating performance – annual performance assessment “Record” – was developed and introduced.



DIRECTOR FOR HUMAN RESOURCES

TATIANA TERENTIEVA

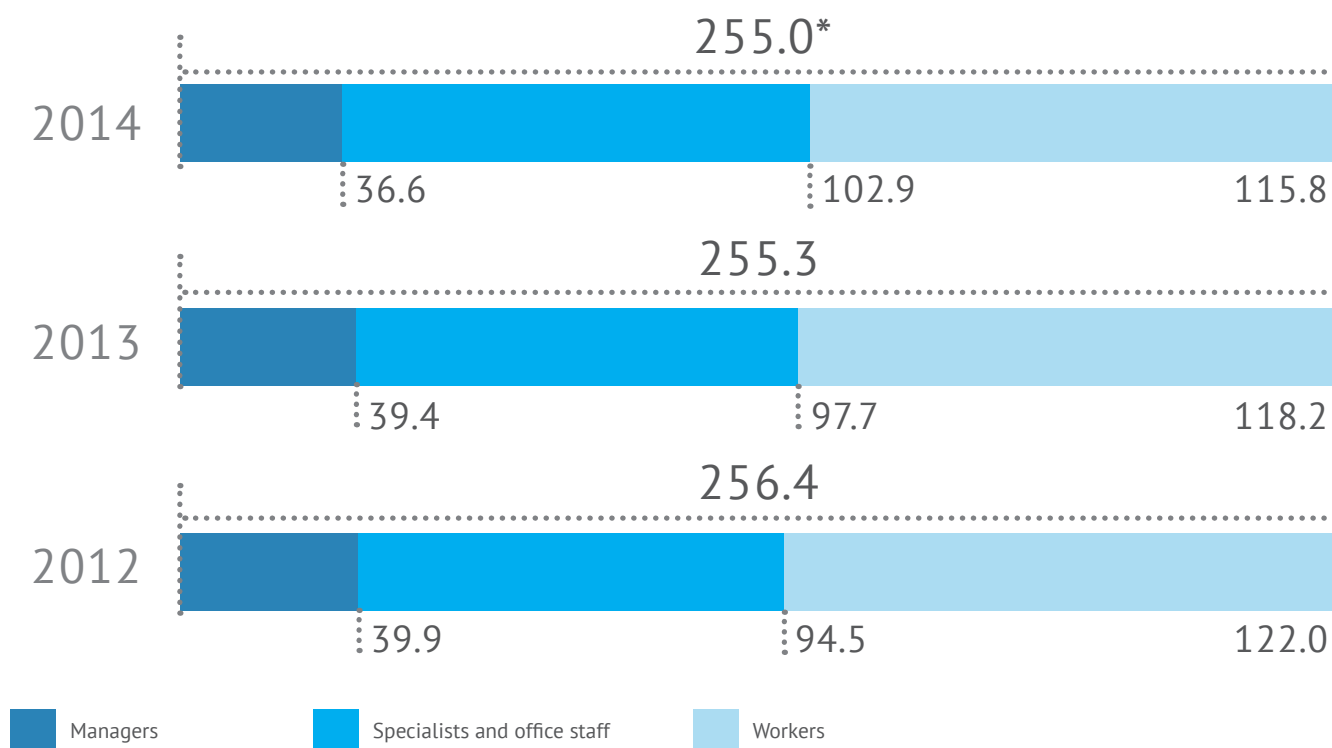
45,000

Summarising the results of 2014, about 45 thousand employees took part in the annual performance assessment “Record” that allows encouraging employees consistently and objectively for their job performance and competency development

ROSATOM ANNUAL PUBLIC REPORT

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Average headcount of ROSATOM employees, thousand people



*Additional average headcount of ROSATOM employees at Corporation's foreign companies is 3 thousand people.

Average monthly salary –
60.4 thousand rubles
per months
(+9.2 % to 2013)

60.4

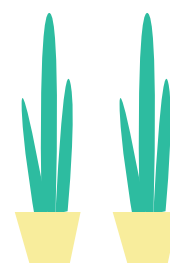
thousand rubles

It allows encouraging employees consistently and objectively for their job performance and competency development. Summarising the results of 2014 about 45 thousand employees took part in the “Record”.

The process of career and succession management has been actively developed in the nuclear industry. Succession plans were developed with regard to top managers (top-1000). These plans allow reducing HR risks of organisations of the industry. The project on cascading the automated career and succession management system covering 11 thousand line managers has been implemented during 2014–2015.

Based on the results of career and succession planning, managers having career potential are selected and develop within the framework of the managerial succession pool. As of today about 3500 managers of all management levels are included into the managerial succession pool of the industry. Projects implementation became the key aspect of the succession pool development programme. In particular, members of the top-management succession pool implemented over 70 projects in 2014 that had a positive impact on the activities of organisations of the industry.

The result of the systematic development of ROSATOM brand as an employer is increased attractiveness of ROSATOM in Universum rating of the best employers:



ROSATOM won 6th place in category “Engineering” of the general rating and 1st place according to the results of a poll conducted among students of ROSATOM core universities. To find and attract the best talented graduates, every year the tournament of young professionals (TeMP) is held. In 2014 over 2000 students and graduates of Russian IHLs as well as students from Turkey and Vietnam took part in the Tournament.

The most efficient instrument to get feedback from employees became consistent work with employee involvement. This work resulted in a number of new formats of operation and events: on a regular basis we carry out information days covering over 130 enterprises in the sector and 82% employees (214 thousand people); contest “Person of the year” is held every year, its objective is recognition of employees who achieved the most significant results; a special role of “involvement experts” was introduced at enterprises of the sector; they act as change champions.

ROSATOM Corporate Academy provides a possibility of professional development to each employee of the sector. In what way do HR managers improve their competency and how is the HR Department as a whole developed?

Since 2014 the HR School has operated in the Corporate Academy. The peculiarity of the School is its sectoral orientation and its objective is improvement of professional competencies of HR employees and development of the role of HR management departments as business partners. In 2014 within the framework of the HR School 3 educational courses were implemented, 114 employees received training. It is planned to develop 10 courses for HR directors and experts during 2015–2016.

Within the framework of development of HR management department, most HR processes became automated for the purposes of simplification and making solution of personnel matters faster. Currently basic HR processes (personnel record keeping, organisational structure, remuneration of labour) as well as performance management (key performance indicators, competency assessment) and career and succession planning are automated. 40 enterprises work with the sectoral system of personnel record keeping based on SAP HR (it is over 25% of enterprises are included into the perimeter of the corporation consolidated budget). About 30% of HR report indicators are automatically downloaded from SAP HR.

114

3 educational courses were implemented and 114 employees were trained in 2014 within the framework of the HR School

The volume of social expenditures per employee – 39.3 thousand rubbles per year

39.3

thousand rubles

Employee involvement rate – 75% (the rate of global leaders of technological sectors)

75%

33.8% – the level of filling top management vacancies by the members of the managerial succession pool

33.8%

~1,800 graduates were employed at the nuclear sector enterprise

1,800

70 enterprises of the sector are covered by ET Web within which the career planning and succession process is implemented.

The coverage area of the common servicing centre for HR management has been extended. Summarising the results of 2014, 30 enterprises which total number of employees amounts to over 45 thousand people, that is about 20% of enterprises included into the perimeter of the Corporation consolidated budget, switched to be serviced by CSC HR. Involvement of the common servicing centre in HR processes allows enterprises of the sector to achieve operational savings, reduce labour risks and the number of mistakes when making personnel transactions (the current volume of mistakes of ROSATOM CSC HR is below 0.2% while it varies from 2% to 5% in Russian practice), standardise HR processes and increase their controllability, increase reliability of management information and, consequently, ensure higher level of business support.

5.1.1.

REMUNERATION SYSTEM

5.1.1.1. Remuneration system

The corporate (sectoral) remuneration system ensures:

- Fair rate of remuneration corresponding to the remuneration rate of top-rated Russian companies;
- Link between the financial gain of the employee and performance and meeting key performance indicators. KPIs of managers of ROSATOM are formulated towards achievement of the strategic goals and KPIs established by the

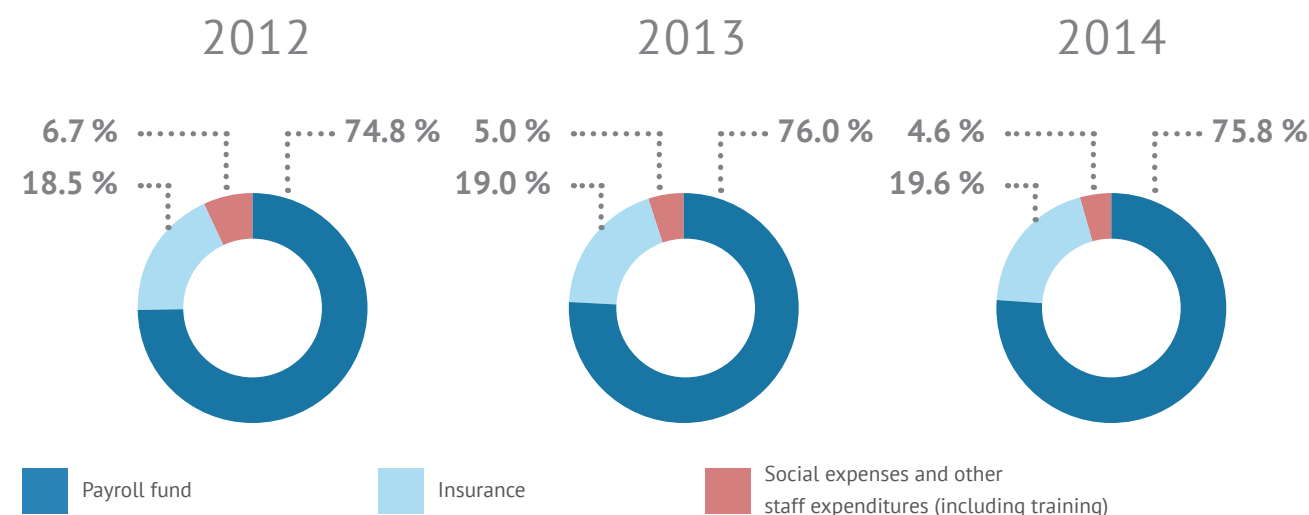
Supervisory Board, while the strategic tasks set for the organisations and enterprises are transformed in the KPI charts of specific managers and cascaded down to structural divisions and employees.

5.1.1.2. Results of 2014

- In 2014 the average monthly salary per employee of ROSATOM grew by 9.2% compared to 2013 and amounted to 60.4 thousand rubles.
- In 2014, the total amount of staff costs was 246 billion rubles, up 8.5% from 2013. The cost of one employee per year grew from 879.6 thousand rubles in 2013 to 961 thousand rubles in 2014 (up 9.3% against 2013).

Individual KPI charts that follow the uniform corporate standard were developed for 19.2 thousand top managers of organisations

ROSATOM staff cost structure



5.1.2.

development of the managerial succession pool has been carried out since 2012.

CAREER AND SUCCESSION MANAGEMENT

The process of career and succession management is implemented at ROSATOM to plan career and ensure succession for managerial positions: managers develop career plans, approve successors for managerial positions, etc.

To automate the process a specialised information system was introduced. The result of the first stage is automation of career planning for 1,300 top and senior managers (directors general and deputy director general from 91 organisations of the sector).

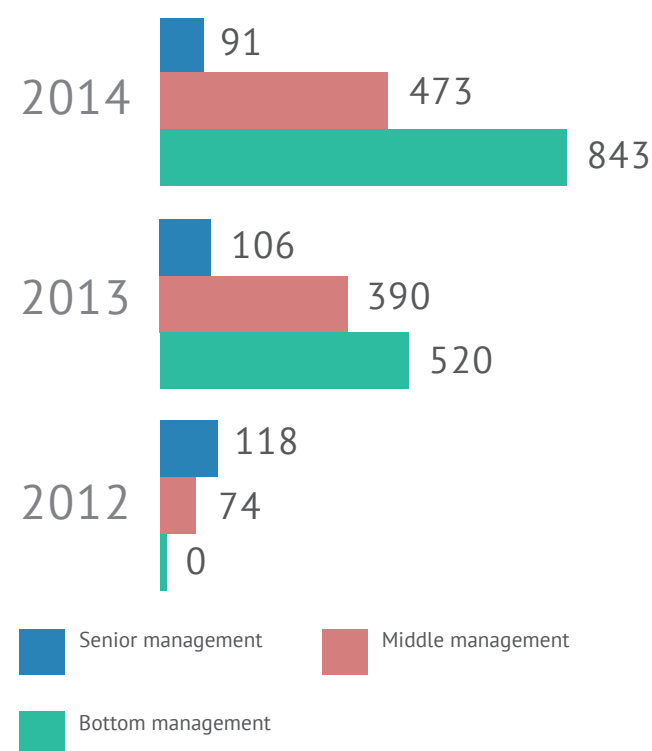
In 2014, the second stage – process cascading for line and bottom managers (division directors, heads of departments, department/workshop/section supervisors, ~10 thousand people) – started and will be finished at the end of 2015.

Building up and development of the managerial succession pool

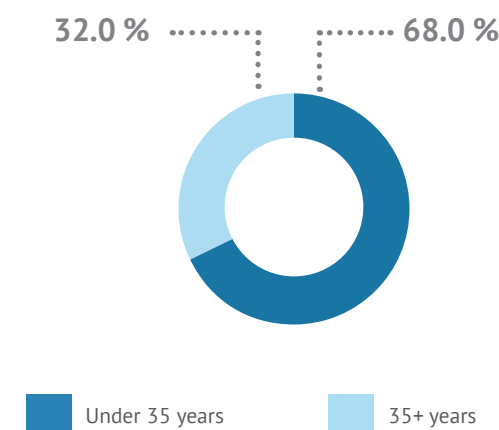
For the purposes of provision of staff succession and preparation of managers to be appointed for managerial positions, centralised building up and

The total managerial succession pool consisted of 1,407 employees at the end of 2014

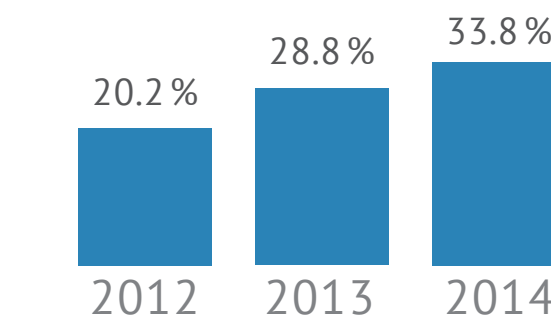
Dynamics of the increase in the number of participants of the managerial succession pool



Managerial succession pool by age in 2014



Dynamics of top management vacancies filling by participants of the managerial succession pool



In 2014, participants of the management succession pool selected in 2012–2013 completed their training. They received training in “Resource management at an organisation”, “Leadership”, “Management of changes”, etc. and participated in project activities including projects on ROSATOM production system and integration of ROSATOM values into the corporate culture.

In 2014, 26.8% managers included into the managerial succession pool were promoted at enterprises of the sector for all managers

The share of top management positions filled by participants of the managerial succession pool over the period under review – 33.8 %

5.1.2.1. Information Days

In 2014, 67% of employees told that Information Days are one the major sources of receipt of information on the status of the sector. Information Days are held within the framework of activities aimed at increasing the rate of involvement of ROSATOM employees. The idea to hold Information Days started up as a response to wishes of employees formulated in the course of studying their attitude to the company's Strategy and Values, satisfaction with the team environment and working conditions. On Information Days the management team of the Corporation and enterprises answers employees' questions, provides up-to-date information on the situation in the sector and development plans. 11 Information days have been carried out since 2011.

5.1.2.2. Personnel involvement studies

Personnel involvement studies have been carried out since 2011. During this time the number of participating organisations increased from 45 to 61 (over 200 thousand employees work at these enterprises 44 thousand of which participate in the study every year).

According to the data of the international company Aon Hewitt that studies involvement across the world, ROSATOM's results in 2014 exceed by 19 % the staff involvement indicator of Russian production companies and corresponds to the staff involvement level of effective employers across the world

Key results of 2014:

- over 1,200 events related to increasing the level of involvement were held (over the last 4 years – 2,660);
- the contest “ROSATOM's Person of the Year – 2014”, in which 1,012 employees participated (increased by 30 % as compared to the previous year) was held;
- involvement experts at 61 enterprises prepared 5 sectoral projects for 2015;
- over 1,300 company's managers received training in “Involvement management” for line management.

During the following 3–5 years ROSATOM plans to maintain the personnel involvement at the level of global leaders of technological sectors – min. 75 %.

Involvement level of ROSATOM's employees, %

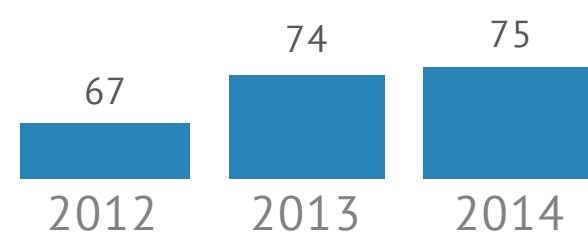


Table. Major corporate social programs, bln. rubles

Corporate social programs	2014	2013	2012
Voluntary health insurance	1.4	1.0	1.2
Personal accident and health insurance	0.7	0.2	0.1
Health resort treatment and rest for employees and their children, including:	1.0	1.3	1.0

5.1.3.

SOCIAL POLICY IMPLEMENTATION

The social policy of the Corporation is aimed at:

- improving ROSATOM's attractiveness as an employer,
- attracting and employing young and highly skilled specialists,
- improving employee involvement,
- enhancement of efficiency of social expenditures.

The benefits package of employees and retirees is formed in accordance with the Uniform Sectoral Social Policy (USSP) that is based on standardised corporate social programs (CSP).

Corporate social programs	2014	2013	2012
• Health resort and rehabilitation treatment for employees	0.7	1.1	0.8
• Health resort treatment and rest for children	0.3	0.2	0.2
Housing for employees	0.6	0.5	0.5
Non-state pension provision	1.0	1.9	1.2
Support for retirees	2.0	2.3	2.0
Catering for employees	0.2	0.2	0.4
Sports and cultural activities	1.0	0.9	1.0
Provision of assistance to employees	0.8	1.5	1.2
Other, mln. rub.	1.3	2.2	1.8
Total:	10.0	12.0	11.3

The priority of employees' life conservation and health preservation is included into the Industry Agreement (sections “Occupational Health and Safety” and “Social Policy”)

Compensation and benefits within the framework of corporate social programs are provided to full-time employees

In 2014, new Industry Agreement on Nuclear Power, Industry and Science for 2015–2017 was signed. The Agreement is based on long-lasting social partnership in the nuclear industry and is aimed at the implementation of the Uniform Remuneration System, Uniform Sectoral Social Policy and the Occupational Health and Safety Management System. The Industry Agreement contains a provision important for employees – wage and salary indexation and an additional mechanism of cooperation with the trade union during implementation of the Occupational Health and Safety Management System and assessment of its results is Envisaged.

Collective labour agreements of all Corporation organisations provide for the minimum period of notification of employees of considerable changes in the company's activity (2 months), and in case of a situation that can result in firings – 3 months.

Collective labour agreements cover 89.6 % of employees working at ROSATOM enterprises.

Interregional Non-Governmental Movement of Nuclear Power and Industry Veterans (INGM NPIV)

INGM NPIV unites 121 veterans' organisations from 27 regions of the Russian Federation. The number of its participants is 318,238. Its 76 veterans' organisations (144,750 participants) are included into ROSATOM.

In 2014, upon INGM NPIV application 790 retirees were awarded by badge “Veteran of Nuclear Power and Industry”.

Veterans' organisations received financial support in the amount of 809 thousand rubles.

5.1.4.

PERSONNEL TRAINING

5.1.4.1. Staff training and retraining, advanced training

Personnel training and advanced training, improvement of personnel competencies are one of the top-priority directions for the development and raising the competitiveness of the Corporation.

In 2014, 120 thousand employees of ROSATOM and its organisations received training, retraining and advanced training. The share of employees who received training during the period under review was 48 % of the total number of personnel. On average, 24 hours was spent in training each employee.

The average share of personnel training and development costs was 0.6 % of the payroll budget in 2014. This indicator increased by 0.15 % as compared to 2013.

Training in accordance with ROSATOM production system is an important aspect. ROSATOM Corporate Academy jointly with KMZ JSC developed a new format of industrial training for ROSATOM Production System instruments application in practice and assessment of their impact on production processes – “process factory” at the premises of JSC MZP. In the longer term it is planned to establish similar training sites with “process factories” at other enterprises to train different categories of personnel. Training following ROSATOM Production System is also integrated into industrial programs for the managerial succession pool development.

The average share of personnel training and development costs was 0.6 % of the payroll budget in 2014. This indicator increased by 0.15 % as compared to 2013.



The average amount of training costs per one employee of the sector is about 4 thousand rubles, which is higher by 4.5 % as compared to the previous year

Table. Coverage by training by personnel categories

Personnel category	Number of employees who received training, at least, once in 2014, employees
Top managers	15
Senior managers	967
Line managers	7543
Bottom managers	17,257
Specialists and executives	44,210
Workers	51,295
Total	121,287

Table. Distribution of the average annual number of training hours by personnel categories

Personnel category	Average number of hours per one employee
Managers	39
Specialists and executives	20
Workers	24

5.1.4.2. Sectoral mentorship system

Historically, the mentorship system plays an important role in preservation and transfer of key competencies and unique experience in the nuclear industry.

In 2014, the total number of mentors at organisations was 7,888.

In the course of the year under review the monitoring system for “ROSATOM Asset” programme participants was implemented: 12 ROSATOM top managers committed themselves to the role of a mentor for 25 best participants of the managerial succession pool for the top management.

Table. Number of mentors in different types of mentorship, persons

Mentorship type	Number of mentors
Mentorship for students	3,430
Mentorship for newly hired young employees	3,996
Mentorship for the transfer of key knowledge and skills	360
Mentorship for participants of the managerial succession pool	102

5.1.5.

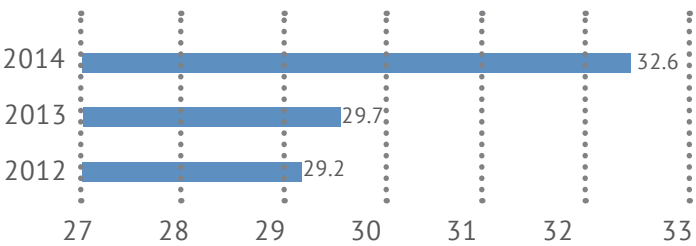
PROVISION OF SECTORAL ORGANISATION WITH YOUNG SPECIALISTS

In 2014, ~1,800 graduates including ~ 1,030 graduates from ROSATOM core universities and ~ 450 specialists from National Research Nuclear University MEPhI (Moscow Engineering Physics Institute) were hired by nuclear sector organisations. Monitoring of recruitment of graduates from educational organisations by Corporation organisations was carried out in 2014; a forecast of the industrial needs in academy-trained specialists and specialists having secondary vocational education till 2022 was developed.

Activities related to the provision of students of specialised universities with on-the-job training. In 2014, on-the-job training was provided to over 6,000 college students (in 2013 – about 5,500). 162 Ph.D. students and university professors received onsite training at enterprises of the sector (in 2013–215).

Admission of employer-sponsored students to universities within the framework of implementation of the state plan for the preparation of researchers and specialists for organisations of the defence-industrial sector was organised. 607 students were admitted for specialised training to 64 universities in 2014. The total number of employer-sponsored students was over 2,500 persons in 2014 (in 2013–2250). A sectoral order for employer-sponsored training of specialists at universities

Fig. Share of specialists under 35, %



Association “Consortium of ROSATOM Core Universities” that united 14 specialist training facilities of higher vocational education providing training to nuclear sector specialists that satisfy over 60% of the total need of the sector in young specialists continued its work

for 2015 was formed, 979 state-financed places at 67 universities was allocated for employer-sponsored students. The amount of own funds spent by ROSATOM for employer-sponsored training of students was 143 mln. rubles in 2014 (in 2013 – 65 mln.).

Interaction with NRNU MEPhI

Occupational guidance provided by ROSATOM and NRNU MEPhI to attract best school graduates to receive training in various “nuclear” specialties was continued in 2014. The total number of participants of school competitions of NRNU MEPhI was ~ 17 thousand persons.

In 2014, the enrolment competition for “Nuclear Physics and Technology” increased by half (from 2.7 in 2013 to 4.2 applicants per place in 2014).



In 2014, NRNU MEPhI was one of the three leaders in the implementation of the Performance indicator Programme for the Enhancement of Competitiveness of Universities among world leading research and educational centres.

The university is included into the following world and national rankings:

- Top-100 Times Higher Education (THE, a list of Physical Sciences),
- Top-20 for THE for the BRICS countries and for the countries with emerging economy,
- 3rd place in the national “Interfax” and “Echo of Moscow” rankings
- 4th place in the national “Expert RA” rating agency.

In accordance with the forecast of demand for higher education professionals it is expected that organisations of the sector will hire up to 5200 graduates of NRNU MEPhI and its affiliates every year until 2022

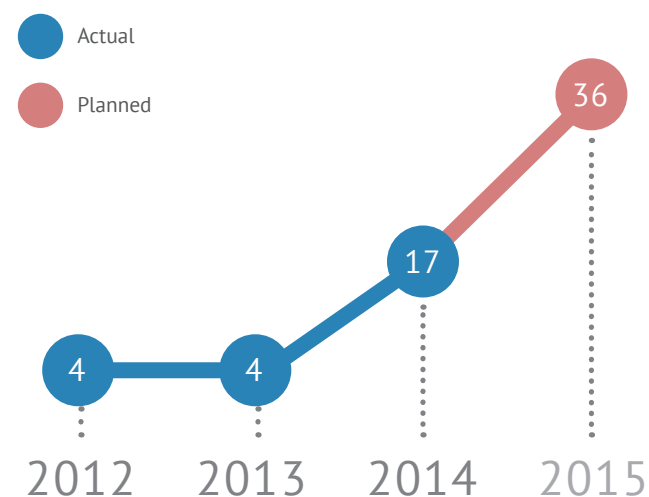


5.1.6.

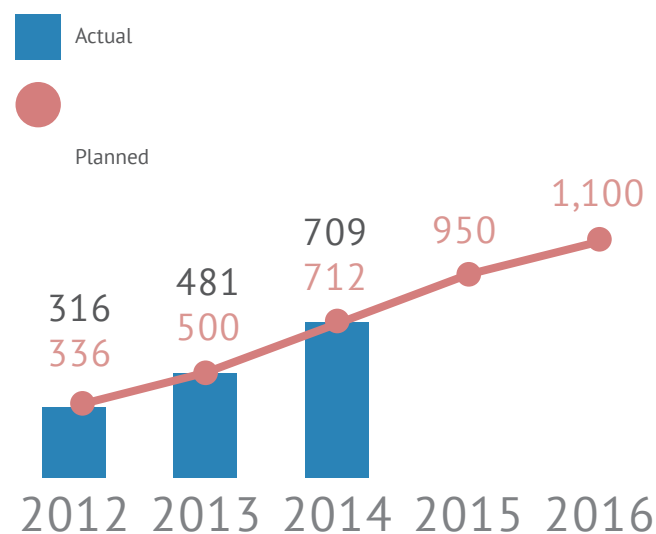
INTERNATIONAL COOPERATION IN THE AREA OF EDUCATION

In 2014, training of foreign students at Russian universities for the nuclear sector continued. Foreign students study at the premises of NRNU MEPhI, Corporation core universities and partner universities. In 2014, 709 students from Vietnam, Turkey, Mongolia, Jordan, Bangladesh, Algeria, Nigeria, RSA, Indonesia, and Cuba studied there. It is planned to enrol 386 students in 2015.

Dynamics of changes in the number of countries from which students come to receive training with specialisation in nuclear power engineering to the Russian Federation through ROSATOM



Dynamics of changes in the number of foreign students studying in the Russian Federation with a specialisation in nuclear power engineering through ROSATOM, persons



5.1.7.

GOALS FOR 2015 AND THE MID-TERM HORIZON

- Maintaining the high level of personnel involvement;
- Increasing the labour productivity in the sector;
- Providing ROSATOM international projects with personnel;
- Increasing the share of promotion of members of the managerial succession pool;
- Increasing the level of satisfaction of internal customers with the quality of education at the Corporate Academy;
- Increasing the efficiency of the HR function.



HEAD OF LOCAL COMMUNITIES RELATIONS UNIT

ALEXANDER HARICHEV

In the year under review ROSATOM introduced a system of “nuclear” cities monitoring. What is its purpose?

The system of monitoring of nuclear industry cities was subjected to pilot production last year. It is one of the elements of ROSATOM information analytics and represents a software package designed to collect and process latest information about social and economic aspects of life at the territories where nuclear enterprises exist, online or at certain intervals.

Thanks to the introduction of this system problems which many territories face became clearer and ROSATOM's services have latest information to take well-argued decisions related to the prospects for the development of the largest sectoral enterprises. Moreover, it became much easier to forecast and prevent manifestations of crisis arising due to external economic and political conditions or restructuration of enterprises.

The Corporation did a big job when it applied status “Territories of advanced development” to ROSATOM “Closed Administrative-Territorial Units”. What advantages are offered to CATF by the introduction of the law on TAD?

We managed to convince the highest-level leaders of the fact that it is necessary to create TADs at CATF. The Law on Territories of Advanced Development was passed considering our offers and it provides a possibility to create such territories at CATF.

The Corporation continues to restructure the sector, large production spaces are released, production is modernised. Since a significant part of our production units is technology intensive, our personnel is also highly skilled and it is an important competitive edge of our cities. But for the purposes of encouragement of creation of new production units, additional incentives for the business are required but before the adoption of the law for CATF certain legal restrictions existed. TAD residents will receive significant benefits: reduction in profit tax, significant reduction of social costs, simplification of central and local government oversight procedures, etc. In our opinion, implementation of the law on TAD will help to utilise all resources available in CATF, facilitate creation of new production units, speed up bringing new products to the Russian and international markets. It also relates to the development of new types of civilian products at our enterprises and implementation of other investment projects including projects of suppliers of the sectoral enterprises or other external companies. Economy diversification and creation of new work places will be positive results for the cities.



101.9

bln. rubles

taxes paid by ROSATOM to budgets of different tiers

What tasks do you set for 2015?

The most critical tasks in some way or other are related to the need in correction and renovation of Russian legislation applicable to the nuclear sector territories. Restructuring of the system of relations between ROSATOM and its organisations on the one part and municipal entities and constituent entities of the Federation on the other part requires to expand opportunities for innovative managerial decisions, improvement of the accuracy of joint actions planning and correct allocation of liability for the results.

That's why in 2015 ROSATOM plans to promote introduction of amendments to the law "On the Territories of Advanced Development" to provide our CATF with a possibility to establish them starting from 2016 (currently a moratorium is imposed on the creation of TAD at all territories except Far East till 2018). We are also going to provide for adoption of important legislative changes in the practice of local governance of CATF to increase the level of protection of the system of local governance of CATF and maintain the required level of involvement of federal authorities.

In 2015, we also plan to implement a number of large-scale educational and cultural initiatives confined to the 70th Victory Day and 70th anniversary of the nuclear industry.

702

mln. rubles

volume of funds allocated
for charity projects

The most critical tasks in some way or other are related to the need in correction and renovation of Russian legislation applicable to the nuclear sector territories

CONTRIBUTION TO THE DEVELOPMENT OF THE TERRITORIES OF PRESENCE

5.2.1.

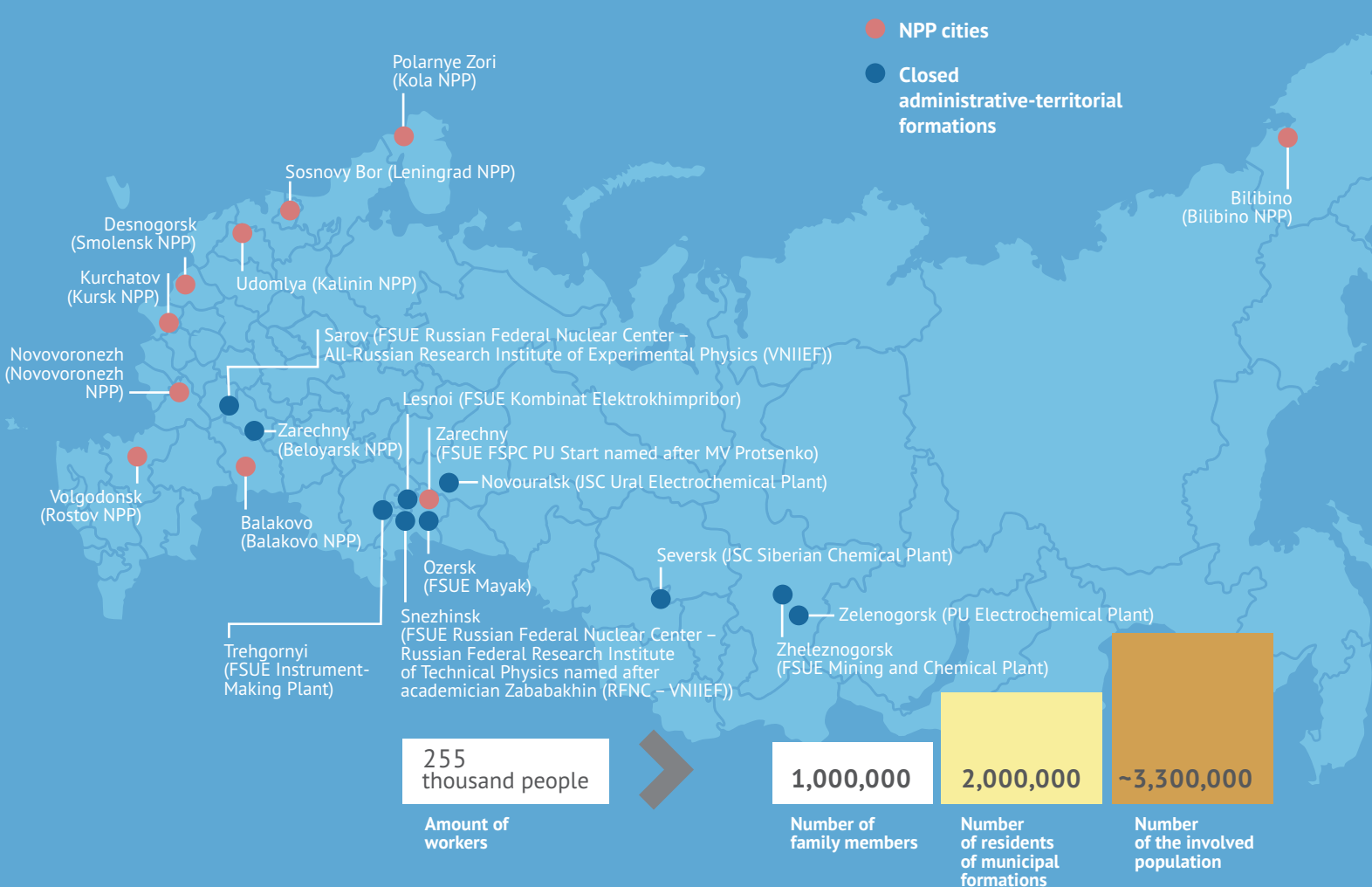
CONTRIBUTION TO THE ECONOMIC DEVELOPMENT OF REGIONS IN WHICH ROSATOM HAS A PRESENCE

17.2%

the share of output of nuclear power
stations in provision of the Russian
Federation with electric power

The social and economic influence of ROSATOM on the development of territories in which it has a presence is of an integrated nature. The Corporation substantially contributes to the energy security of a number of regions. ROSATOM is a large taxpayer at all tiers of government. The Corporation's activities produce a significant economic effect through the creation of a large number of jobs in the nuclear and allied industries, thus providing not only employment but also decent labour conditions and remuneration.

Territories in which ROSATOM has a presence



5.2.1.1. Contribution to the creation and distribution of economic value at the territories in which ROSATOM has a presence

The overall picture of ROSATOM economic performance in the year under review is presented in the table of creation of the economic value and its distribution among interested countries. The created value is distributed among suppliers and

contractors (within the framework of operating costs), capital suppliers (in the form of interest paid to creditors), personnel of the Corporation and its organisations (labour remuneration and social expenditures), government (in the form of taxes), local communities and regional and municipal authorities (in the form of social investments, goodwill expenditures and taxes). A part of the created value remains at the Corporation (undistributed costs including funds allocated for business development).

Table. Creation and distribution of value, mln. rubles

Item	2014	2013	2012
Created economic value	631,323	535,616	486,416
Revenues (proceeds from sales, as well as revenues from financial investments and sales of assets)	631,323	535,616	486,416
Distributed economic value	489,440	442,264	389,193
Operational costs (payments to suppliers and contractors, expenses for purchasing materials)*	(228,224)	(220,814)	(192,643)
Remuneration and other payments to and benefits for employees	(189,415)	(172,148)	(153,158)
Payments to capital providers	(23,295)	(7,645)	(570)
Gross tax payments (excluding PIT, VAT)	(42,831)	(36,172)	(35,143)
Investments in communities including charity	(5,675)	(5,485)	(7,079)
Non-distributed economic value	141,883	93,352	97,223

* Operational costs do not include the rate of depreciation that was 92.05 bln. rub. in 2014, 86.86 bln. rub. in 2013, 78.40 bln. rub. in 2012

5.2.1.2. Contribution to the energy security of RF regions

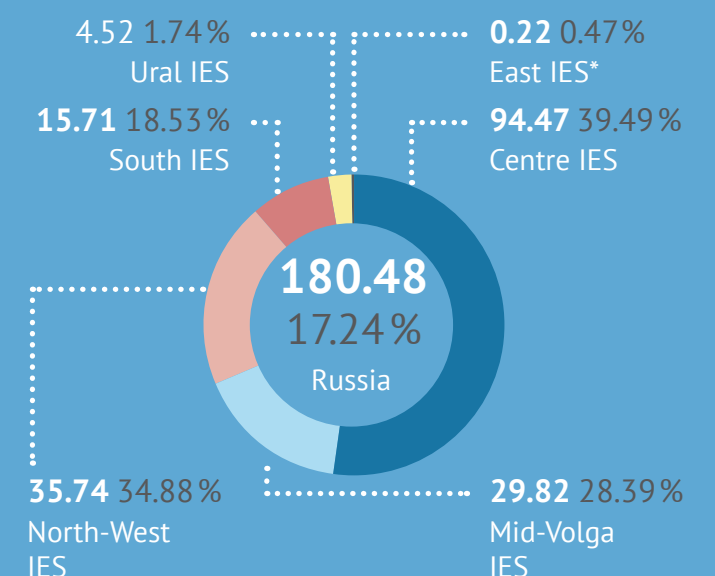
The share of electric power generated by NPPs in the total volume of electric power in Russia is 17.24 %. Atomic generation makes a significant contribution to Russian integrated energy systems (IES).

5.2.1.3. Tax payments to budgets of different tiers

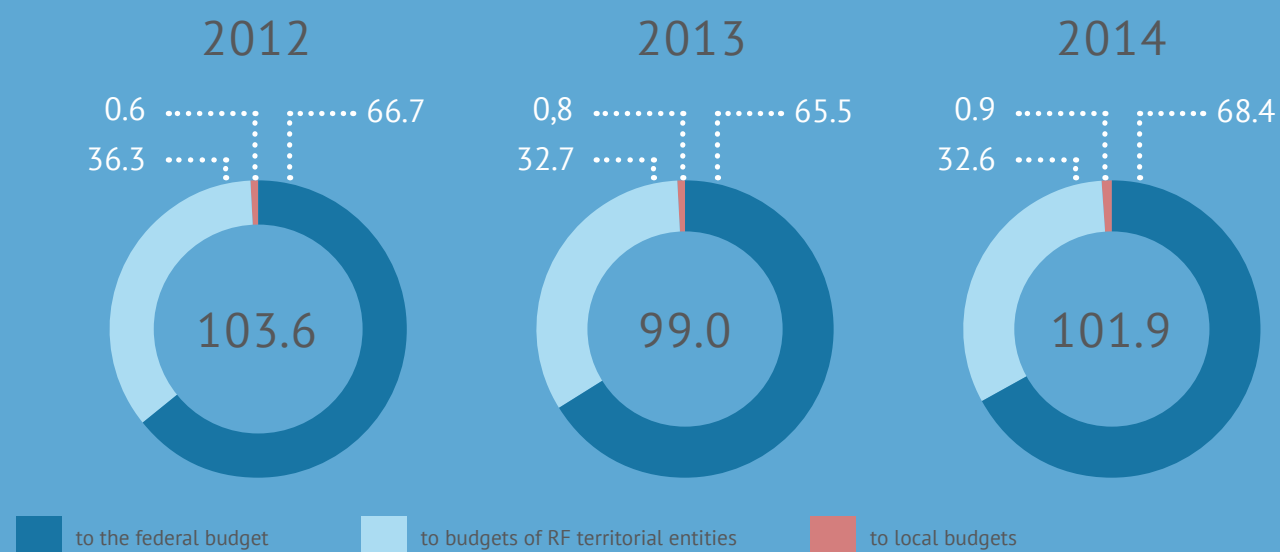
Organisations and enterprises of ROSATOM substantially influence the generation of budget revenues of the territories in which they have a presence. In 2014, the budgets of all tiers (including contributions to extra-budgetary funds) received 101.9 bln. rub, up 2.9 % from 2013.

* Including isolated systems (Bilibino NPP, Chukotka Autonomous circles are included into the East isolated energy system),

Share of output of NPPs of JSC Concern Rosenergoatom of the electricity output in the Russian Federation in 2014 by regions (energy systems), bln. kWh



Amount of taxes paid by ROSATOM and its organisations, bln.rub.



5.2.1.4. Interaction with suppliers and contractors in the regions in which ROSATOM has a presence

Building and putting into service of nuclear facilities including nuclear power plant units results in creation of new workplaces: a number of local residents living within a radius of 100 km from the building site are hired. In addition, each workplace during NPP construction facilitates creation of 10–12 workplaces in adjacent sectors of economy (metallurgy, engineering, etc.).

Table. Amount of involved organisations and hired employees at NPPs under construction in 2014

NPP	Number of major involved organisations	Hired employees, persons	including:	
			engineering manpower	workers
Baltic NPP, Units No. 1, 2	4	90	10	80
Beloyarsk NPP, Unit No. 4	59	5,960	762	5,198
Novovoronezh NPP II, Units No. 1, 2	41	8,021	1,668	6,353
Leningrad NPP II, Units No. 1, 2	19	4,043	377	3,666
Rostov NPP, Units No. 3, 4	33	6,062	465	5,597
Total:	156	24,176	3,282	20,894

5.2.2.

DEVELOPMENT OF CATF AND CREATION OF TERRITORIAL CLUSTERS OF THE NUCLEAR INDUSTRY

In accordance with the assignments of the President of the Russian Federation No. Pr-335 of February, 17, 2014 ROSATOM jointly with RF territorial entities, administrations of CATF, business and expert communities developed complex development programs (CDP) for ten CATF combining development of municipalities and strategies for the development of city-forming enterprises and including production, infrastructure and social projects. The total amount of funds allocated for the programs till 2020 will be 433.3 bln. rub. (271.6 bln. rub. of which is cost of production investment projects, 161.7 bln. rub. – cost of social and engineering infrastructure facilities).

It is planned to create special conditions for doing business at the territory of CATF for the support and encouragement of investment production projects included into CDPs using the mechanism of territories of advanced social and economic development that can be created in CATF in accordance with the Federal Law on Territories of Advanced Social and Economic Development No. 473 of December, 23, 2014.

Creation of innovative clusters

In 2014, ROSATOM continued to support the development of territorial innovative clusters of the nuclear industry (Zheleznogorsk, Sarov, Dimitrovgrad, and the agglomeration St. Petersburg-Sosnovy Bor-Gatchina). Implementation of cluster programs aimed at the achievement of a high level of concentration and development of new technological, production, service and other competencies continued.

Implementation of key projects continued in clusters: in Sarov – an engineering centre specialising in computer engineering; in Dimitrovgrad – a research and production complex engaged in the development and production of radiopharmaceutical agents and healthcare products; in Zheleznogorsk – an industrial park to accommodate supplier companies of city-forming enterprises.

Educational programs aimed at searching for new project ideas and projects, creation of project teams, training of cluster participants to project management methods as well as involvement of small and medium-size advanced companies in the cluster activities were implemented.



The funds were raised for 4 clusters in the amount of 433.6 million rubles, including 349.7 million rubles from the federal budget and 83.9 million rubles from regional budgets under the programme of support for clusters in 2014

5.2.3.

IMPLEMENTATION OF
SOCIAL AND CHARITY
PROGRAMS IN THE
TERRITORIES OF
PRESENCE

In following the traditions that have developed in the nuclear industry, ROSATOM and its organisation are guided in their activities by the principles of socially responsible behaviour. Adopting the priorities of social and economic development of Russia, its regions and cities, including the nuclear CATF, as basic landmarks, [the Corporation consistently implements a number of sector-wide social programs.](#)

Table. Funds spent for charity, mln. rub.

Charity function	Amount, mln. rub.
Initiatives to build up the historical and cultural heritage of Russia	232.5
Contests of social and charity projects	117.5
Educational initiatives and support of activities of educational establishments	93.8
Patriotic upbringing and donations to hold functions tied to commemorative dates and events	88.2
Initiatives for child development and mass amateur sports	69.4
Initiatives in the field of culture and the spiritual and moral upbringing of youth	48.3
Initiatives in the field of ecology and the elimination of the legacy of the early stages of atomic development	24
Support of veterans, handicapped people and people undergoing hardship	23.6
Free assistance on demand, including urgent medical aid and non-financial involvement	4.7
Total:	702.0

5.2.3.1. ROSATOM School

The sector-wide educational initiative [ROSATOM's School](#) has existed for four years and is implemented in the host cities of the Corporation's enterprises.

In 2014, 568 representatives of educational establishments took part in the contest programme. Over 8000 students were registered to participate in the events. Awards were given to 10 best teachers and 9 preschool and secondary educational establishments introducing advanced educational technologies. 19 contest winners were awarded cash and prepaid internships in Finland and Sweden under conditions of carrying out internships in the premises of their schools and pre-school facilities for colleagues from 24 cities participating in the project.

A meta subject contest for schoolchildren was held in CATF Snezhinsk. Over 700 schoolchildren from 24 nuclear cities took part in it.

The project is implemented under the auspices of ROSATOM Public Council.

5.2.3.2. Programme "ROSATOM's Territory of Culture"

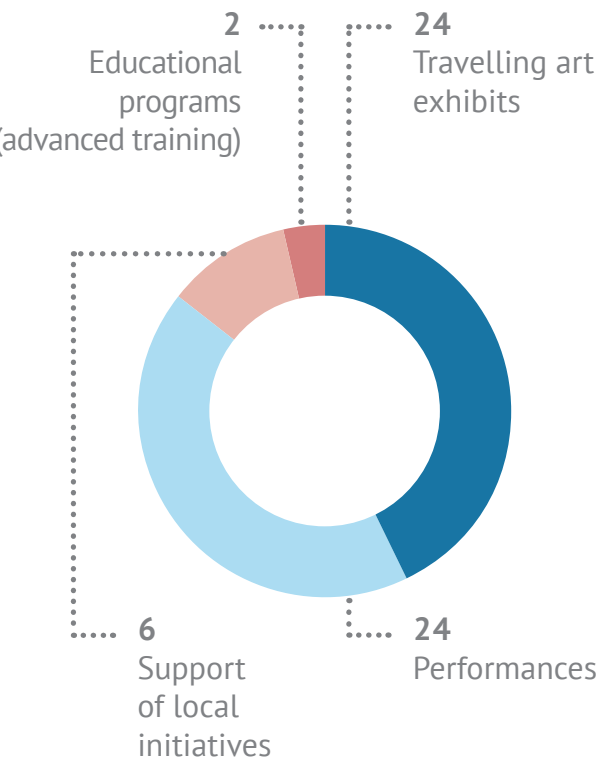
A number of travelling displays "Artist Lermontov M.Y." was carried out in CATF. They were confined to the 200th anniversary from the day on which the great poet was born.

Exhibitions of painters Abakumov, Plastov, Britov, Shagal, Picasso, Giacomo de Pass, exhibitions of drawings and sculptures of honoured Russian artist Zakomorny, Panov, etc. were also held.

The following events were held in 2014: 10th All-Russian Competition of Young Pianists, Industrial Festival of Children's Bands and Instrumental Groups, 5th All-Russian Theatre Festival of Amateur Theatres "Teatralnye Vitrazhi" ("Theatrical Stained-Glass Windows"), regional folk festival "Sloboda", interregional jazz festival "Zarechny. Jazz – 2014".

9th art symposium "Atomny Rennessans" ("Nuclear Renaissance") was held in Snezhinsk. Four prominent Russian artists took part in it. As a result of the artists' work that took one week 18 pictures and a lot of sketches were created. They were presented at the final exhibition at Snezhinsk City Museum.

Events held within the framework
of "ROSATOM's Territory of Culture"



In the year under review 20 different interregional and industrial cultural projects including industrial patriotic project "Fatherland" and industrial festival of guitar poetry of ROSATOM cities "U235" were implemented.

The programme is implemented under the support of ROSATOM Public Council.



5.2.4.

PLANS FOR 2015 AND THE MID-TERM HORIZON

For the purposes of development of the initiative on the creation of advanced development territories in nuclear cities in 2015 it is planned to develop concepts of such territories in all CATF of the nuclear sector. The concepts will determine specialisations of the territories and key projects. City-forming enterprises in CATF, administrations of CATF and RF territorial entities on which territory CATF are situated will take part in concepts elaboration.

In 2015 it is planned to continue cooperation with the Ministry of Culture of the Russian Federation (Federal Centre for the Support of Road Tours and Moscow State Academic Philharmonic named after Tchaikovsky P.I.) with respect to road tours of leading Moscow theatres and performers in nuclear cities, advanced training of heads of culture departments and workers of cultural establishments of nuclear cities.

It is planned to hold a wide range of events confined to the 70th Victory Day and 70th anniversary of the nuclear industry.

In 2015 industry-wide educational initiative "ROSATOM School" will start its new chapter of history. It will begin its operation abroad – in countries that are Russian partners in nuclear technologies development.



5.3.

INTERACTION WITH STAKEHOLDERS

345

thousand people
visited Atomic Energy
Information Centres

11.3

mln. people
audience of television
programme "Strana ROSATOM"
("ROSATOM Country")

72 %

the share of supporters of nuclear
energy use in Russia





DIRECTOR OF THE COMMUNICATIONS DEPARTMENT SERGEY NOVIKOV



ROSATOM Annual Public Report will be published in the year of the 70th anniversary of Russian nuclear industry. Exhibition “Chain reaction of success” will be carried out at Moscow Manezh throughout September 2015. What is the main idea of the exhibition?

The aim is to restore the historical context many years later and give a reply to the question why impetus to the development of the nuclear industry in our country was given 70 years ago, in 1945. It is not a business exhibition and it's not “Atomexpo” forum where business partners study our marketing offers. It is a cultural and historical exhibition targeted at common Russians, children, youngsters – everybody who would like to know the history of nuclear industry creation.

What other events confined to the 70th anniversary will be held?

Gala concert at National Kremlin Palace. “Russia 1” TV channel will broadcast it.

The script of musical film “Nuclear Kids” is also confined to the anniversary this year. But the approach is original – a story about Kurchatov’s childhood, moreover, it is a fantasy. Were You not afraid that some people can give a hostile reception to the idea?

The storyline of many projects is historical this year. As for “Nuclear Kids”, the logic is the following: kids cannot tell onstage something they do not understand. They are not professional actors. We came up with the following idea – we imagined that kid Kurchatov could have been an indirect participant of events in the Crimea in 1916. But it’s a story for kids: children who played key roles understood what it was about – about the life of a boy and each of them could have been this boy as adjusted for the historical details. The storyline awaked interest of Russian and foreign performance participants to Igor Kurchatov. They obtained information what he is famous for, why we create a musical film about him – what he did that people tell about his adventures onstage 99 years later.

5.3.1.

APPROACHES TO INTERACTION WITH STAKEHOLDERS

Given the scale and features of activities (simultaneous carrying out the diversified state and business tasks), ROSATOM has a broad range of stakeholders, both in Russia and outside.

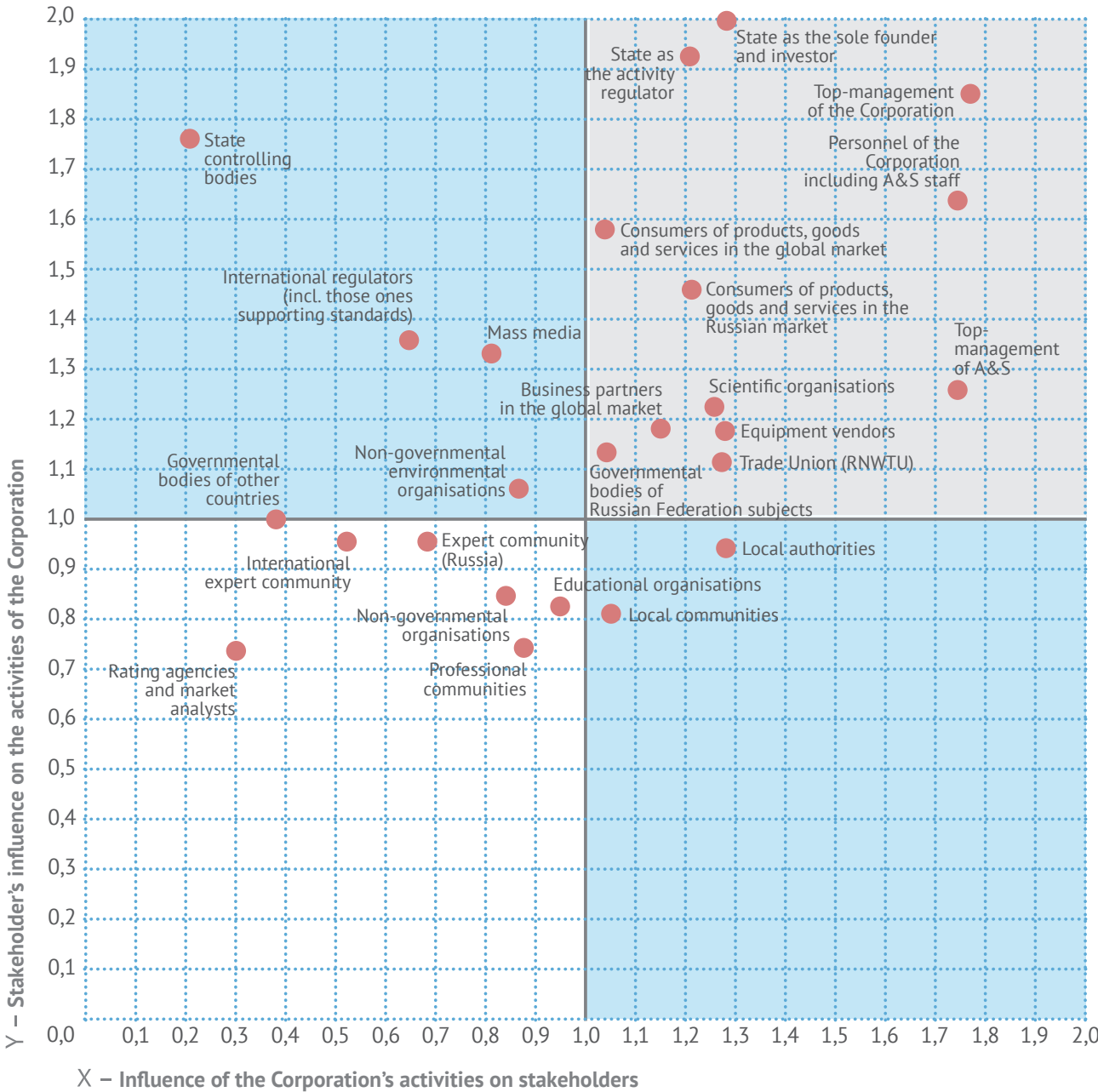
The focused work with stakeholders is governed primarily by the aim to achieve strategic goals and to ensure public acceptance of nuclear power development.

Given the multiplicity of core businesses (uranium production, construction of NPPs, electricity generation, fuel fabrication, nuclear decommissioning, SNF and RAW management, power machine engineering, etc.), as well as supporting activities (international legal cooperation, law-making, etc.), each area has its own stakeholders, and ROSATOM structures systemic and planned interaction with them (see. sections [“International cooperation”](#), [“Execution of public functions”](#), [“Development of Human capital assets”](#)). With that, some of ROSATOM’s work is aimed at the interaction with all stakeholders and the general public. Work on the interaction with stakeholders is also based on Corporation internal documents.

The basic principles underlying the interaction are respect and consideration for all participants, open and efficient cooperation, provision of information about ROSATOM activities to stakeholders in full and in a timely manner, drive to get certain benefits by all participants, and fulfilment of obligations

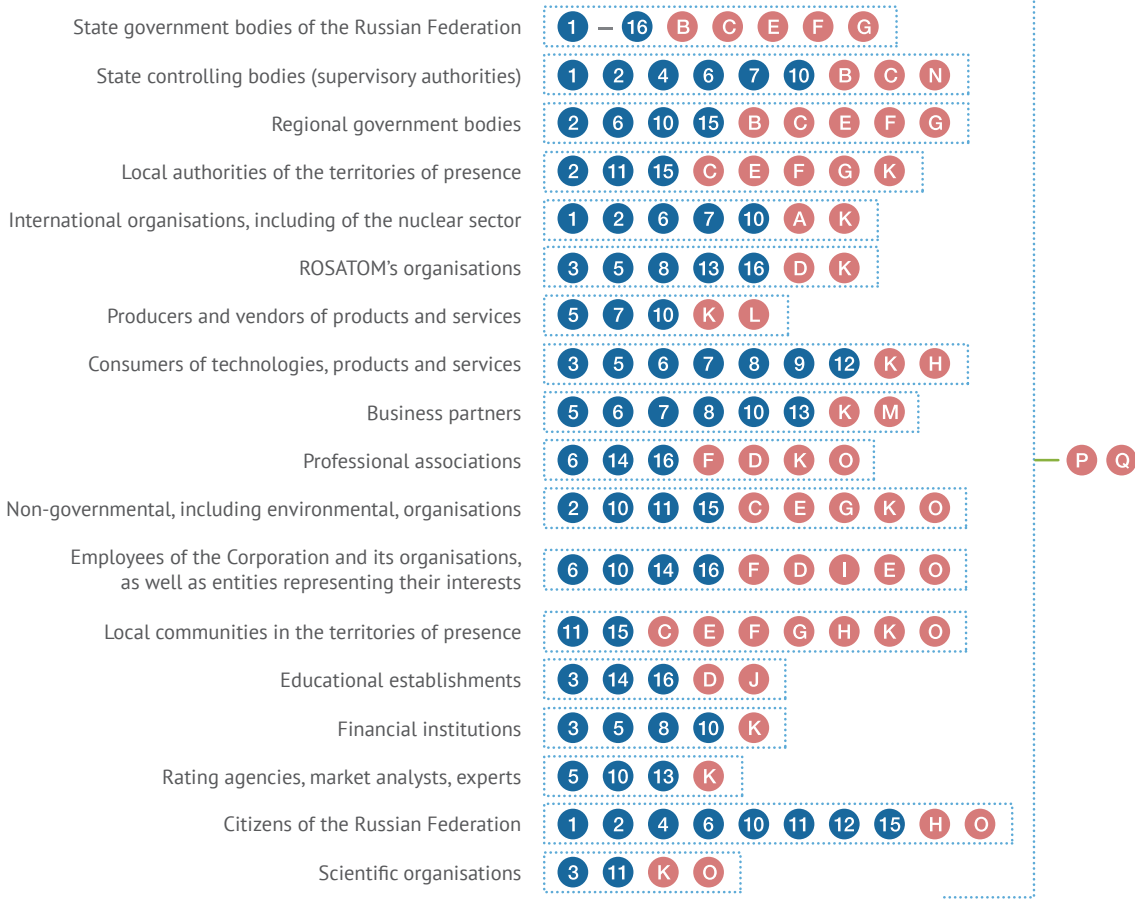


Ranking map of stakeholders*



* The ranking map gives a perspective of the degree of interdependence of ROSATOM and its stakeholders. The degree of influence of Corporation's activities on stakeholders is presented horizontally, and the degree of influence of stakeholders on the Corporation's activities is presented vertically.

Interaction with stakeholders



Interests of stakeholders

- 1 Support of a nuclear material and technology non-proliferation regime
- 2 Nuclear, radiation and environmental safety
- 3 Technological modernisation of the nuclear industry
- 4 Efficient spending of budget funds
- 5 Economic efficiency of ROSATOM's organisations
- 6 Observance of international and Russian law
- 7 Fair competition and responsible behaviour in the markets
- 8 Competitiveness in the global markets
- 9 Improvement of product and service quality
- 10 Transparency of ROSATOM's activities, including transparency of procurement
- 11 Solution of the problem of the "legacy" of past economic and defence activities in the sector

- 12 Reliable electricity supply
- 13 Adaptation of international norms and standards of management
- 14 Decent remuneration of personnel, professional advancement of employees, safe labour conditions
- 15 Improvement of the quality of living in the territories in which ROSATOM has a presence
- 16 Development of ROSATOM and its organisations' human resources

Types of stakeholder engagement

- A Cooperation with related international organisations, participation in international programs and projects
- B Participation in law-making
- C Holding of public hearings and public environmental reviews on nuclear power unit construction projects
- D Personnel training and skill advancement programs

- E Social programs and projects
- F Participation in the development of territories in which ROSATOM has a presence
- G Charity
- H Sociological studies, consumer satisfaction research
- I Hotlines
- J Cooperation programs with associated universities
- K Dialogues, presentations, forums, conferences
- L Open and competitive procurement procedures
- M Cooperation programs with other companies
- N Cooperation programs with state control (supervisory) authorities and law enforcement agencies
- O Public governance and control bodies
- P Information and communication
- Q Public reporting

5.3.2.

ROSATOM'S COOPERATION WITH FOREIGN PARTNERS

Active work on the development of strategic cooperation with large players of the international nuclear sector continued in 2014.

20th International Energy & Environment Fair & Conference "ICCI-2014" was held in Turkey (Istanbul). Face-to-face meetings of NIAEP-ASE with representatives of Turkish companies and a seminar for prospective vendors were held within its framework.

8th International Conference on Isotopes 8ICI was held in the USA (Chicago). 500 representatives of business community, science and medicine from different countries including representatives of Korean Atomic Energy Research Institute, European Commission's Joint Research Centre, National Institute of Standards and Technology, Los Alamos, Brookhaven and Argon National Laboratories as well as representatives of American and European leading universities took part in the conference.

Conference and exhibition "Pacific Basin Nuclear Conference 2014" was organised. It was held in Canada (Vancouver). The central theme of the exposition was a board with the information about the first NPP (Obninsk) with a logo of the 60th anniversary of nuclear energetic on it.

39th World Nuclear Association Symposium "WNA 2014" was held in Great Britain (London). Festive events confined to the 60th anniversary of the first NPP were carried out for 700 delegates representing world nuclear companies from 30 countries across the world within its framework. A video clip was prepared and shown at the symposium and then placed on WNA website, Facebook and YouTube.

6th International Forum "ATOMEXPO 2014" (Moscow) was a high-profile event of the year. It was held under the slogan "Nuclear kilowatt hour – new product of the power market". Over 90 companies from 11 countries across the world took part in the Forum.

ROSATOM's membership in international organisations and associations

ROSATOM and its subsidiaries are members of relevant international organisations and associations including World Nuclear Association, Nuclear Energy Institute, World Nuclear Fuel Market, Japan Atomic Industrial Forum, Korea Atomic Industrial Forum, and World Nuclear Transport Institute. JSC Rosatom Overseas is a member of NuPoC – association uniting nuclear companies that develop Nuclear Power Plant Exporters' Principles of Conduct.

5.3.3.

ATOMIC ENERGY INFORMATION CENTRES

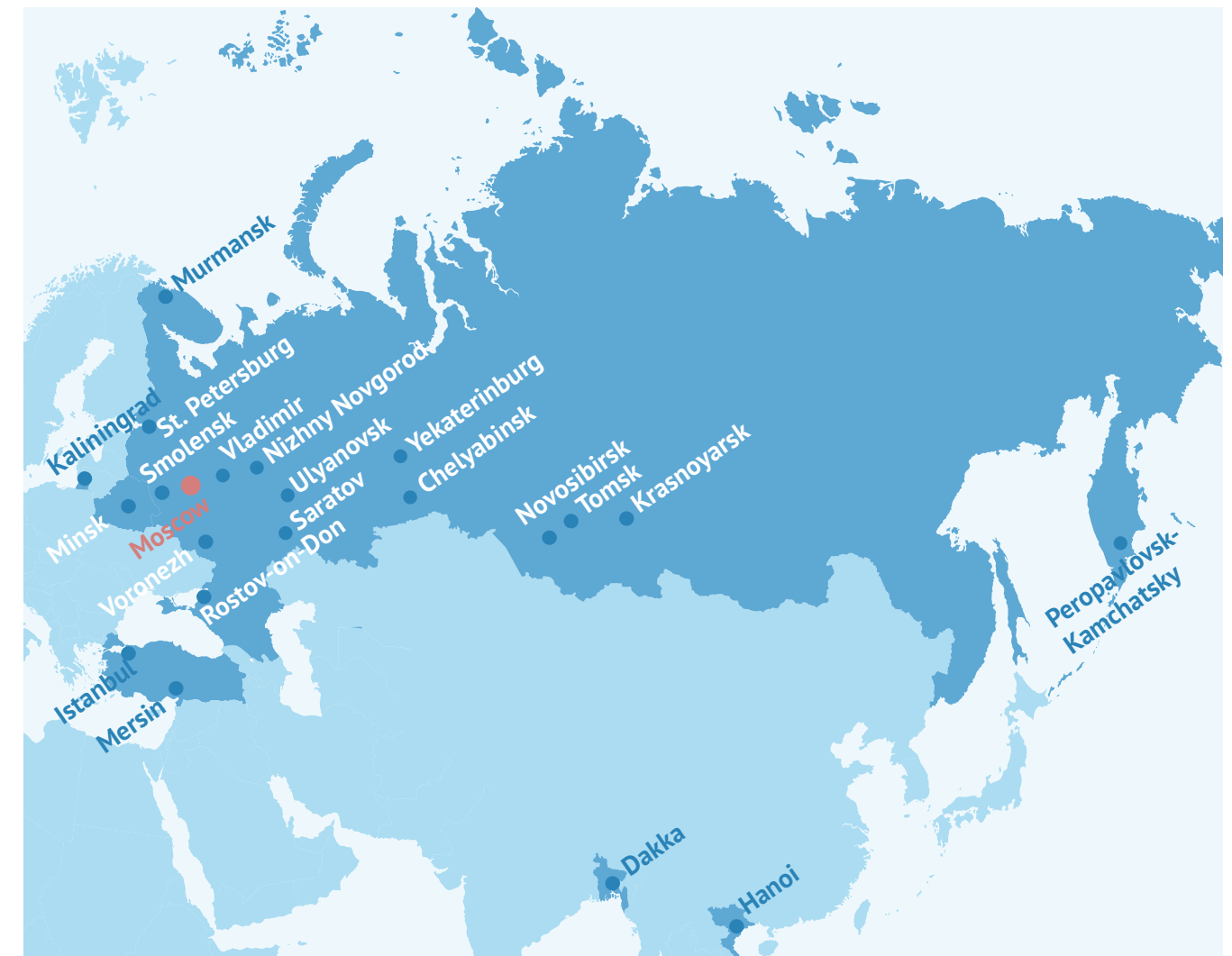
The AEIC network consists of 22 information centres including five foreign centres in Hanoi (Vietnam), Mersin, Istanbul (Turkey), Dhaka (Bangladesh) and Minsk (Belarus).

It is planned to open a centre in Astana (Kazakhstan) in 2015.

Since 2008, ROSATOM has implemented the project of establishing [atomic energy information centres \(AEIC\)](#) in the regions in which the Corporation has a presence. The main objectives of the centres are to disseminate basic knowledge of the nuclear industry, education of the population and promotion of science, innovative technologies and engineering education among schoolchildren.

Over six years, the centres were visited by more than 1.3 million people, including more than 345.000 people in 2014. The visitors watched multi-media programs on nuclear power, astronomy and country studies and took part in creative and educational projects.

Map of AEIC locations



5.3.4.

FORUM “FORSAGE”

The forum has been held since 2011 in the Kaluga region.

The aims of the Forum are to create a unified communication environment by combining the most promising innovation specialists of Russian and international companies on one platform and to develop favourable conditions for formation of professional identity and development of creative

innovative thinking and technological culture in young specialists.

In 2014, the Forum gathered together 800 participants (representatives of enterprises of nuclear sector, energy industry and production sector, the winners of the on-line stage of the competition called “Innovative Leader of Nuclear Industry”, employees of energy complex organisations, leaders and members of public youth organisations, young workers of Emergencies Ministry, young scientists of profession-oriented universities of the Eurasian Economic Community countries) and 150 invited speakers and experts.

Forum “Forsage”



5.3.5.

TELEVISION GAMESHOW “WHAT? WHERE? WHEN?”

In 2014 ROSATOM continued its cooperation with the television game show “What? Where? When?”, positioning ROSATOM among the target audience

as the “Corporation of knowledge” – the sphere of activities and business, the basis of which consists of people’s knowledge, innovation and high technologies.

The team of the Corporation, which includes nuclear experts from a variety of organisations of the sector, participated in the spring and autumn series of games, and became the “face” of human resources and intellectual potential of nuclear industry for Russian TV viewers.

The team of ROSATOM at the television game show “What? Where? When?”



5.3.6.

INDUSTRY MEDIA

5.3.6.1. Industry Press

In 2014, the industry newspaper “Strana Rosatom” continued to be published. Circulation is 55 thousand copies, the audience is about 270 thousand people.

The Main Objectives of the Newspaper:

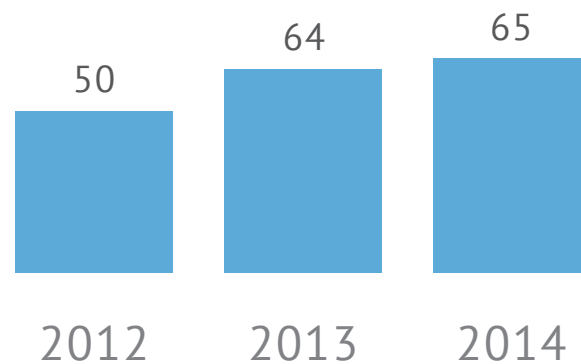
- formation of an industry-wide information environment,
- support for corporate image as an employer.

The readers of the newspaper are the employees of the nuclear sector, from ordinary specialists and line managers to senior managers.

However, according to enquiries, the newspaper is read by the families of the employees, veterans of the nuclear industry, customers and partners of ROSATOM. A large part of the audience consists of the residents of small single-industry towns, including the closed subnational entities.

To provide feedback to the audience the newspaper editorial office holds regular meetings with the readers. Thanks to this practice in 2014 new columns appeared in the newspaper: “Soon” (announcements of the industry events), “Review of the Foreign Media” (weekly column describing the major publications of world mass media devoted to the nuclear topic), “What to read/

The share of the specialists who consider the newspaper “Strana Rosatom” the main source of information about the industry, %



what to see” (recommendations of experts of the industry and experiments).

Within the framework of publication such regional additions as “SR-Europe”, “SR-Ural”, “SR-Siberia” are issued; scientific addition “Laboratory of SR” is monthly issued; the addition of the Russian Federal Nuclear Centre – All-Russian Scientific Research Institute of Experimental Physics (RFNC-VNIIEF) (Sarov, Nizhny Novgorod region) is weekly issued; the addition of the Concern – “People of Action” is issued 2 times a month.

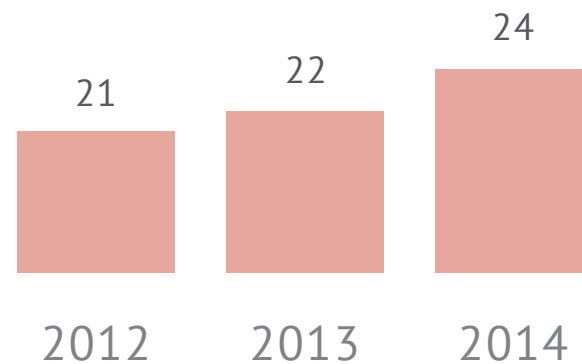
5.3.6.2. Industry Television

In 2014, information and analytical TV programme “Strana Rosatom” aired in 24 “nuclear” cities of 17 regions of Russia (“nuclear” cities include Closed Administrative-Territorial Units, cities of NPP and the cities, in which the nuclear companies are city-forming) and was broadcasted on 33 enterprises of ROSATOM.

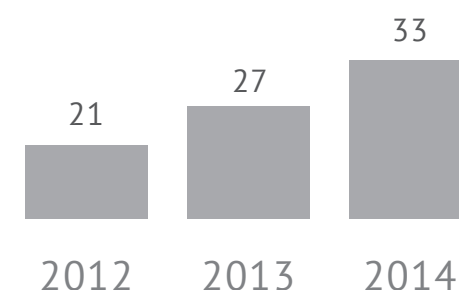
In 2014, more than 500 episodes aired (three times more than the year before). The total number of audience of terrestrial and cable channels that broadcast the programme, is about 11,3 million people.

In 2014, one more division of ROSATOM – machine-building joined the work on the project.

Number of cities where the TV programme “Strana Rosatom” is transmitted



Number of enterprise of the sector, which provide video materials for TV programme



Each version of the programme contains an information block which consists of news of its own division, and is related to a particular city.

5.3.6.3. Industry Radio

The radio programme “Strana Rosatom” airs 3 times a week (15–18 minutes). In 2014 135 editions of the radio program were broadcasted. The editions are transmitted on 50 companies of the sector through wire broadcasting or Intranet, as well as posted on the official website of ROSATOM.

During the reporting year, more than 800 events were covered and more than 450 speakers were invited.

The radio programme became the best corporate mass media of the year according to the All-Russian competition called “Press Service of the Year” for press secretaries, Press Service employees and specialists in the sphere of public relations. The co-project of the editors office of the radio programme “Strana Rosatom” and the International forum of young energy workers and manufacturers “Forsage” for creation of the field radio “AtomFresh” was awarded with the Premium in the sphere of internal communications and corporate culture “INTERCOMM-2014”, taking first place in the nomination of “Growth Point”.

5.3.7.

COMMUNICATIONS IN THE INTERNET

In 2014, the Corporation actively used the Internet to inform interested parties about its activities. According to the Google Analytics data 698 thousand users visited the official website of the State Corporation “Rosatom” (www.rosatom.ru) during the year (12 to 23 thousand people a week), the total number of views exceeded 3.8 million. During the year 2,590 press releases were published on the site (an average of 215 releases per month). 971 messages were posted in the section named “Mass media about the nuclear industry”.

In 2014 the presence of ROSATOM and its organisations in the social networks and the blogosphere increased significantly. The number of registered users of official communities has been growing. In Facebook, it grew to 7,970 people (5,740 people a year earlier); Vkontakte had 7,542 registered users (6,120 users a year earlier). 4,079 users were registered in Twitter by the end of the year (3,002 people a year earlier). Finally, YouTube, as of December, 31, 2014 had 1,979 registered users (1,105 users a year earlier). On Facebook 21.4 thousand comments were posted below the records of the community of ROSATOM. More than 11 thousand comments – in Vkontakte.

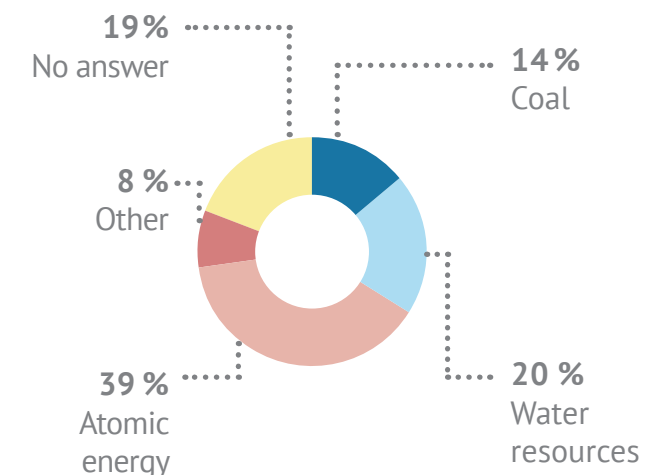
* Representative selection survey of population of Russian regions, of 3,834 people aged 18 years and older, was conducted on 22 August – 8 September, 2014. Source: independent and non-governmental organisation “Levada-Centre” (<http://www.levada.ru>)

5.3.8.

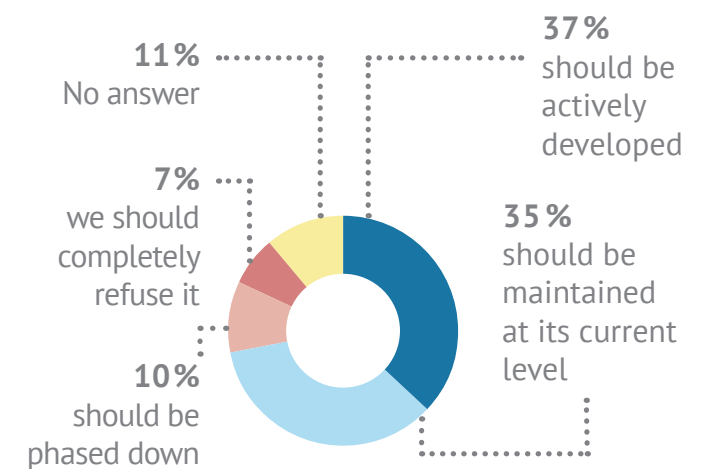
SOCIAL RESEARCH OF PUBLIC OPINION

Public opinion about nuclear industry in Russia*

People say that in 20 years oil and gas reserves will run out in Russia. What do you think can replace them as a source of energy?



Do you think nuclear industry should be developed, maintained at its current level or phased down?



5.4.

THE PUBLIC COUNCIL OF ROSATOM*

5.4.1.

Public Council of ROSATOM was formed in 2006 in order to involve Russian citizens, public and professional associations, scientific organisations, local government bodies in making recommendations to help ROSATOM in taking decisions concerning atomic energy.

Main Areas of Activity:

- Scientific and organisational and scientific and expert activities,
- Activities in the regions, holding public dialogue forums,
- Social-and-educational, sociocultural activities.

SCIENTIFIC AND ORGANISATIONAL AND SCIENTIFIC AND EXPERT ACTIVITIES

In 2014:

- the expert analysis of the project of the new version of the state programme “Development of Atomic Energy Industrial Complex” was conducted and submitted for its further consideration in the procedure established by the Government of the Russian Federation,
- the principal directions and a staged approach to the development of the Russian legislation concerning the spent fuel handling were approved,
- proposals of improvement of the project of radioactive wastes disposal in the territory of Sosnovy Bor according to the EIA materials were provided.

In the reporting year 4 public hearings and 6 environmental expertise were held. A working group of the Public Council dealing with radioactive wastes and spent nuclear fuel management, the purpose of which is to organise interaction between the public and organisations of the Corporation in the field of radioactive waste and spent nuclear fuel management and rehabilitation of the territories. The group includes representatives of the Public Council, Federal State Unitary Geological Enterprise “Gidrospecgeologiya” and public organisations.



* Publications of experts – members of the Public Council and inform provision of the public with information on the Internet or sites: www.rosatom.ru, www.atomic-energy.ru.

Public Hearings and Public Environmental Expert Reviews



5.4.2.

ACTIVITIES IN REGIONS, PUBLIC DIALOGUE FORUMS

In 2014 the receiving offices of the Public Council worked in Zelenogorsk and Novouralsk Closed Administrative-Territorial Units and in Sosnovy Bor. In Murmansk Oblast the Nuclear Industry Safe Development Public Council worked.

In the reporting year, the Public Council was traditionally an organiser of the dialogue forums, devoted to atomic energy use safety:

- IX International Public Dialogue Forum “Nuclear Energy, Society, Safety” (Moscow, 150 participants, 9 countries),
- VII Regional Dialogue Forum “Atomic Production, Society, Security” (Krasnoyarsk, 300 participants, more than 20 public organisations).

5.4.3.

PUBLISHING ACTIVITIES

Public Council carries on publishing activities, in 2014 it particularly issued:

- The handbook of public environmental associations “Russian environmental movement in 2013”,
- The brochure on the activities of the Public Council of ROSATOM in Russian and English,
- The two brochures of the series “The Seven Wonders of the world atom”, “Spying Rays: how to know what is inside the black box without opening it?” And “The Magic molecules: radiological agents help doctors to detect and treat dangerous diseases”.

For the new Atomic Energy Data Centre of ROSATOM four series of brochures of the Public Council reissued in Minsk: These series are “To the space – nuclear-powered”, “The Future of nuclear power industry – thermonuclear reactors”, “Radiation is natural!” And “The nuclear fuel cycle. Way of uranium”.

6.

PLEDGING OF SECURITY

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6.1.

PROVISION OF NUCLEAR AND RADIATION SAFETY

KEY RESULTS OF 2014

There were no events of the level 2 and above on the INES scale

from 0.51 to 0.43

The injury frequency coefficient decreased in 2014 compared to 2013

60,958

Number of people for whom individual radiation risks were determined with the ARMIR system



DIRECTOR OF NUCLEAR SAFETY
AND LICENSING DEPARTMENT
SERGEY RAYKOV

What are the main achievements in the sphere of provision of safety in the reporting year?

Safety of people and the environment was traditionally the highest priority for ROSATOM. In 2014, we achieved significant results in all areas of safety provision. Not a single event which could be classified as an accident or incident on the INES scale happened on the nuclear facilities. The injury frequency rate reduced significantly: from 0.51 in 2013 to 0.43, which is almost 4 times less than for the whole of Russia. No industry facility had events classified as "accident at hazardous industrial facility". And still, the vast majority of employees belonging to the group A, work under the conditions of acceptable occupational risk.



In 2014 we achieved significant results in all areas of safety provision

What are the plans in the sphere of safety provision for 2015 year?

There are three main areas of work for the next year: first, improving the safety management system. Second – the development of the legal and regulatory framework and normative-technical basis in the field of security. Third – introduction of information and communication technologies in the system of personnel training using computer simulators and computer-based testing systems. At the same time we must provide security in the context of innovative development and technological modernisation of the sector – during construction of new nuclear facilities and the operation of existing ones, in solving problems of liquidation of "nuclear legacy" and the creation of nuclear power technologies of the future.

We must provide safety in the context of innovative development and technological modernisation of the industry

The objectives of provision of nuclear and radiation safety of nuclear facilities, personnel, population and the environment in the medium-term and long-term perspective are scheduled by the programme of the “Rosatom” State Corporation activities for a long period.

[The main areas of activities of the Corporation in the sphere of NRS](#) are: provision of the safe operation of nuclear facilities, and comprehensive solution to the problems of “nuclear legacy”.

[Information on nuclear and radiation safety in ROSATOM and its Organisations is presented in the Safety Report.](#)

The security status of nuclear facilities is evaluated by amount and scale of accounting malfunctions that are compared with the International Nuclear Events Scale (INES) developed by the IAEA. Within the scale any events are classified in seven levels: at the upper levels (4–7) they are called “accidents” and in the lower levels – “Incidents” (2–3) and “anomalies” (1). The events that are insignificant from the point of view of safety, are classified as Below Scale – with 0 level. The events unrelated to safety are classified as “out of scale”

6.1.1.

PROVISION OF NUCLEAR AND RADIATION SAFETY OF NUCLEAR FACILITIES

In 2014 ROSATOM provided sustainable and safe operation of the nuclear industry enterprises. Radiation accidents and excessive radiation doses of personnel were not allowed.

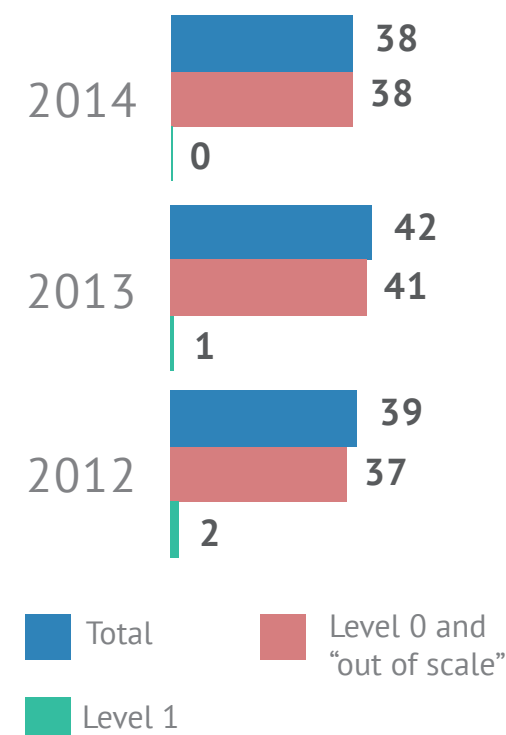
In 2014 no events of the “2” level or higher on the scale of INES happened on the enterprises of the Corporation. For the last 16 years there have been no events that are classified as accidents or incidents on the INES scale.

Nuclear Stations

On 10 Russian nuclear power plants there were 33 power generation units, in operation of which 38 malfunctions were registered according to NP-004-08, including 9 malfunctions with stopping power generation units by automatic system action, reactor shutdown from critical state.

In addition, 4 malfunctions occurred on power generation units No. 4 of Beloyarsk NPP (2 of them are classified as level “1” on the INES scale) and 1 malfunction on power generation units No. 3 of Rostov NPP, which were in the process of commissioning.

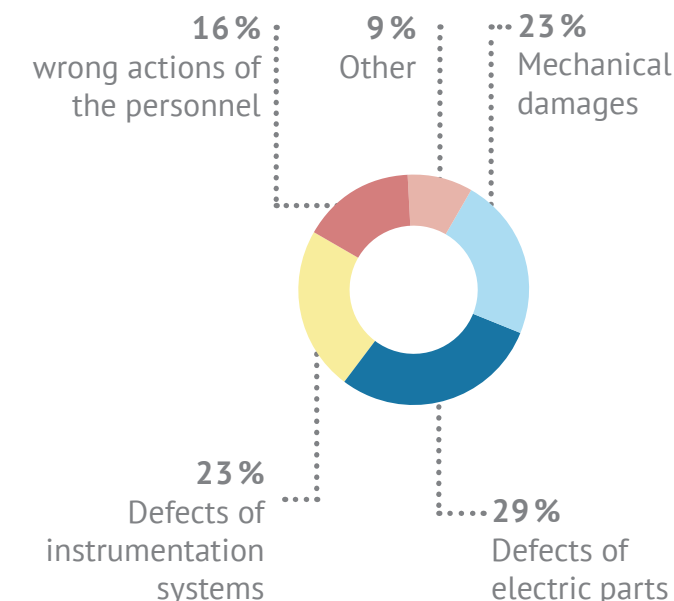
Dynamics* of number of malfunctions in operation of NPP on the INES scale



* The dynamics of the total number of malfunctions is shown without malfunctions of power generation units that were in the experimental-industrial exploitation after construction or at commissioning stages.

Malfunctions were studied according to the established procedure, any effects of malfunctions were mitigated and prevented in the future. The following reasons of malfunctions were determined: wrong actions of personnel during transport of nuclear fuel, damage of the fuel-handling machine with cooling water system; failure of cooling water system in the reactor: disconnection of the cork with throttle from the shanks of cooling water system. Corrective measures were developed, including those that are aimed to improve the system of training and skill upgrading of the personnel of NPP and to enhance the quality of control of the preparation and permit of the personnel to work.

Reasons of malfunctions in operation of NPP in 2014



NFC enterprises

In 2014, at the nuclear fuel cycle facilities there were malfunctions to be considered in compliance with federal norms and regulations in the field use of nuclear energy*.

Operating organisations (Mayak Production Union FSUE) noted 12 events (5 of them in industrial reactors):

- 6 events were related to wounds and damaged skin of employees,
- 2 event occurred as a result of the storm front,
- 4 events are related to errors in the work of services and equipment

These events are classified as insignificant for the safety and are considered events below the INES scale (level “0”).

*“Regulations concerning procedures of study and consideration of failures in operation of nuclear fuel cycle facilities” NP-047-11.

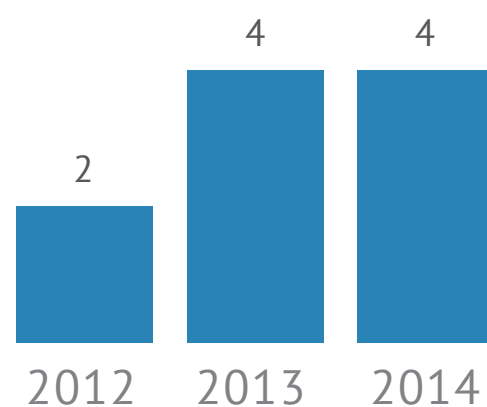
Accidents and cases of exceeding the valid parameters of nuclear safety, the annual dose limit in the personnel and the population, as well maximum permissible emission in the NFC enterprises were not allowed.

Nuclear Research Installations

In 2014, 4 malfunctions in the nuclear research installations were recorded, which occurred in the active research reactor of JSC State Scientific Centre – Research Institute of Atomic Reactors and were classification on the INES scale as 0 level. All malfunctions were related to the power supply failure in the areas of responsibility of the operational organisation, therefore the operating organisations are working on improvement of reliability of electricity supplying systems, being under their responsibility, and sustainability of NRI to malfunctions in power supply.

In the work of Russian NRI in 2014 no failures of elements/systems, personnel error were detected, and there were no cases of exposure of personnel, control levels excess, radioactive contamination of premises, sites of location of NRI and territory outside areas.

Dynamics of malfunctions in operation of NRI, unit



6.1.2.

PHYSICAL PROTECTION OF NUCLEAR FACILITY

The main mechanism provision of the physical protection of nuclear and radiation hazardous facilities of ROSATOM is a comprehensive approach that combines prescriptive regulatory and institutional works studying and training actions of services and structural division responsible for physical protection.

Results of 2014

- the comprehensive inspection of status of physical protection was conducted in more than 20 % nuclear-hazardous facilities of the Corporation;
- antiterrorist protection of facilities was provided, planned modernisation of the necessary technical means of physical protection was carried out;
- measures on personnel development were taken;
- new training courses demanded in IAEA were developed.

Results of international interaction

- measures to implement international technical assistance in the field of physical protection were taken in the framework of the Russian and American cooperation;
- the project of sectoral programs for the physical protection and antiterrorist sustainability for 2015–2017 was prepared (the programme comes into force in 2015). In view of the completion of cooperation with the US on the matters of physical protection, one of the objectives of the programme is compensation of financing of operations executed at the expense of funds of international technical assistance;
- participation in the consultations concerning the protection of NPP being built in Turkey and Belarus.

Plans for 2015 year and medium-term perspective

- improvement of the effectiveness of the systems of physical protection of nuclear and radiation hazardous organisations of the Corporation,
- introduction of special software made in Russia for the analysis of physical protection systems,
- normative base updating,
- participation of designers and builders of NPP business events devoted to safety and physical protection.

6.1.3.

READINESS TO EMERGENCY RESPONSE

In order to provide safe operation of the nuclear industry, protection of personnel, population and territories against the possible consequences of accidents (emergency situations (ES)) the System of Prevention and Response to ES (SPRES), which is a functional subsystem of the single state system of prevention and recovery of emergency situation, acts in ROSATOM.

Results of activities of SPRES

The structure of SPRES contains 12 professional Emergency Response Teams (ERT) and 47 freelance ERT certified to conduct salvage and rescue operations, with a total of more than 3,500 rescuers. 9 professional ERT included in the list of forces and means of constant readiness of the federal level form the basis of Emergency Response Forces of the Corporation.

In 2014, the readiness of governing organs of SPRES, forces and means of emergency response to take measure in case ES at nuclear facilities was provided.

The level of readiness of forces and means, completeness and feasibility of emergency plans are evaluated during the training. In 2014 273 accident-prevention, tactical and command-staff exercises and training were conducted, 50 of them took place at nuclear stations.

The certification committee of the Corporation regularly certifies the executive employees, rescuers and emergency response teams to allow them to carry out salvage and rescue operations. In 2014, more than 400 executive employees and specialists of ERT were trained and upgraded their skills. 17 ERT (3 professional and 14 freelance ERT) were routinely certified and more than 1,500 rescuers gained or confirmed the corresponding class of qualification.

6.1.4.

INDUSTRIAL-BASED AUTOMATED RADIATION SITUATION MONITORING SYSTEM

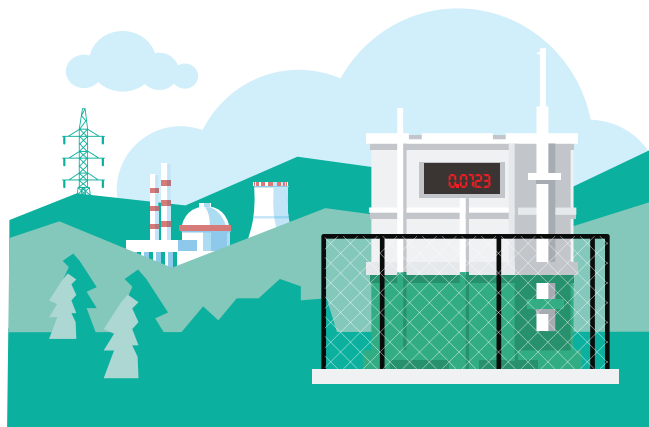
One of the key elements of the system of state control of the radiation situation in the areas where nuclear and radiation hazardous facilities are located is an Industrial-based Automated Radiation Situation Monitoring System, which operates under the Uniform state automated system for monitoring of the radiation situation on the territory of the Russian Federation.

The structure of the Industrial-based Automated Radiation Situation Monitoring System includes 27 Automated Radiation Situation Monitoring System enterprises and organisations of the nuclear industry, with a total of 406 fixed positions, including all NPP.

Data of many years experiment show that in normal operation mode the contribution of NPP to

the measured radiation background is negligibly small and the radiation situation in the areas of measurement complies with the natural radiation background.

Data of radiation monitoring of Industrial-based Automated Radiation Situation Monitoring System of ROSATOM are available to the a wide public in real time on the website www.russianatom.ru



6.1.5.

INDUSTRIAL SAFETY

In the reporting year the registration of hazardous industrial facilities (HIF) operated by the organisations of the Corporation, in a departmental (industry-based) section of the state registry was continued. As of December, 31, 2014 794 HIFs were register in 111 organisations (in 2013 – 836), of which 8 are of I hazard class, 32 – II, 294 – III, 460 – IV.

In 2014 no events classified as “accidents at hazardous production facilities” happened on the industrial facilities of the Corporation. 3 incidents that did not result in financial expenses were investigated and taken into account.

Industrial-based Automated Radiation Situation Monitoring System

4 stations

control dose of gamma radiation and the concentration of hydrogen fluoride in the atmosphere

7 stations

control of meteorological parameters and gamma radiation dose rate

2 stations

control the gamma radiation dose rate and volumetric activity of radioactive gases and aerosols

1 station

control of meteorological parameters, the gamma radiation dose rate of and volumetric activity of a radioactive gases and aerosols

27

the total number of ARMS facilities, integrated into IARMS

406

the total number of fixed monitoring stations of ARMS integrated into IARMS

285 stations

outside of the industrial site of the Corporation organisations

7 stations

control volumetric activity of radioactive gases and aerosols

4 stations

control of meteorological parameters

381 stations

control the gamma radiation dose rate

121 stations

on the industrial site of the Corporation organisations

Functions Location

6.1.6.

PROVISION OF SAFE WORKING CONDITIONS

Comparative data of industrial injuries in Russia and in ROSATOM, coefficient of frequency

6.1.6.1. Industrial injuries

The ROSATOM is continuing to reduce industrial injuries, as well as the impact of harmful production factors on the personnel.

Reduction of injuries level is observed in most divisions of ROSATOM. In 2014, the injuries frequency rate reached a value of 0.43, which is almost 4 times less than in Russia as a whole.

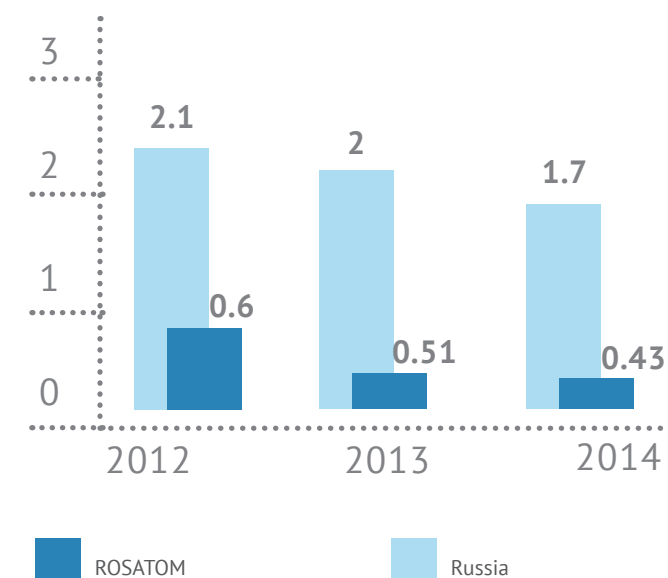
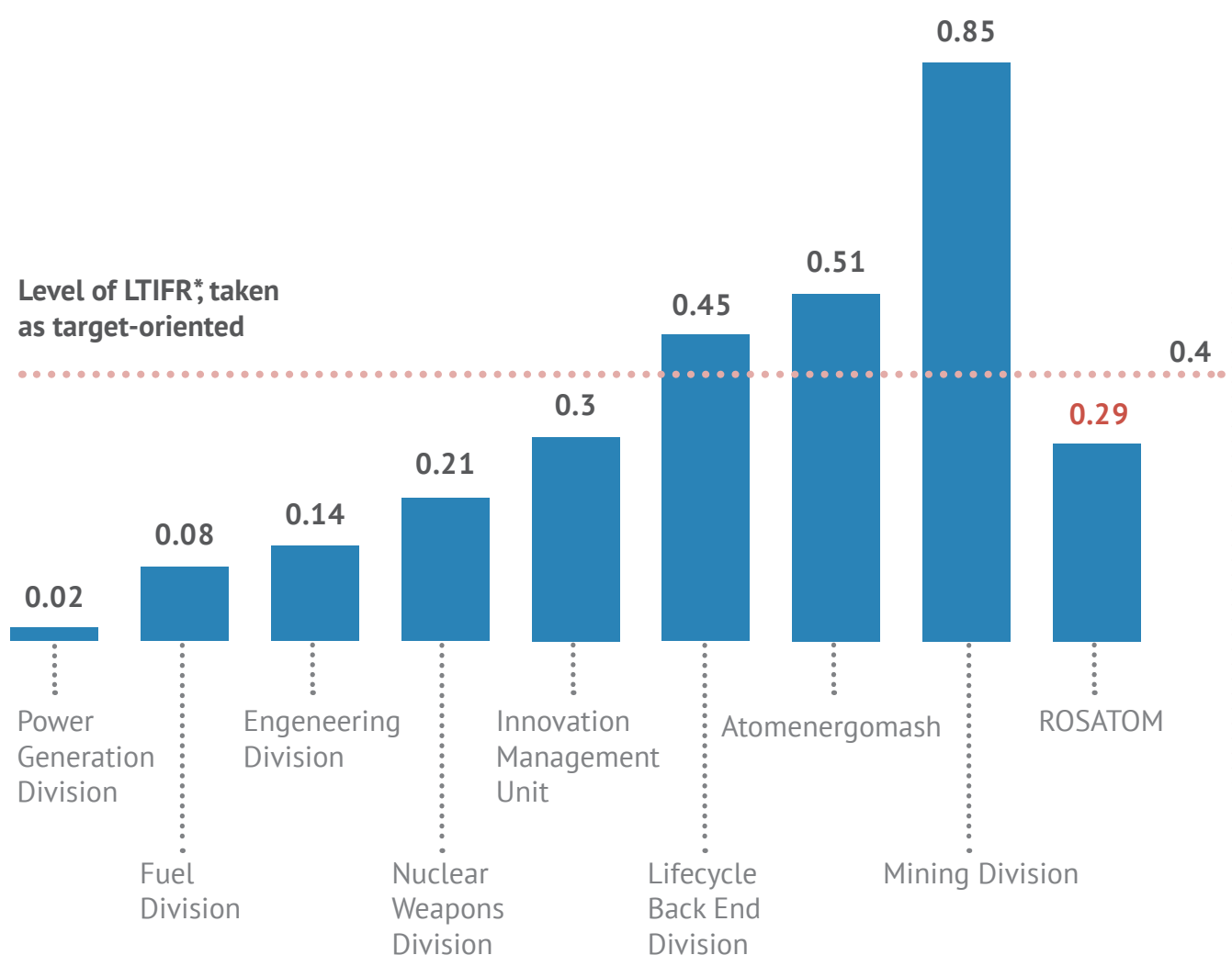


Table. Labour Protection Indexes*

Indexes	2014	2013	2012
Number of people employed (people)	251,516	250,307	252,267
Number of injured people due to accidents	109	127	143
Number of fatalities	4	4	3
Injuries frequency rate	0,43	0,51	0,6
Lost Time Injury Frequency Rate LTIFR	0.29	0.28	0.34
Number of people newly diagnosed with professional disease (people)	48	47	33

* On the basis of information provided by the companies of the sector in the framework of statistical reports under the Form N-7 injuries, approved by the order of the Federal State Statistics Service dated June, 19, 2013 No. 216 “On approval of statistical tools for the organisation of federal statistical observation of activities in the areas of health, occupational traumatism and the natural movement of population

Index of LTIFR in ROSATOM and division/complexes



* LTIFR = (total working period, lost as a result of injuries.) × (1 mln person-hour) / (total time worked).

6.1.6.2. Assessment of Labour Condition

In order to implement the Federal Law dated 12.28.2013 "On the special assessment of the labour conditions" the organisations of the Corporation launched a special assessment of labour conditions.

The special assessment of the labour conditions was developed in the framework of the pension reform in the Russian Federation. The special assessment provides the transition from the "list" approach to the provision of guarantees and compensation to workers harmful and hazardous productions with taking into account the actual impact of harmful (or) hazardous factors of production environment and labour process on the employee's body.

Ministry of Labour and Social Protection of the Russian Federation with the participation of ROSATOM developed "Features of the special assessment of labour conditions in the workplaces of workers of radiation hazardous and nuclear-hazardous industries and facilities engaged in work with technology-related sources of ionising radiation".

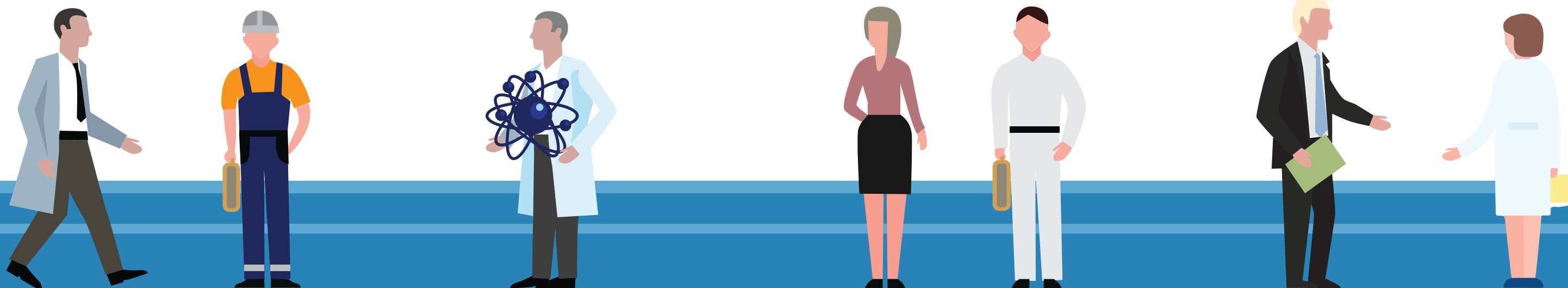
Development of the document driven by the need to take into account certain requirements while making an assessment: keeping state secrets, carrying out the additional measurements of the work process tension in the workplaces, in which weapons fissile materials are used, etc.

Before the special assessment law came into force, of more than 80% of work places of the Corporation's organisations had been attested in terms of labour conditions, the period of the action of the results of which has not yet expired.

Assessment of workplaces (AWP) in large organisations is carried out gradually (during several years), taking into account that period of validity of the results of AWP is five years, the start of the special assessment of the labour condition at these workplaces also occurs gradually (with the expiration of AWP results period of validity). In accordance with the law the special assessment of the labour condition can be made in stages and should be completed no later than December 31, 2018.

Special assessment of labour conditions has started for the rest workplaces. About 40 organisations of the Corporation have such workplaces.

According to the industry agreement on nuclear energy, industry and science for 2012–2014, nuclear industry employers provide funding for measures aimed to improve labour conditions and protection in enterprises in the amount of not less than 0.5% of the amount of expenses for production costs. In 2014, companies and organisations of ROSATOM spent 8.9 billion rubles on labour protection measures



6.1.7.

PERSONNEL EXPOSURE

Ionising radiation is a specific production factor for enterprises of the Corporation.

Criteria for radiation safety of personnel are provided by the current radiation safety standards (NRB-99/2009), the Principal Sanitary Radiation Safety Rules (OSPORB-99/2010) and other regulations. Labour conditions that fully meet these requirements have been created on most of the enterprises.

6.1.7.1. Radiation Dose Level for the Personnel

In 2014, 67,018 people (staff of A group) were subject to radiation control in the organisations of ROSATOM. Compared to the 2013 this number was reduced by 0.8%.

During the reporting year, there were no people with a total effective dose of more than 100 mSv among the personnel (like in the last five years).

The annual dose limit of 50 mSv was not exceeded. For half of the workers of the industry (54.4%), radiation doses did not exceed 1 mSv / year – the basic dose limit for the population.

In comparison with 2013, collective effective dose to the personnel in 2014 decreased slightly, while the average annual effective dose to personnel hardly decreased. Since 2009, the average effective dose and the number of personnel exposed vary slightly and maintained at the lowest possible and achievable level.

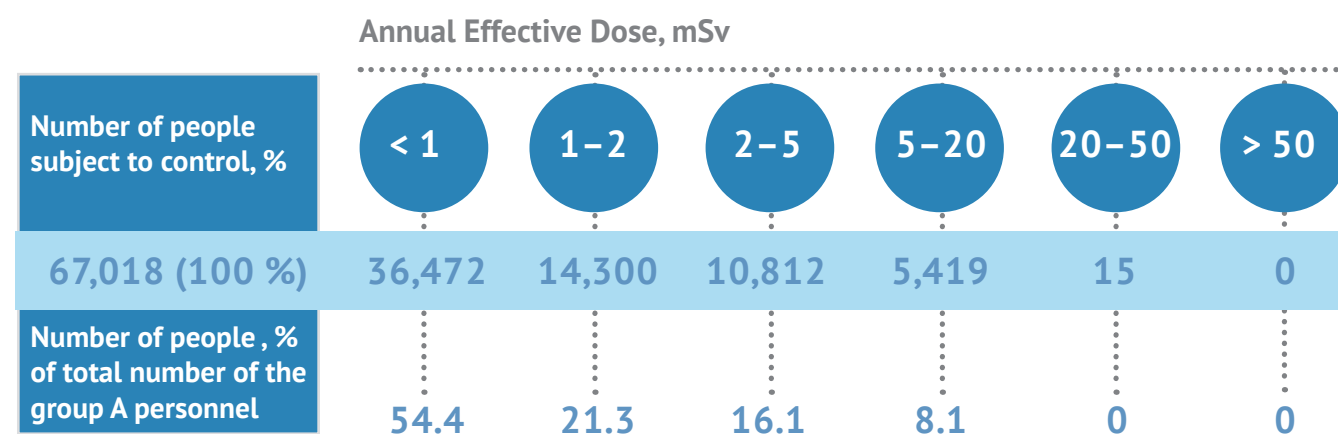
6.1.7.2. Assessment of Individual Radiation Risk

In 2014, the radiation risk to the personnel of the A group was determined with use of professional assessment of the radiation risk ARMIR. Individual risk was determined for 60,958 people, accounting for 91% of the number of personnel of group A (90.8% in 2013).

The vast majority of employees belonging to the A group, work in conditions of acceptable occupational risk. For 848 people (772 in 2013) individual risk exceeded the value of 10^{-3} . The relative number of individuals with high risk was 1.26% of the number of personnel included in the system ARMIR (1.25% in 2013). The average age of employees of high risk groups was 60 years old, there were no people younger than 45 years among them. For the next years the average value of the radiation risk in ROSATOM has not exceeded 8% of the statutory limit (10^{-3} year⁻¹ NRB 99/2009).

This tendency is confirmed by significant potential radiation safety achieved at the enterprises of the sector.

Distribution of personnel A Group according to the dose range in 2014, in % of total amount



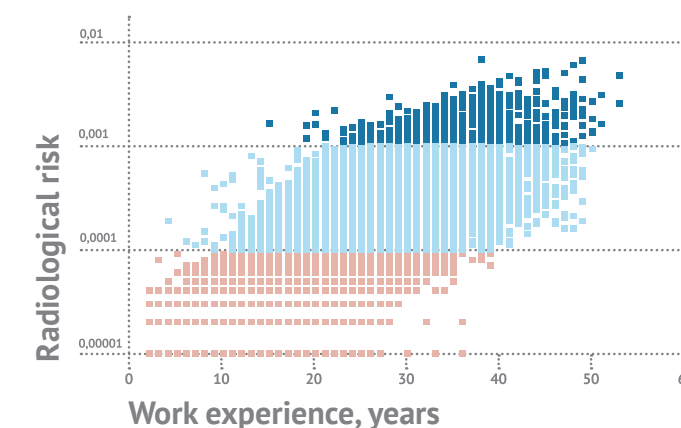
6.1.8.

Individual radiological risks of employees

2015 AND MEDIUM TERM PLANS

In the framework of legal and regulatory activities, the following were planned:

- Preparation of proposals for the harmonisation of requirements of federal regulations and rules with recommendations of the IAEA to provide the NRS;
- Development and submission to the government of the Russian Federation of the draft decree of the Government of the Russian Federation "On approval of rules for categorising of land affected by radioactive pollution as a result of activities related to nuclear energy use";
- Development and submission to the government of the Russian Federation of the draft decree of the Government of the Russian Federation "On approval of rules for the management of spent fuel and spent fuel derived products";
- Development and submission to the government of the Russian Federation of the draft decree



- of the Government of the Russian Federation "On approval of the procedure of transfer on the disposal of radioactive waste generated during the activities related to the development, manufacture, testing, operation and disposal of nuclear weapons and nuclear power plants of military purposes";
- Development of Federal Regulations and rules of Safety provision when handling the spent closed radionuclide sources, including the safety requirements for their disposal or transfer with ownership right of the manufacturing factories for further processing.

Table. Average individual accumulated dose and Average individual radiation risk for the personnel

Group of Companies	Average individual accumulated dose, mSv	Average individual radiation risk
Power Generation Division	51.30	1.2E-04
Fuel Division	20.60	2.8E-05
Nuclear Weapons Division	33.20	4.9E-05
Mining Division	35.45	1.5E-05
Nuclear and Radiation Safety Complex	38.76	6.8E-05
Innovation Management Unit	44.57	8.7E-05
ROSATOM	39.86	7.6E-05

6.2.

“NUCLEAR LEGACY” PROBLEM SOLVING

Key results of 2014 year

The transportation of spent nuclear fuel accumulated in the Navy during the Soviet period was completed. One of the priority objectives related to improvement of the environmental and nuclear safety of the Primorsky Territory was solved.

Rate of preparation, removal from NPP sites and putting on dry storage of conditioned spent fuel of RBMK reactors was increased 2 times in comparison with 2013.

The area of the plant Mosrentgen located in the territory of New Moscow was fully rehabilitated.



DIRECTOR FOR PUBLIC POLICY ON RADIOACTIVE WASTE,
SPENT NUCLEAR FUEL AND NUCLEAR DECOMMISSIONING

OLEG KRYUKOV

For many years The ROSATOM has been taking serious efforts to address the problems of "nuclear legacy." What are the main results of 2014?

Many projects were successfully completed last year. The plant for the production of MOX fuel was put into operation. In 2015 the first assembly for fast neutron reactor will be produced.

A project for the rehabilitation of the land of the old unauthorised disposal of radioactive waste, located on the territory of JSC Mosrentgen in the south-west of Moscow. The facility was released from regulatory control and environmental safety was confirmed by appropriate conductive conclusion of Russian Federal Consumer Rights Protection and Human Health Control Service.

The works on the Volginskoye field in the Vladimir area were completed: the decontamination works had been carried out for ten years, as a result 4 hectares of land were rehabilitated.

What about business results?

During the year, the enterprises of the Lifecycle Back End Division of performed works for 17.7 billion rubles, having received 120 million of net profit. Labour productivity increased by 23% compared to 2013. The growth of the average wage amounted to 14.8%: from 48.8 thousands of rubles a month to 56 thousand. Unit costs for storage of spent nuclear fuel and radioactive waste were reduced by approximately 15%.

What are the objectives for near-term prospect?

In 2015, it is planned to approve the federal target programme "Nuclear and Radiation safety for 2016–2020 and for the period up to 2030". Priority programs consist in practical works on liquidation of "legacy": Decommissioning of stopped nuclear radioactive hazardous facilities, final isolation of radioactive waste, reprocessing of spent nuclear fuel, that is not subject to long-term storage. The volume of works on the "legacy" in comparison with the previous programme will be increased by more than twice. Since 2016 it is planned to begin work on creation of facilities of final isolation of radioactive waste. At the initial stage pre-studies will be carried out and project documentation will be developed.



6.2.1.

APPROACH TO SOLVING “NUCLEAR LEGACY” PROBLEMS

One of the principal activities to ensure nuclear radiation safety is to solve nuclear heritage problems and to prevent its harmful impact on the environment.

Federal target programs and international programs on technical assistance to Russia are implemented in the Russian Federation for the subsequent elimination of nuclear legacy. The interstate programme on restoration of territories affected by uranium mining is implemented in the CIS to unite efforts and to create common systems of radiation safety.

Russia as the legal successor of the Soviet Union continues to execute its international obligations on return of spent nuclear fuel of foreign energy and research reactors built under the national projects.

ROSATOM with its unique experience in solving “nuclear legacy” problems has everything to be a leader in this field and to share its experience and technologies with countries with “nuclear heritage”.

6.2.2.

THE MAIN RESULTS IN 2014

6.2.2.1. Development of the unified state system of RAW management

In 2014:

- The first phase of the unified state radioactive waste management system (USRAWMS) is completed, the Russian Federation territorial planning scheme in the energy regarding radioactive waste disposal is approved, “Eligibility criteria for radioactive waste disposal” are developed;
- The initial registration of RAW and their locations (over 400 radioactive waste storage sites were inspected) is completed, an actual inventory list of nuclear and radiation hazardous facilities contains information on more than 2000 objects;
- The first stage of the construction of the site for 3 and 4 class solid RAW disposal near JSC Ural Electrochemical Plant is completed;
- Federal State Unitary Enterprise “National Operator” started operating of sites for liquid RAW landfills in the cities of Seversk at Tomsk region, of Zheleznogorsk at Krasnoyarsk Krai, and of Dimitrovgrad at Ulyanovsk region.



Table. Performance Targets on RAW management

Index	2014, progressive total plan	2014 actual
Commissioning of radioactive waste storage facilities, thous. ton	49	54.9
RAW activity transferred to a safe state, 10 ¹⁸ Bq	11	24.9

Table. Accumulated RAW as of December, 31, 2014

RAW Category	SRW, mln. t	FRW, mln. m ³
Low-active wastes	73.06	428.287
Middle-active wastes	0.6036	2.337
High-active wastes	0.0135	0.059
Total	73.6771	430.683

Table. Generated RAW as of December, 31, 2014

RAW Category	SRW, mln. t	FRW, mln. m ³
Low-active wastes	1.180	1.167
Middle-active wastes	0.0010	0.121
High-active wastes	0.0001	0.010
Total	1.1811	1.298

6.2.2.2. Spent Nuclear Fuel Management

Results in 2014:

- 598 spent nuclear reactor fuel assemblies of water-cooled power reactor WCPR-1000 were removed from Russian NPPs and placed for central “wet” storage at the FSUE Mining and Chemical Plant;
- Construction of the “dry” chamber storage for spent nuclear fuel of water-cooled power reactor WCPR-1000 and spent nuclear fuel of high-power channel-type reactor HPCR-1000 is continued (completion term-2015);
- 3,442 spent nuclear fuel assemblies of high-power channel-type reactor HPCR are removed and placed for central dry storage at the dry

storage start-up complex at the FSUE “Mining and Chemical Plant” from the Leningrad NPP;

- 203 spent nuclear fuel assemblies of defected HPCR RAW removed for processing to the FSUE Mayak PA 117 tons of spent nuclear fuel are brought for processing to the FSUE Mayak PA from Russian nuclear power plants, research reactors and Nuclear-Powered Icebreaker Fleet, 140 tons of spent nuclear fuel is processed (SNF removal from Russian RR is increased – 1,502 SFA, from the Nuclear-Powered Icebreaker Fleet objects – 794 SFA);
- The number of SFA, removed for the centralised storage and processing – 7,477;
- 5,864 DAV-90 units containing highly enriched uranium and having corrosion damage are removed from the FSUE Mining and Chemical Plant for processing to the FSUE Mayak PA including 1,200 defect blocks;

- The experimental demonstration complex is developed for SNF processing basing on innovative technologies at the FSUE Mining and Chemical Plant, real SNF reprocessing innovative schemes were tested, showing the ability to reduce processing costs by 10–12%.

6.2.2.3. Decommissioning of nuclear and radiation hazardous facilities and solution of “nuclear heritage” problems in the decommissioning of nuclear and radiation hazardous facilities

Results in 2014:

- To develop the system of decommissioning of nuclear and radiation hazardous facilities, the concept of decommissioning of nuclear units, radiation sources and storage sites is actualised as well as the technical-organisational management plan implementing its provisions;
- Offers on improvement of the Russian Federation legislation on decommissioning of nuclear facilities and on restoration of territories contaminated due to their operation are submitted to the Russian Federation Government;

El-22 reactor decommissioning

In 2011, the project on decommissioning of industrial uranium-graphite reactor El-2 was developed under “Special RAWs conservation site construction” version. The following works were executed from 2012: dismantling of technological equipment and systems in building No. 190 – 950 tons; removing previously dismantled equipment from the lower levels – 422 tons; removing and conditioning of sludge deposits from process mine No. 2 – 100 m³; filling of the reactor spaces with barrier materials 41164 m³; decontamination of construction structures of the central hall of building No. 190 – 1520 m²; dismantling of construction structures of building No. 190 above 0 mark – 22,604 t. The works on the conservation site construction are planned to be completed in September 2015.

The Pilot and Demonstration Engineering Centre activities on Novovoronezhskaya NPP decommissioning

In 2014, to clean the required room for RAW sorting equipment and fragmentation area in the central hall of the 2nd unit of Novovoronezhskaya NPP (NVNPP), 50 covering cases for SNF of different types are fragmented and decontaminated (9 more covering cases are planned to be fragmented by the end of 2015), not planned to be further used in the production cycle (as of mid-August 2015, 43,632 tons of metal stainless steel are transferred into the “industrial waste” category). During the reported year, the processing facility for radioactive waste plasma processing is put into experimental operation and tested, located in the “dirty” workshop of NVNPP unit 2.

- The corporation information system of renewable energy of nuclear and radiation hazardous facilities was commissioned into trial operation.

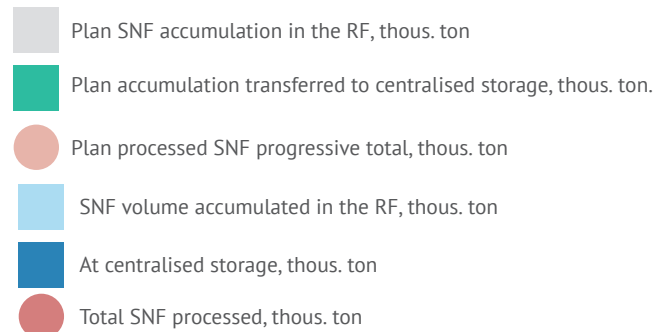
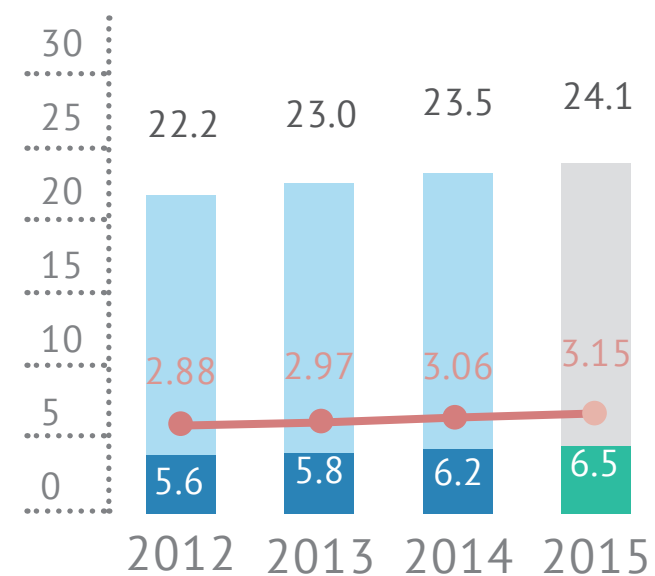
6.2.2.4. Nuclear Submarine

Dismantling

Results in 2014:

- Commission of the 1st start-up complex of the 2nd stage of the site construction for long-term storage of reactor compartments from decommissioned nuclear submarines at Ustrichny Cape in Primorsky Krai, the construction is planned to be completed in 2015;
- Primorsky Krai was completely cleaned from spent nuclear fuel accumulated in the Soviet period (the works lasted for 14 years);
- Completed utilisation of the nuclear submarine of 949A project, serial number 617, and started works on the utilisation of the nuclear submarine of 949A project, serial number 618;

SNF volume at centralised storage



- Completed utilisation of floating technical base “Volodarsky”, floating technical base “Lepse” is located on the “solid” base for SNF unloading;
- completed utilisation of the tanker of 326M TNT-16 technical design (floating technical base PM-133);
- 2 voyages for SNF removal were conducted, and 1.4 tons of spent nuclear fuel were recycled at the FSUE Mayak PA;
- 504.4 m³ of liquid radioactive waste were processed;
- 593.62 m³ of SRW were collected and placed on storage at the Far Eastern Centre on SRW DalRAO;
- 120 packages of solid waste were removed from the former coastal technical base at Gremikha settlement to the collecting site in Saida Bay;
- The federal budget received 61.8 million rubles from the utilisation products sale.

6.2.2.5. Dismantling and utilisation of radioisotope thermoelectric generators

Results in 2014:

- Continued works on dismantling and utilisation of RITEGs previously decommissioned by the Russian Defence Ministry and placed for temporary storage at the Far Eastern Centre on SRW DalRAO (FSUE RosRAO);
- 36 RITEGs were removed, partly dismantled and placed for long-term storage at FSUE Mayak PA;
- An expedition is arranged for decommission and transportation of 4 RITEGs in Antarctica.

6.2.2.6. International cooperation

At the expense of international technical assistance within the Federal Targeted Programme “Submarine Dismantlement” and FTP Nuclear Safety, works are executed in the amount of 3.3 billion rubles, including completed construction of

the North-West regional centre on RAW processing and temporary storage, of workshops for reactor compartment cleaning and painting at DalRAO, containers for VHF treatment of “Alpha” class submarine, floating maintenance base “Lepse” is located on the stacker plate at Nerpa shipyard.

61 contracts with donors are executed in the amount of 3.78 billion rubles.

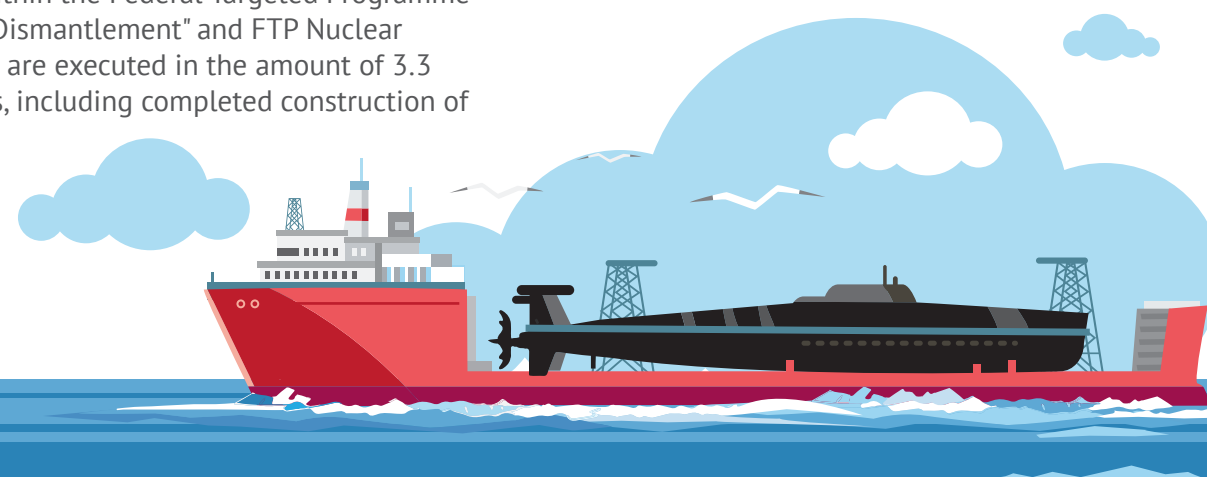
“The Fourth Russian National Report on execution of obligations under the Joint Convention on the Safety of Spent Fuel Management and of Radioactive Waste Management” is performed.

6.2.3.

2015 AND MEDIUM TERM PLANS

The second phase of the development will start in 2015. The key goal of the stage is to create the system for disposal of low- and middle-active wastes. The plan to implement the second phase was developed and submitted to the Government. It contains:

- The design development estimates for the construction of disposal facilities for solid low- and middle-active RAW in the Siberian, Ural and Southern federal districts;
- The construction of the second stage of the disposal site for solid low- and middle-active RAW near SC Ural Electrochemical Plant;
- The transfer of the special waste disposal facilities into special waste conservation sites.



6.3.

ENVIRONMENTAL PROTECTION

KEY RESULTS IN 2014

33.2

bln rubles

total costs for environmental protection (by 70% more than in 2013)

4 %

reduction of polluted wastewater discharge into surface waters for year

26 %

Reduction of costs for energy consumption (relative base 2009)

159.7

ha

re-cultivated land square (3.7 times more than in 2013)



POINT OF VIEW

ADVISOR TO THE CEO

VLADIMIR GRACHEV

In 2014 environmental protection costs increased almost twice and amounted to 33,2 billion rubles. Why this was done and what results did allow to achieve?

Total costs were increased by 1.7 times due to the increased attracted investments into fixed assets. In particular, investments into construction of new environmental-protection-related objects and rational use of natural resources amounted to almost 20 bln. rubles. The largest amount of these investments was used at Rostov and Leningrad NPP-2. Over three billion were spent at Rostov NPP for construction of water recycling systems. About the same amount was spent at Leningrad NPP-2 for the same goals. In addition 13 billion was spent for units to capture and neutralise exhaust gas harmful additives.

Increased investment has allowed to commission sewage treatment stations at three enterprises of other divisions. Two companies put rain and storm water treatment facilities and water recycling systems. And other two companies put units for capturing of exhaust gas harmful additives. Also works on utilisation, recycling, disposal and dumping of toxic, industrial, household and other waste were executed.

In your opinion, what important issues in the ecological safety are to be resolved in the coming years?

Important changes are observed these days: the environmental management system is fundamentally restructured at the state level, methods and approaches to environmental safety are changed. In this regard, ROSATOM has to be involved into the development of draft laws and regulations on environmental protection and to support its interests, tailored to all organisations of the nuclear industry. The organisations' activity should comply with these changes as well. This applies to both categorising of our organisations, depending on their level of impact on the environment and changing of payments for environmental impact.

In general, the implementation Federal Law July, 21, 2014 No. 219-FZ "On Amendments to the Federal Law "On Environmental Protection" and some legislative acts of the Russian-Federation" is a top-priority environmental challenge for the next few years.



6.3.1.

6.3.1.1. Implementation of international standards

ENVIRONMENTAL SAFETY AND ENVIRONMENTAL PROTECTION MANAGEMENT SYSTEM

Since 2008, [the Basics of Environmental Policy of ROSATOM and its Organisations \(Environmental Policy\)](#) has been the main regulatory document in the field of environmental safety and environmental protection.

Activities of the organisations of the nuclear industry in 2014 was carried out in accordance with environmental legislation. Organisations worked steadily, there were no accidents and incidents, the consequences of which would have a negative impact on the environment. Compared with the previous year there was a reduction of anthropogenic impact on the environment.

In 2014, the work the environmental management systems (EMS) continued. EMS is part of an integrated management system: quality management, environmental management and safety management system based on the requirements of ISO 9001: 2008, ISO 14001: 2004, OHSAS 18001: 2007 with regard to the provisions of the Russian legislation and regulations of the IAEA.

JSC Concern Rosenergoatom

Compliance and / or re-certification audits of certified EMSs were carried out in Rosenergoatom's headquarters and operating NPPs to meet the requirements of ISO 14001: 2004. Environmental certificates were validated.

JSC NIAEP

Agency for Certification of DQS conducted a surveillance audit of environmental management system and confirmed validity of the certificate of compliance of EMS to ISO 14001: 2004.

JSC Techsnabexport

The second certification audit of EMS for compliance with DIN EN ISO 14001: 2009 was held successfully.

6.3.2.

ENVIRONMENTAL PROTECTION FINANCING

In 2014, the cost of environmental protection amounted to 33.24 billion rubles and compared to the previous year, the expenditures increased by 1.7 times.

6.3.2.1. Current expenditures on environmental protection

In 2014, current operating expenses amounted to 80.3 % out of the total current expenditures, payment of environmental services amounted to 15.6 % and the cost of major repairs amounted to 4.1 %.

Table. Current expenditures of the environmental protection activities, million rubles

The environmental activities	2014	2013	2012
Total,	12,740	13,604	11,650
including:			
atmospheric air protection and climate change mitigation	1,130	1,450	1,300
collection and treatment of wastewater	2,470	2,620	3,000
waste management	1,230	920	1,000
protection and rehabilitation of lands, surface and underground water	460	1,580	400
environmental protection from noise, vibration and other types of physical impact	10	4	30
preservation of biodiversity and protection of natural areas	10	30	20
radiation safety of the environment	6,410	6,030	5,200
research and development activities to reduce negative human impacts on the environment	360	410	200
Other activities in the field of environmental protection	660	560	500



6.3.2.2. Fixed capital investments aimed at environmental protection and rational use of natural resources

In 2014, investment in fixed capital from all sources of funding amounted to 20.50 billion rubles. Compared with the previous year the volume of investments increased by 3.4 times. Investments in new construction amounted to 19.46 billion rubles, of which 82.1% was used at the Leningrad NPP-2 and 17.2% in the Rostov NPP.

In 2014 investment for the construction of installations to capture and neutralise harmful substances from exhaust gases amounted to 12.91 billion rubles at the Leningrad NPP-2 (98.9% of the total volume of investment in atmospheric air protection).

6.3.2.3. Payment for a negative impact on the environment (environmental payments)

In 2014, payments for negative environmental impact on the environment amounted to 110.8 million rubles. Including payments for allowable

Table. Fixed capital investments aimed at environmental protection and rational use of natural resources

Directions of investment	2014		2013		2012	
	million rubles	%	million rubles	%	million rubles	%
Environmental protection and rational use of natural resources, total,	20,502.7	100.0	6,029.7	100.0	4,079.4	100.0
including:						
protection and rational use of water resources	7,269.8	35.5	5,456.6	90.5	3,646.5	89.4
protection of atmospheric air	13,047.5	63.6	264.6	4.4	215.4	5.3
protection and rational use of land	100.0	0.5	260.9	4.3	49.8	1.2
installations (productions) for the disposal and recycling of industrial wastes	53.0	0.3	18.2	0.3	33.4	0.8
enterprises and landfills for the utilisation, decontamination and disposal	28.9	0.1	11.8	0.2	127.1	3.1
protection of mineral resources and the rational use of mineral resources	3.5	0.0	17.6	0.3	7.2	0.2

emissions and discharges of pollutants, disposal of waste of the production and consumption amounted to 57.7 million rubles. (52.1%), for excessive amounted to 53.1 million rubles (47.9%).

Compared with the previous year, the total amount of environmental payments increased by 6.6 million rubles, including excessive 4.2 million rubles. A significant increase (11.9 million rubles.) of excessive environmental payments compared

with the previous year were for emissions of pollutants into the atmosphere, mainly due to changes in the consolidation perimeter of ROSATOM (Zheleznogorsk TPP, TPP LLC NIIAR-GENERETION) as well as due to the lack of permitting documentation At the same time, above-standard payments for waste disposal by 5.1 million rubles and discharges into water by 2.5 million rubles decreased.

Table. Payment for a negative impact on the environment (environmental payments), million rubles

Indicator	Payments		
	2014	2013	2012
Payment for allowable emissions (discharges) of pollutants (waste disposal), total	57.7	55.3	51.6
including:			
into water bodies	3.9	7.4	7.4
into atmospheric air	6.4	6.3	6.3
for disposal of waste from production and consumption	45.3	41.6	37.9
for discharge onto relief	2.1	0.0	0.0
Payment for excess emissions (discharges) of pollutants (disposal of waste of the production and consumption), total	53.1	48.9	63.0
including:			
into water bodies	23.2	25.8	23.0
into atmospheric air	14.6	2.7	1.4
for disposal of waste from production and consumption	15.2	20.3	38.5
for discharge onto relief	0.1	0.1	0.1
Payment for permissible and excess emissions (discharges) of pollutants (disposal of waste of the production and consumption), total	110.8	104.2	114.6
Funds (claims), and penalties levied as compensation for damage caused by violation of environmental legislation	1.50	0.66	1.32

6.3.3.

ENERGY EFFICIENCY IMPROVEMENT

Main goals of 2014:

- Reduction of energy consumption in comparable values relative to the base in 2009.

- Completion of the implementation of an automated control system of energy efficiency in the organisations of the nuclear industry;
- Formation of the concept of repeated energy audits in accordance with the Federal Law number 261 "On energy saving and energy efficiency improvements and on Amendments to Certain Legislative Acts of the Russian Federation" with the aim of developing energy efficiency programs and energy efficiency in the five-year period;
- Development of targets to increase energy efficiency for the State Programme RAEPK.

6.3.3.1. Results of 2014

Table. Energy consumption in 2014

Division / Development / Organisation	Electricity		Heat		Water	
	thous. kWh	%	thous. Gcal	%	thous. m³	%
Fuel Division	3,300,230	50.4	2640	25.4	628,900	73.1
Power generation Division (household needs)	853,800	13.0	3700	35.6	134,520	15.7
Machine-Building Division	189,382	2.9	94	0.9	3260	0.4
Mining division	594,770	9.1	860	8.3	10,740	1.3
Nuclear Weapons Division	965,600	14.7	2150	20.7	29,740	3.5
JSC Federal Centre for Nuclear and Radiation Safety	396,197	6.0	508	4.9	42,376	4.9
Innovation Management Block	200,640	3.1	306	2.8	8910	1.0
Other	52,409	0.8	142	1.4	754	0.1
Total for ROSATOM	6,553,028	100	10,400	100	859,200	100



Table. Saved energy and Cost reductions achieved for energy resources

Year	2015		2014		2013		2012		2011		2010	
	plan		plan	actual	plan	actual	plan	actual	plan	actual	plan	actual
Savings as compared to 2009, %	25		22.5	26.3	20	22.2	14.5	17.6	10	12.3	5	6.5
Accumulated savings mln. rubles	19,552		17,384	18,766	13,272	13,965	8,252	8,826	4,146	4,643	1,255	1,632

A reduction of energy consumption in 2014 by 26.3% was achieved by the realisation of works of investment character, reducing the costs of energy consumption, energy management system implementation at several enterprises of the sector according to ISO 50001, improvement of monitoring data on energy consumption quality.

6.3.3.2. Implementation of systems of energy efficiency management and energy management

Implementation of automated management system energy efficiency (AEEMS) is one of the directions of the programme on energy saving and energy efficiency of the sector. The system was commissioned by 78 enterprises. AEEMS allows making comprehensive analysis of the information to make forecasts of energy consumption, generate reports and transfer data to all levels of management.

LLC Centre for Energy Efficiency INTER RAO UES completed the project on the development and implementation of energy management system in JSC TVEL and JSC Concern Rosenergoatom In particular, JSC Concern Rosenergoatom is certified in accordance with the requirements of ISO

50001, LLC Management System Certification "DEKUES" (Russian branch of the German certification body of management systems DQS GmbH Deutsche Gesellschaft zur Zertifizierung von Managementsystemen).

JSC TVEL is certified by LLC Intercertifika TUF (a branch of the certification body of management systems TÜV Thüringen eV (Germany) within the system of TÜV International Certification).

6.3.3.3. Goals for 2015 and the mid-term horizon

- Repeating energy audits of organisations;
- Development of programs on energy saving and energy efficiency for the five-year period;
- Definition of target values for organisations for five years on the basis of energy audits, taking into account the typology of organisations and planned measures on energy saving and energy efficiency;
- Organisation on the basis of AEEMS of electronic reporting of enterprises on energy saving and energy efficiency;
- Standardisation of approaches to the measurement and verification of data on energy saving and efficiency.

6.3.4.

ENVIRONMENTAL IMPACT

6.3.4.1. Radionuclide releases and discharges

In 2014, the radiation burden on the environment did not change much compared to the preceding year. Permissible values of radionuclide releases were not exceeded.

The total activity was 99.01 % due to releases of beta-active nuclides ($4.65\text{E}+16\text{Bq}$), where the percentage of inert radioactive gases is 96.75 % and 2.88 % is tritium. Compared to the preceding year, releases of beta-active nuclides grew by 5.83 %

The alpha-active radionuclide releases ($4.65\text{E}+14\text{ Bq}$) are 95.91 % due to radon-222 coming from uranium mining operations. Compared to the preceding year, releases of alpha-active nuclides decreased by 13.02 %. For the nuclear industry as a whole, releases of alpha-active nuclides accounted for about 25.03 % and beta-active nuclides for 4.49 % of the permissible guideline.

Table. Actual-to-permitted ratio of radionuclide releases, Bq

Type of emission of radionuclides	Permitted release	Actual release
Alpha	$1.86\text{E}+15$	$4.65\text{E}+14$
Beta	$1.04\text{E}+18$	$4.65\text{E}+16$

In 2014, drain water in an amount of 240.72 mln m^3 and activity of $3.99\text{E}+13\text{ Bq}$ was discharged into surface water bodies by the enterprises. Compared to 2013, the amount of discharge of such water decreased by 21.20 % (mainly due to the decrease in the volume of discharges Novovoronezh NPP by 70.97 mln m^3) and its total activity increased by 2.26 %.

On the whole, incoming of radionuclides with drain water to the open hydrographical network was: in terms of alpha-active radionuclides ~15.87 % and in terms of beta-active radionuclides 0.80 % of the established guidelines.

Table. Actual-to-permitted ratio of radionuclide discharges, Bq

Type of emission of radionuclides	Permitted discharge	Actual discharge
Alpha	$1.84\text{E}+11$	$2.92\text{E}+10$
Beta	$4.98\text{E}+15$	$3.99\text{E}+13$

Contaminated territories

As of 31 December 2014, 22 enterprises in the sector had territories contaminated with radionuclides. The total area of contaminated territories was 119.92 km^2 . Area contaminated areas increased compared with 2013 by 13 % due to clarification of the information on the area of contamination.

Radioactive contamination is mainly due to the nuclides caesium-137 and strontium-90, as well as natural uranium and its decay products. More than 77 % (93.03 km^2) of territories contaminated with radionuclides are situated near FSUE PA Mayak (the consequence of the 1,957 accident). Over the past five years, 51.68 km^2 of contaminated territories have been rehabilitated.

6.3.4.2. Disturbed and rehabilitated territories

As of 31 December 2014 the area of disturbed land in the organisations of ROSATOM was 5.3 thousand. Hectares, of which 3.1 thousand. hectares were damaged at the development of mineral deposits, 2.1 thousand hectares were damaged at the construction works, 6.8 hectares were damaged at surveying works, 1.4 hectares were damaged (including construction) and solid wastes, 97.2 hectares were damaged at other works.

In 2014, it was rehabilitated 159.07 hectares of lands, which is by 19.1 % more than the area of disturbed during the year lands

Table. Disturbed and rehabilitated territories

	2014	2013	2012
The area of contaminated lands, thous. hectares	5.3	5.2	5.0
The area of rehabilitated lands, hectares	159.07	42.57	8.72
including:			
PJSC Priargunsky Industrial Mining and Chemical Union	73.40	27.30	0
PJSC Novosibirsk Chemical Concentrates Plant	0.00	0.42	0.56
JSC Siberian Chemical Combine	37.16	10.64	5.62
FSUE Elektrokhimpribor	0.17	3.85	1.15
FSUE Protsenko PA START	0.02	0.00	1.0
FSUE Zababakhin RFNC-VNIITF	48.19	0.00	0.00
JSC Research Institute of Atomic Reactors;	0.13	0.00	0.1
Saratov Unit of FSUE RosRAO's branch "Volga Territorial District"	0.00	0.36	0
JSC PA Electrochemical Plant	0.00	0.00	0.29

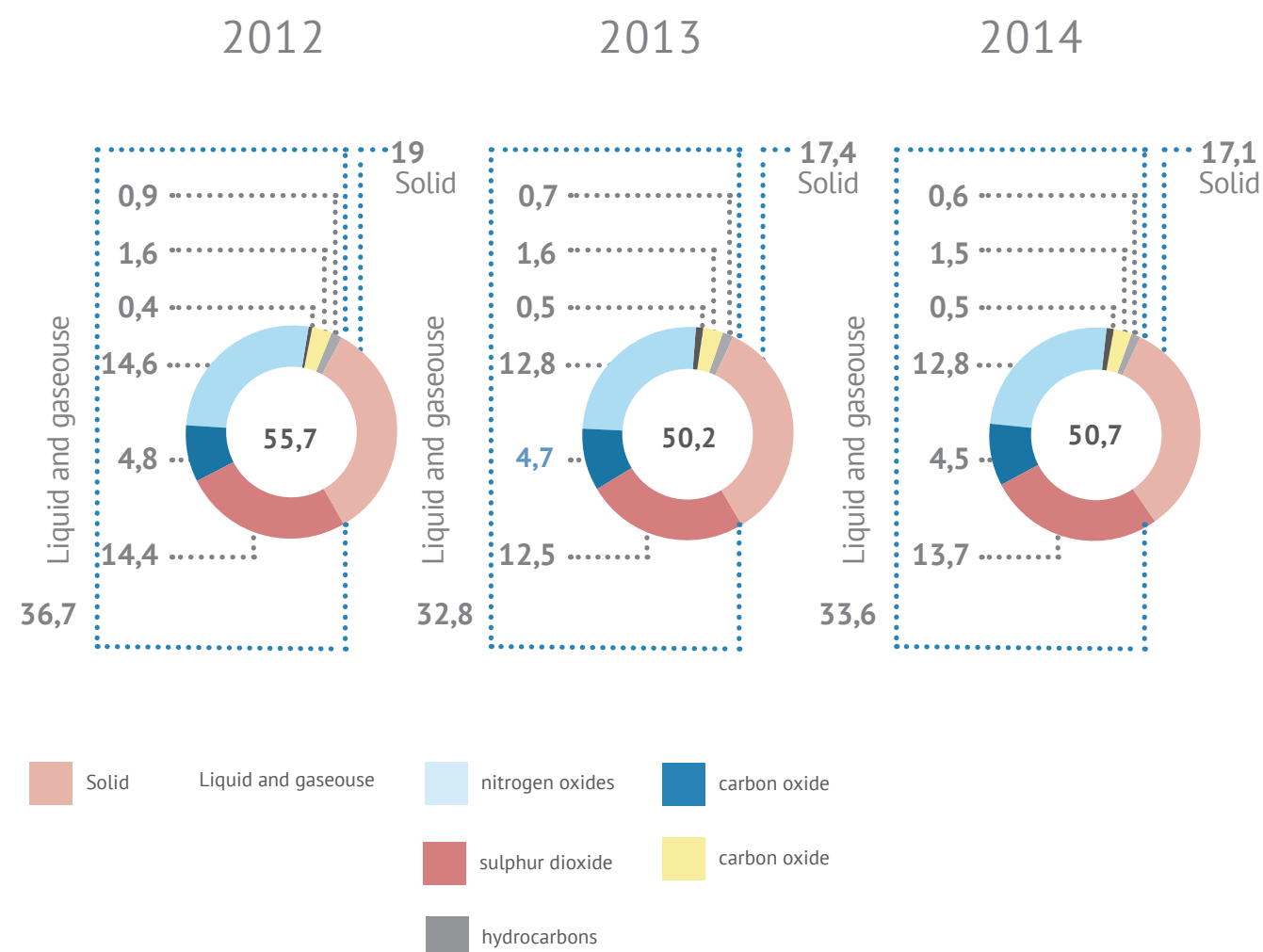


6.3.4.3. Harmful atmospheric releases

Release of harmful chemical substances (HCS) into the atmosphere in 2014 amounted to 50,700 t. On the whole in the nuclear industry the releases into the atmosphere increased by 500 t. (due to increase of consolidating perimeter). The trapping rate was 85.04 %; it is by 1.04 % higher than in the previous year.

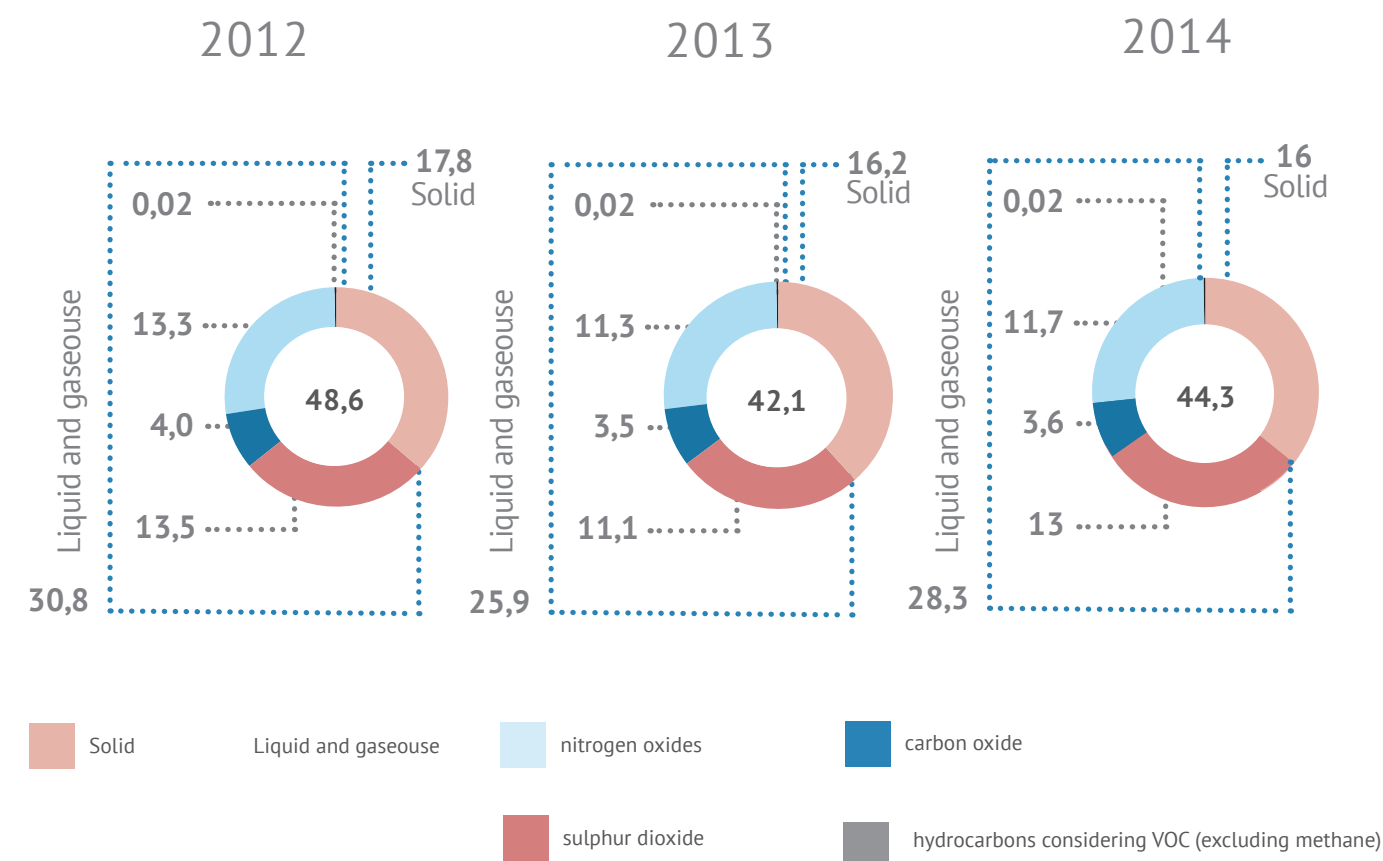
Compared to the previous reporting period, the amount of HCS atmospheric releases resulting from the burning of fuel (for heat and electricity) increased across the Corporation by 2,200 t (by 5.2 %), which is associated with an increase in the perimeter of consolidation by JSC Zheleznogorsk TPP and with increase in coal burning by JSC CHMZ and JSC SHK.

HCS atmospheric releases, thousand tonnes*



* HCS emission data are represented by organisations of the Corporation by means of chemical methods of analysis or automated gas analysers.

Percentage of HCS releases resulted from burning of fuel against total amount of releases, thousand tonnes



Significant initiatives and results in reducing emissions of harmful chemicals into the atmospheric air:

Sverdlovsk Unit of FSUE RosRAO's branch "Ural Territorial District" launched a modular gas boiler to replace the boiler on solid fuel, which allowed reducing emissions of pollutants by 36%

Installations for trapping pollutants from exhaust gases were mounted in LLC ALABUGA-VOLOKNO FSUE Y.E. Sedakov FNPTs NIIS

HCS emissions into the atmosphere by hazard class, th. tons

HCS Hazard Class	Emissions		
	2014	2013	2012
1 hazard class	0.002	0.003	0.004
2 hazard class	0.8	0.3	0.2
3 hazard class	31	29.9	35.0
4 hazard class	5.6	5.8	5.7
other	13.3	14.2	14.8
TOTAL:	50.7	50.2	55.7

Significant initiatives and results in reducing emissions of harmful chemicals in the atmosphere:

At JSC Afrikanov OKBM emissions of carbon tetrachloride were reduced by 71 % through optimising the manufacturing process and the transition to organic solvents, which do not deplete the ozone layer.

In PJSC MSZ local radioactive dust air cleaning system was created and low-waste and energy-saving technologies were applied in the production of components for fuel assemblies.

Table. Emissions of the main ODS and greenhouse gases, tons

Substance	Emissions		
	2014	2013	2012
Nitrogen (II) Oxide	227.96	150.57	253.38
Ozone	0.17	0.18	0.19
Methane	265.16	236.22	232.97
Dichlorodifluoromethane (Freon-12)	83.75	87.58	15.33
Difluorochloromethane (Freon-22)	17.8	18.27	26.6
1,1,2-trifluoro-1,2,2-trichloroethane (Freon -113)	4.94	5.78	9.13
Trifluorochloromethane (Freon -13)	164.21	164.35	0.18
Tetrafluoroethane (Freon -14)	124.83	124.81	0.001
TOTAL:	888.82	787.76	537.8

6.3.4.4. Water management

Nuclear power is a major water consumer. It accounts for 4,5 %* of the total fresh water consumption in the Russian Federation.

The fresh water intake from natural water sources was 7307.3 million m³. Compared to previous year, the total water intake increased by 1105,2 million m³. The intake volume increased mostly due to increase in sea water consumption. In 2014, due to increased electricity production at Leningrad NPP, the volume of seawater intake increased by 1.1183 billion m³ (31%).

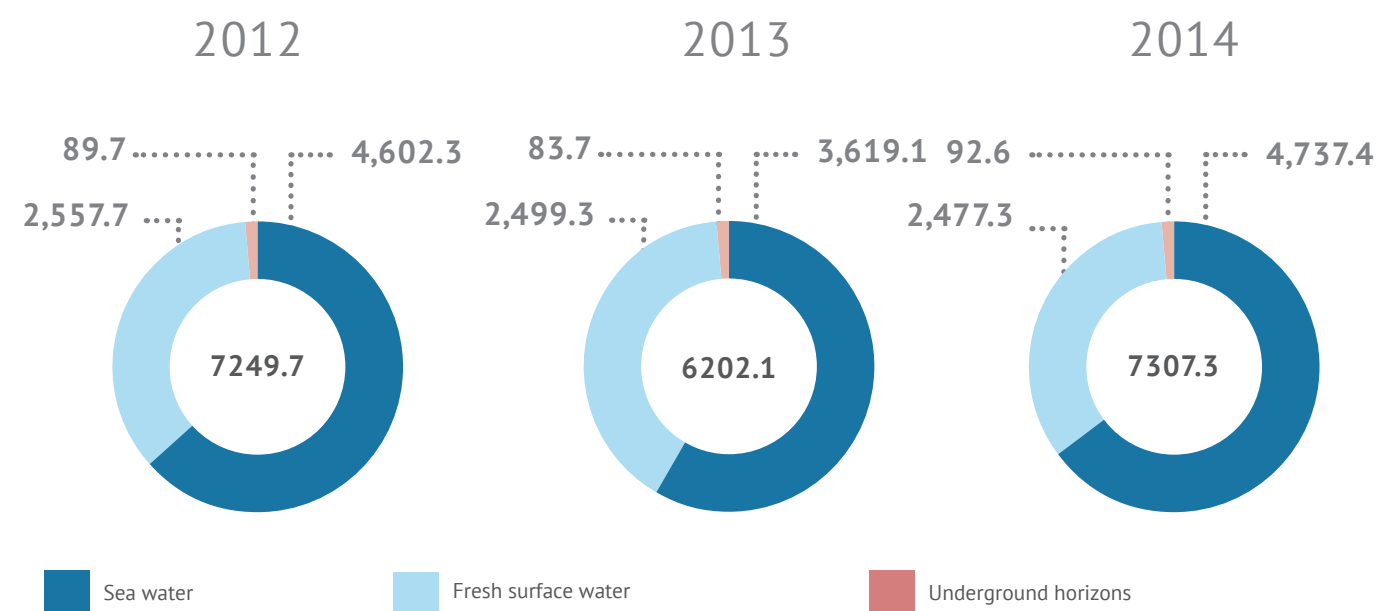
Extraction of water from underground sources increased by 8.9 million. m³ at the expense of Zheleznogorsk TPP (included in the consolidation perimeter during the reporting year), LLC NIIAR-GENERETION (exploitation of new wells, Kalininskaya NPP (the increase in recreational activities in the dispensary).

The reduction in intake of fresh water from surface sources at 22,1 million m³ was mainly due to the JSC AECC (reduction of water withdrawal from the river Angara due to lack of demand for electric capacity of branches of JSC Irkutskenergo TPP 9 and TPP 10 on the electricity market).

* According to the state report "On the state and Environmental Protection of the Russian Federation in 2013"



Water intake, million m³



6.3.4.5. Water discharge

The total wastewater discharge was 6,642.0 million m³, of which 98.2 % was partially clean water (97.8 %), 1.4 %, was contaminated water, and 0.4 % was water treated to reach the standard quality.

The total wastewater discharge has increased by 1,067.0 million m³ (19.1 %) due to increased discharge of normative clean water to 1.0697 billion m³. The increase was mainly due to increased discharge of water at the Leningrad NPP by 1.099 billion m³ due to increased electricity generation.

Significant initiatives to reduce the negative environmental impact on water sources

JSC CMP completed work on the creation of the rehabilitation of the upper horizons water polluted by radioactive waste accumulated in tailing dumps number 2, 3

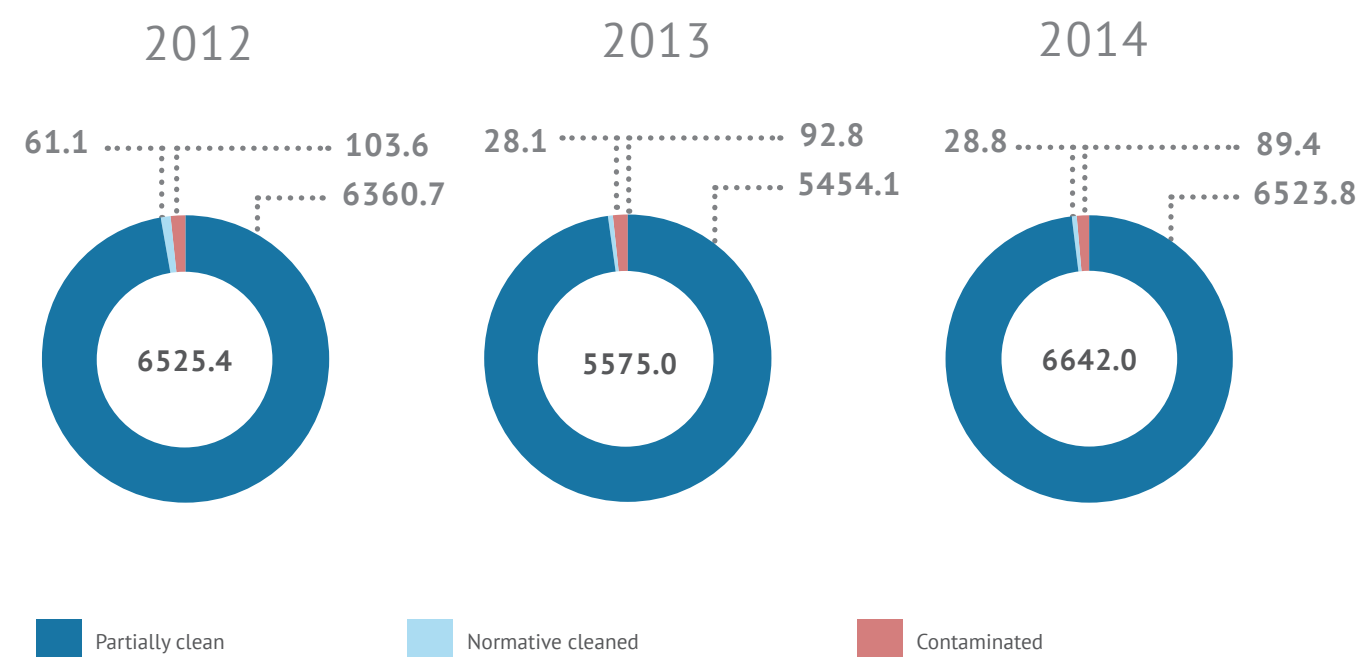
JSC SCC continued work on the preservation of pools and construction of additional safety barriers

FSUE FSPC PC Start n.a. M.V. Protsenko for the 2013–2014 set 249 accounting devices of cold water, 266 accounting devices of hot water on objects of consumption, which will reduce the intake of water to 0.9 million m³/year. At the water treatment plant, the water recycling systems of washing water in the contact chambers were reconstructed, and there was closing of the release of these waters into a stream, which reduced the wastewater discharge by 1.5 million m³/year

In the reporting year, compared to the previous year, the contaminated wastewater dump into the Arctic Ocean decreased by 3.9 million m³. Whereby the dump volume to the Baltic Sea increased, that is due to the increase of electricity generation on Leningrad NPP.

Structurally, the major contributors to the contamination discharged with wastewater into natural water bodies are dry residues (40.99 thousand tonnes), sulphates (8.69 thousand tonnes), chlorides (7.95 thousand tonnes), suspended matter (1.92 thousand tonnes), and nitrates (1.21 thousand tonnes).

Waste water discharge into open surface water reservoirs, million m³



Significant initiatives to reduce the negative environmental impact on water sources

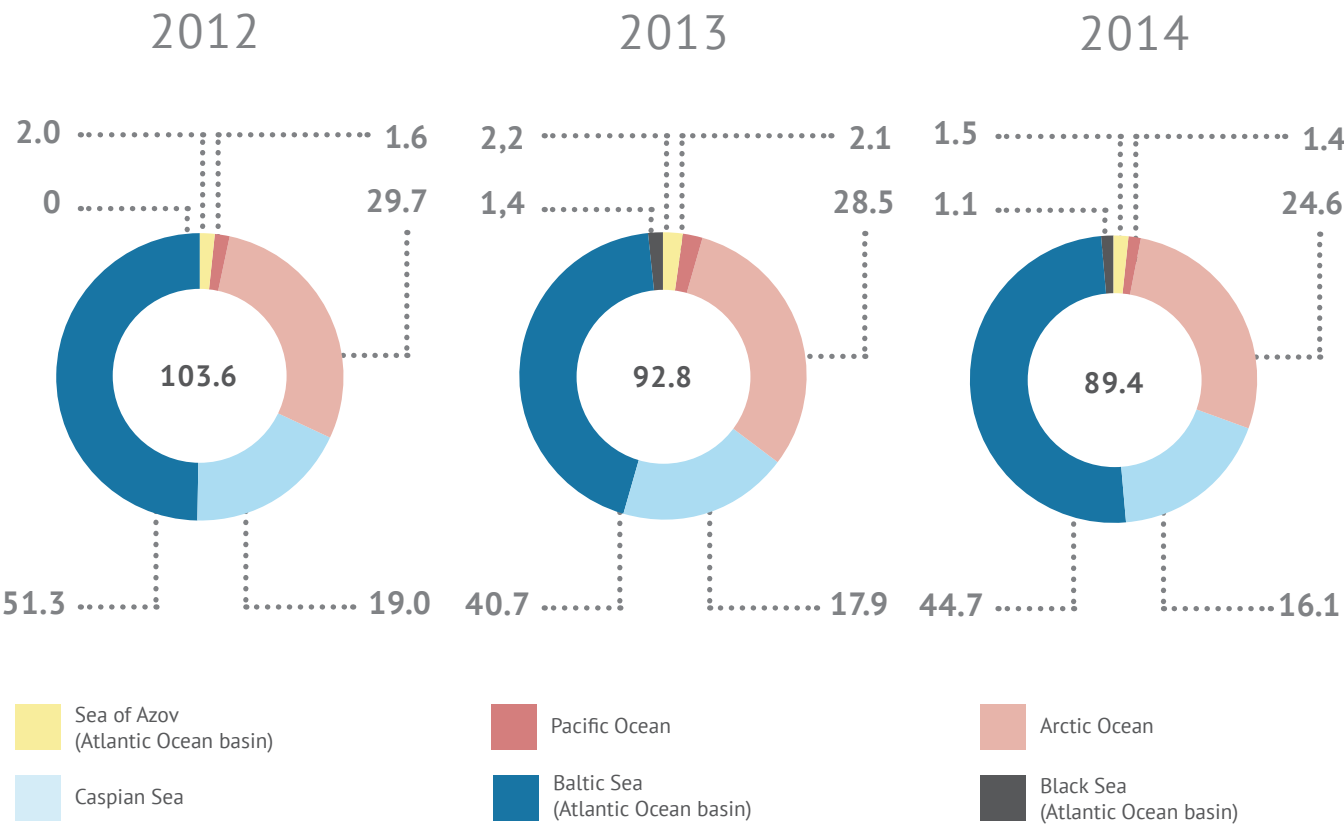
Balakovo NPP at the expense of cleaning and reduction of contaminants of discharged water implemented works on maintaining (recovery) of design characteristics of oily drains cleaning unit "Crystal" and biological treatment station.

In Rostov NPP was overhauled the filtration field No. 1 of treatment facilities of "free" mode area; treatment facilities for rainwater drainage of power units number 3, 4 were commissioned; algae elimination in cooling pond and dam part of Tsimlyansk reservoir was held to suppress the biological interference — to prevent "bloom" of water bodies

One of the main reasons for the reduction of pollutants in the surface water bodies is a change in the structure of the production order at the Federal State Unitary Enterprise Kombinat Elektrokhimpribor associated with the electroplating, the use of other materials and processes.

The increase of major pollutants in the surface water bodies is primarily due to the PAO PGHO (insufficient capacity of purification plants) and JSC SCC (changes in the operation and re-distribution of wastewater flow of TPP).

Dynamics of contaminated wastewater discharges, with a breakdown by sea basin, mln. m³



Significant initiatives to reduce the negative environmental impact on water sources: On JSC Khiagda and DVC DaIRAO were installed stations for biological and mechanical cleaning

On LLC ALABUGA fibre, FSUE PO Mayak, FSUE FSPC NIIS n.a. Y.E. Sedakov were installed facilities for purification of rain and storm drains

On LLC Elemash MAGNET, JSC Alyanstransatom was installed circulating water supply system

6.3.4.6. Production and consumption waste

During 2014, 25.4 million tons of production and consumption waste was formed at the nuclear organisations, which is 0.5 million tons more than in 2013, 25.3 million tons (99.6 %) of this being non-hazardous waste (hazard class 5). JSC PIMCU accounts for most of this waste 24.6 million tons (96.85 %), 24.3 of which is mostly overburden and

enclosing rock resulting from the mining of non-metallic minerals. The volume of waste generation in I hazard class in 2014 compared with 2013 increased by 436.1 tons, in II decreased by 2,508.5 ton, in III decreased by 604.9 tons, in IV increased by 9.5 thousand. tons, in V increased by 452.0 thousand tons. Proceeds from the disposal of other organisations amounted to 28.8 thousand tons.

Table. Formation and storage of waste with a breakdown by hazard classes in 2014

Waste hazard class	presence of waste on January, 01, 2014, (thousand tons)	Waste formation and receipt in 2014 (thousand tons)	Used, out of the waste amount formed and received in 2014		Decontaminated, out of the waste amount formed and received in 2014		Transferred to other organisations (thousand tons);	Disposition of waste at operated sites in the reporting year (thousand tons)		presence of waste on December, 31, 2014, (thousand tons)
			thousand tons	%	thousand tons	%		Total	To be buried	
Total	398,917.9	25,439.0	24413.0	96.0	26.4	0.1	552.3	416.2	278.8	399,086.4
I	0.319	0.639	0.086	13.5	0.004	0.6	0.678	0.006	0.000	0.190
II	0.188	13.434	0.004	0.03	5.777	43.0	7.793	0.005	0.000	0.048
III	8.691	4.939	0.481	9.7	0.177	3.6	4.277	0.341	0.184	8.511
IV	19.6*	110.0	13.7	12.5	20.4	18.5	67.7	9.2	7.2	20.7
V	398,889.2**	25,309.9	24,398.7	96.4	0.009	0.0	471.9	406.6	271.4	399,057.0

* In accordance with the new FWCC 2014 (FS Rospirodnadzor Order No. 445 of 07.18.2014 at the PAO "PGHO" part of Hazard Class 4 wastes transferred into class 5hazard.
** In connection with the reorganisation of "NIIR."

Table. Management of production and consumption waste, thousand tons

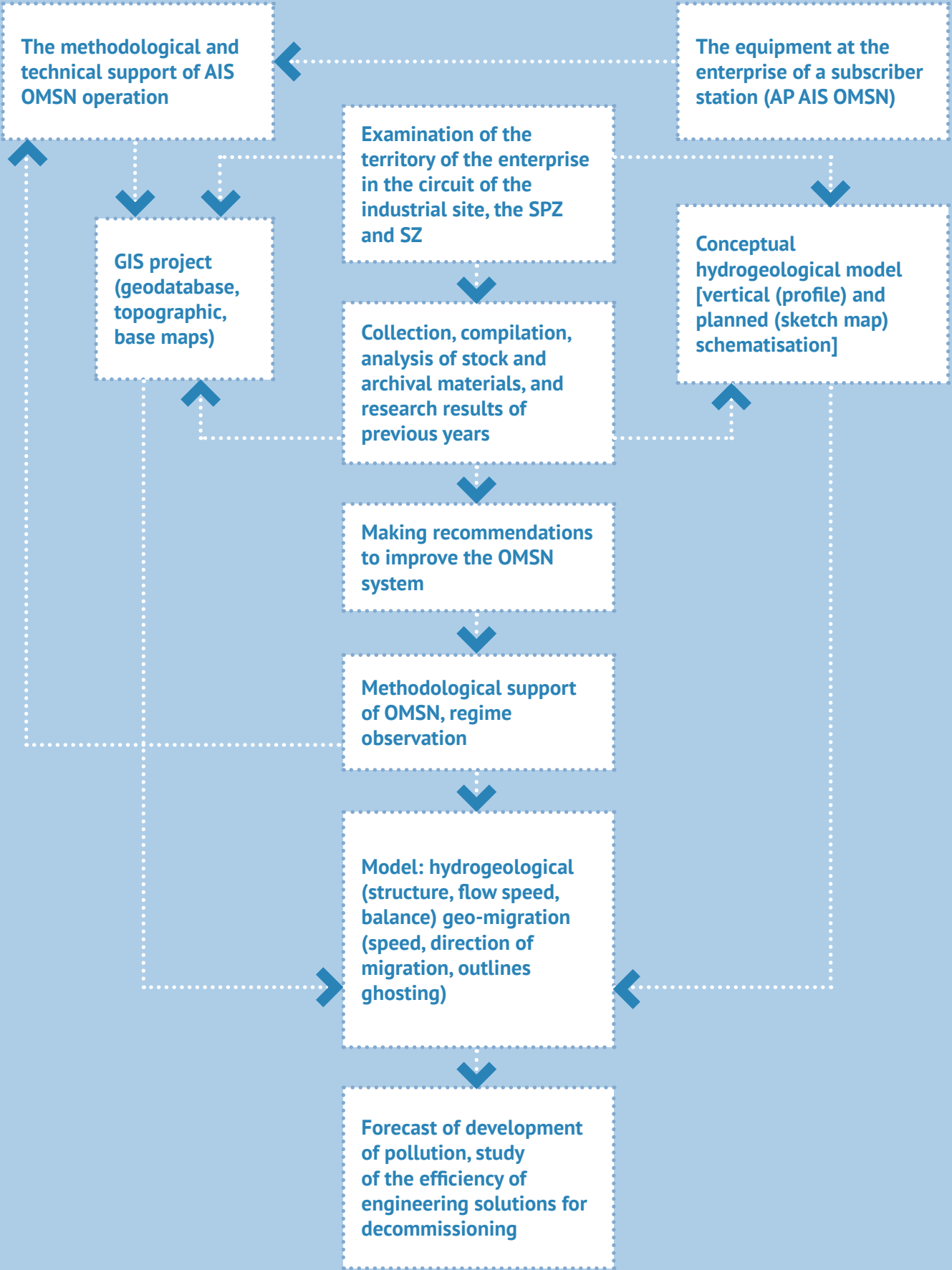
	Available as of January, 01, 2014	Formed and received during the year	Used and disposed of formed and received ones		Transferred to other organisations	Disposed on the entities	Available as of December, 31, 2014
			amount	%			
2014	398,917.9	25,439.0	24,439.4	96.1	552.3	416.2	399,086.4
2013	398,888.7	24,961.6	24,409.2	97.8	212.2	390.9	398,963.3
2012	398,799.5	21,883.2	21,233.1	97.0	255.1	456.9	398,888.6

Information about formation, use, neutralisation and disposal of production and consumption in the organisations of the Corporation are conducted in accordance with the laws of Russia*. During 2014 (and prior years) enterprises of ROSATOM did not receive waste on imports and exports.

Significant initiatives to reduce waste production and consumption:
The JSC AECC held recycling of previously accumulated waste products of triplets, 150 tons of waste was sent to specialised organisation
Due to commissioning of Boiler unit No. 1 in PJSC PGHO, after the reconstruction of the gas cleaning system ash emission decreased by 13%

* 30 hazard classes of waste are allocated in accordance with the Federal classification catalogue of waste, approved by the Ministry of Natural Resources and Ecology of the Russian Federation of September, 30, 2011 No. 792.

Structural and functional scheme of the object monitoring of the state of mineral resources at the enterprises of ROSATOM



6.3.4.7. On-site subsoil condition monitoring

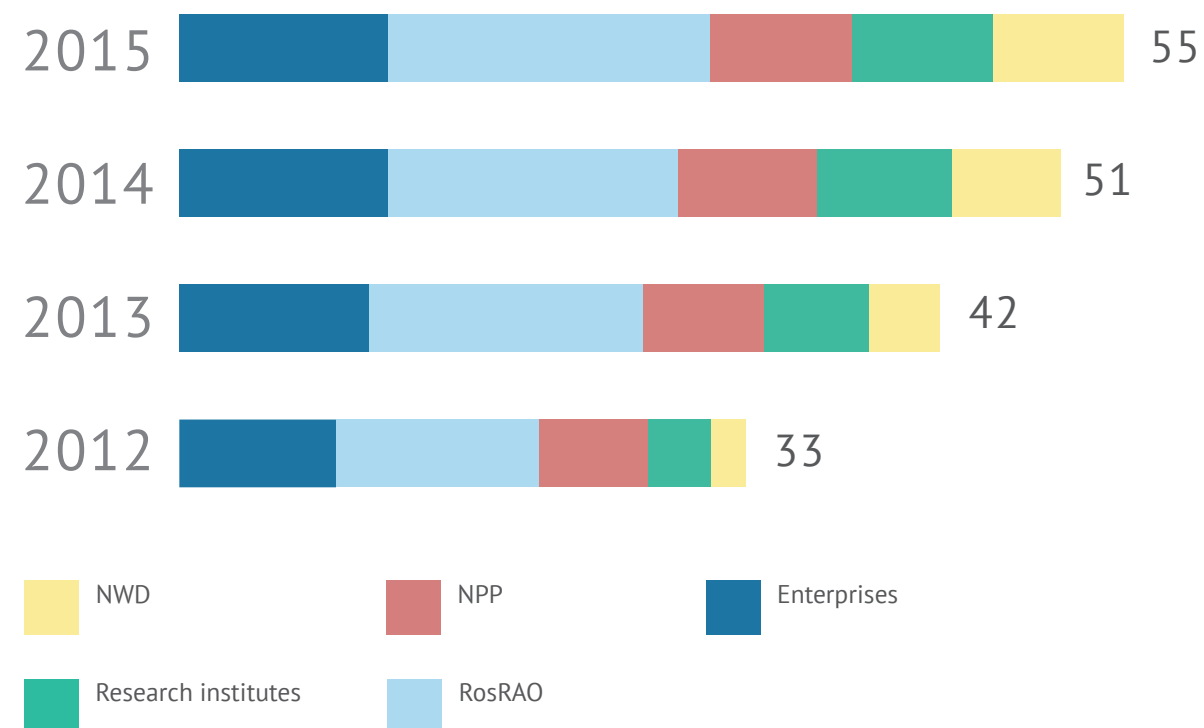
On-site Subsoil Condition Monitoring (OMSN) is a system of monitoring and regular observations of changes in the subsoil environment and surface hydrosphere condition indicators caused by the operations of ROSATOM's organisations, assessment and projection of these changes and management thereof.

The OMSN development programme defines the main objective as the merging of 55 key enterprises of the sector into the OMSN system by 2015. By December, 31, 2014 51 enterprises were examined and included into the system, the rest is planned to be included by 2015.

In 2014 was led an analysis of the OMSN systems in the Corporation's enterprises. 25.5 % of related enterprises are considered to be "good", 45.1 % are a "satisfactory", and 15.7 % are "unsatisfactory". Seven companies (13.7 %) are estimated ambiguously: at different sites of the same enterprise OMSN system are both in a satisfactory and unsatisfactory condition.

The main task of OMSN for the future is solving of problems of safe decommissioning and long-term placement of radioactive waste.

Stages of creation of the object monitoring system of subsurface condition at the nuclear facilities of ROSATOM, the number of organisations



6.3.5.

PREDICTED ENVIRONMENTAL IMPACTS FROM OPERATIONS OF THE CORPORATION'S ORGANISATIONS AND PLANS FOR CHANGING THE ENVIRONMENTAL IMPACTS AND ENSURING ENVIRONMENTAL SAFETY IN 2015 AND IN THE MEDIUM TERM

A great deal of conservation work is undertaken annually to mitigate the adverse environmental impacts from operations of ROSATOM's organisations. Each year, there is a growing volume of investments in fixed capital, which is used to fund conservation activities and rational use of natural resources via all funding sources, this being accounted for by an increase in the share of internal sources earmarked by companies for the construction and commissioning of facilities and systems that prevent the contamination of the environment and ensure the mitigation of radiological impacts. In the medium-term funding is planned within the framework of the Federal target programme "Nuclear and Radiation Safety for 2016 and for the period up to 2020".

It is planned to increase up to 5 times the volume of investment into fixed assets over the next 5–7 years. It is expected that the largest amount of current expenditure in the medium term (as

well as at present) will be allocated to ensure radiation safety and the collection and treatment of wastewater.

The dynamics of wastewater discharges in recent years is about the same level, but in 2014 there was an increase by 19.1%, due to increased regulatory discharge of clean waters at the Leningrad NPP because of increased electricity generation. In 2015 it is projected that the amount of discharge will be approximately at the same level.

Emissions of pollutants into the air at the enterprises of the industry from stationary sources are expected to be reduced due to the reconstruction and installation of new cleaning equipment.

Predicted dynamics reflects the systematic work on commissioning the systems for collecting and disposal of harmful substances from emissions, and plants for waste water purification.

The volume of production and consumption waste generation will be approximately at the same level. The gradual reduction of waste of 1 and 2 classes of hazard is planned.

In 2014, compared to the previous year, the area of recultivated land has increased significantly; in the future it is also expected to increase the area of recultivated land.

The level of radiation exposure to the environment will not increase.

Detailed information on the environmental safety and environmental impact is [in safety report of ROSATOM](#) and [the environmental reports of companies](#).

7 • STAKEHOLDER ENGAGEMENT IN THE REPORT'S PREPARATION

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7.1.1.

PUBLIC REPORTING SYSTEM

KEY RESULTS IN 2014

21

integrated reports were prepared by organisations of the nuclear industry (for 2013 reporting year)

11

awards received at Russian and international annual report contests

4

reports of nuclear companies are included in the base of "best practices" of the International Integrated Reporting Council

4

out of less than 10 reports of Russian companies, prepared in accordance with the G4 version of the GRI Guidelines and verified by the auditors, 4 reports belong to companies of the nuclear industry

7.1.1.

PUBLIC REPORTING OF ROSATOM AND ITS ORGANIZATIONS

In order to increase transparency and constructive cooperation with stakeholders ROSATOM since 2010 on a voluntary basis releases integrated reports, which are designed to form among stakeholders a comprehensive understanding of the Corporation's strategy, the sustainability of its business, industrial, financial and economic results of the reporting year, activities field of NRS, environmental safety, contribution to the development of the regions of the presence and other socially significant aspects of the work. In addition, the Corporation releases [annual report to the Government of the Russian Federation](#) (published in the open part) and [safety report](#) that is prepared jointly with the IBRAE RAN. Some organisations and companies prepare [environmental reports](#).

21 integrated reports were prepared by organisations of the nuclear industry in 2014. Stakeholder engagement comprehensive activities were carried out in the course of report preparation (surveys, questionnaires, dialogues and public verification procedures), the purpose of which was to determine the material aspects to be disclosed in reports and increase the utility of reports for users.

The reports of five organisations (ROSATOM, JSC NIAEP, JSC Concern Rosenergoatom, JSC Atomredmetzoloto, JSC Atomenergomash) are among the first in the Russian practice of corporate report were prepared in accordance with the new version of the Guide GRI G4 (Core 'in accordance' option).

Reports of the three companies of the nuclear industry (ROSATOM, JSC Atomredmetzoloto, JSC TVEL) were included in the Top-10 ranking of annual reports of the agency "Expert RA" according to the results of 2014. The Top-10 of the annual ranking of corporate transparency of major Russian companies, prepared by the Russian regional network of integrated reporting, includes six companies (ROSATOM, JSC NIAEP, JSC TVEL, JSC Concern Rosenergoatom, JSC Atomenergomash, JSC Afrikantov OKBM).



4 reports of nuclear companies are included in the base of “best practices” of the International Integrated Reporting Council (JSC NIAEP, JSC Atomredmetzoloto, JSC Atomenergomash, JSC Afrikantov OKBM).

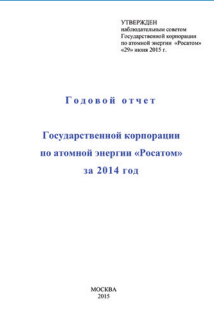
In addition, the reports of the Corporation and its organisations received 3 awards at national

and 8 awards at international competitions of the annual reports in various categories. In total since the start of the project for public reporting is gained 39 victories in national and 11 victories in international competitions.

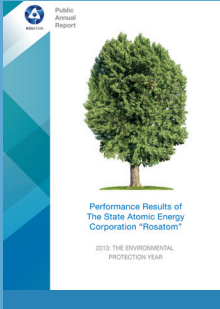
The structure of the reports of ROSATOM and its organisations

ROSATOM

Report to the Government of the Russian Federation



Public Report for a wide range of stakeholders



Safety Report



Reports of organisations and enterprises

Reports of JSC (including key organisations)



Ecological reports



Table. The results of national and international competitions of the 2013 annual reports

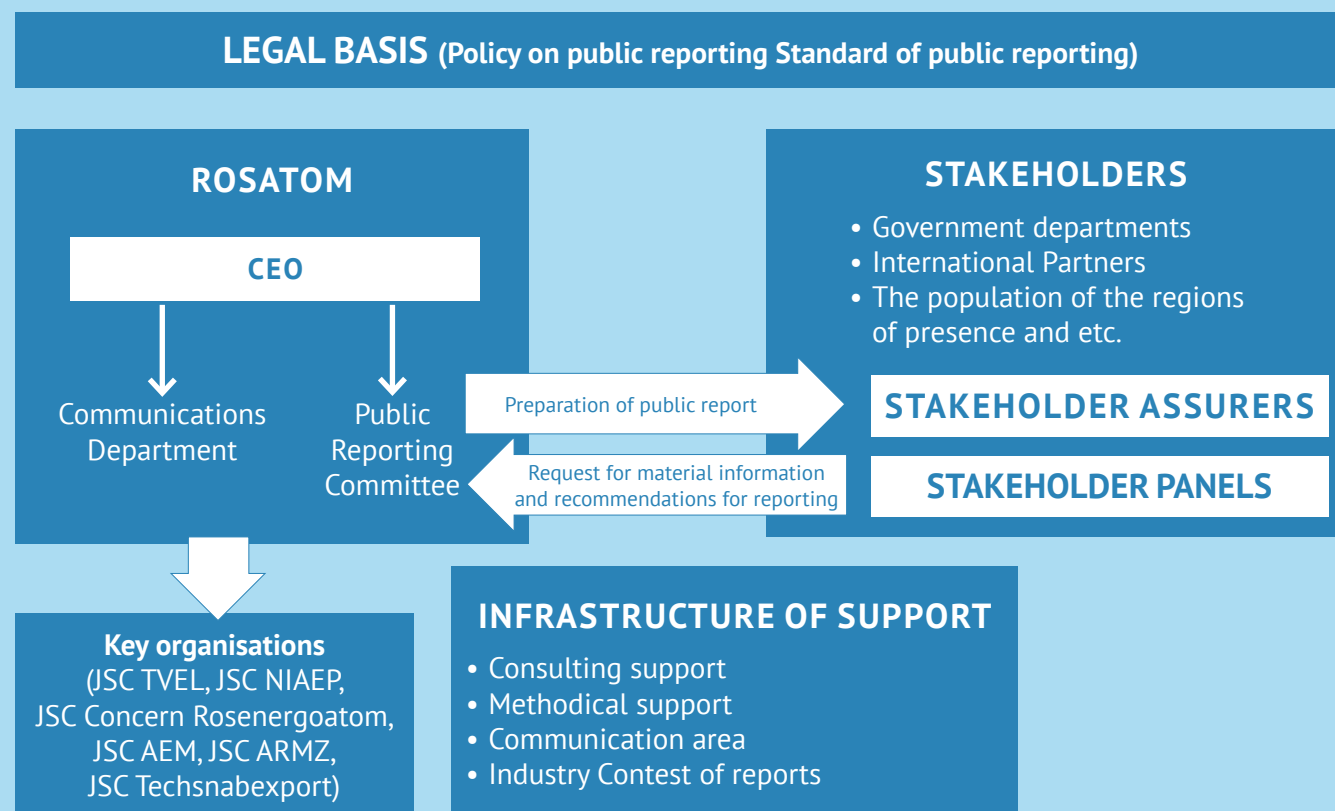
Competition	Winner	Nomination
Expert-RA rating agency 15th annual Federal contest of annual reports	JSC Concern Rosenergoatom	Best Interactive Annual Report (nominee)
	JSC TVEL	Special nomination “For the qualitative disclosure of information about relationships with suppliers”
MarCom Awards 2013	JSC NIAEP	Corporation (Platinum Winners)
	JSC Atomenergomash	Annual Report (Platinum Winners) Corporation (Gold Winners)
	JSC Concern Rosenergoatom	Corporate Social Responsibility (Platinum Winners) E-Annual Report (Platinum Winners) Corporation (Gold Winners) Other (Gold Winners)
LACP	JSC Techsnabexport	Energy – Equipment & Services (Platinum Winners)
Competition of Moscow Chamber of Commerce	ROSATOM	Diploma “For high level of corporate social responsibility and for the best corporate report on the results of 2013”

7.1.2.

PUBLIC REPORTING SYSTEM

ROSATOM created a system of public reporting, which purpose is improvement of the quality of reporting of the Corporation and its organisations (see. [Annual Public Report of ROSATOM of 2012](#)). Responsibility for the preparation of annual public reports was assigned to the functional units of the Corporation and its organisations, and in maps of KPI of the staff.





7.1.2.1. Issue of public reports of the Corporation and its key organisations

The quality of disclosure of accounting information significantly improved in 2014, including parts under the GRI Guidelines (version G4) and <IR> Framework.

Table. Dynamics of production of public reports of ROSATOM and its key organisations

	2014*	2013	2012
Number of integrated reports	21 , 5 of them in accordance with the Core 'in accordance' option of the GRI G4 and 11 GRI G 3.1: 1 A+, 3A, 1B+, 5B, 1C	21 , 6 of them at the level of A + GRI G 3.1, 7 B+, 2, 1, C+, C	22 , 2 of them at the level of A+ GRI G 3.1, 9 B+, 2 C+, 5C
The number of reports that have received stakeholder assurances	19	19	19
The number of reports in English	10	11	9
The number of dialogues with stakeholders during the preparation of reports	37	75	70
The number of web reports	6	13	9

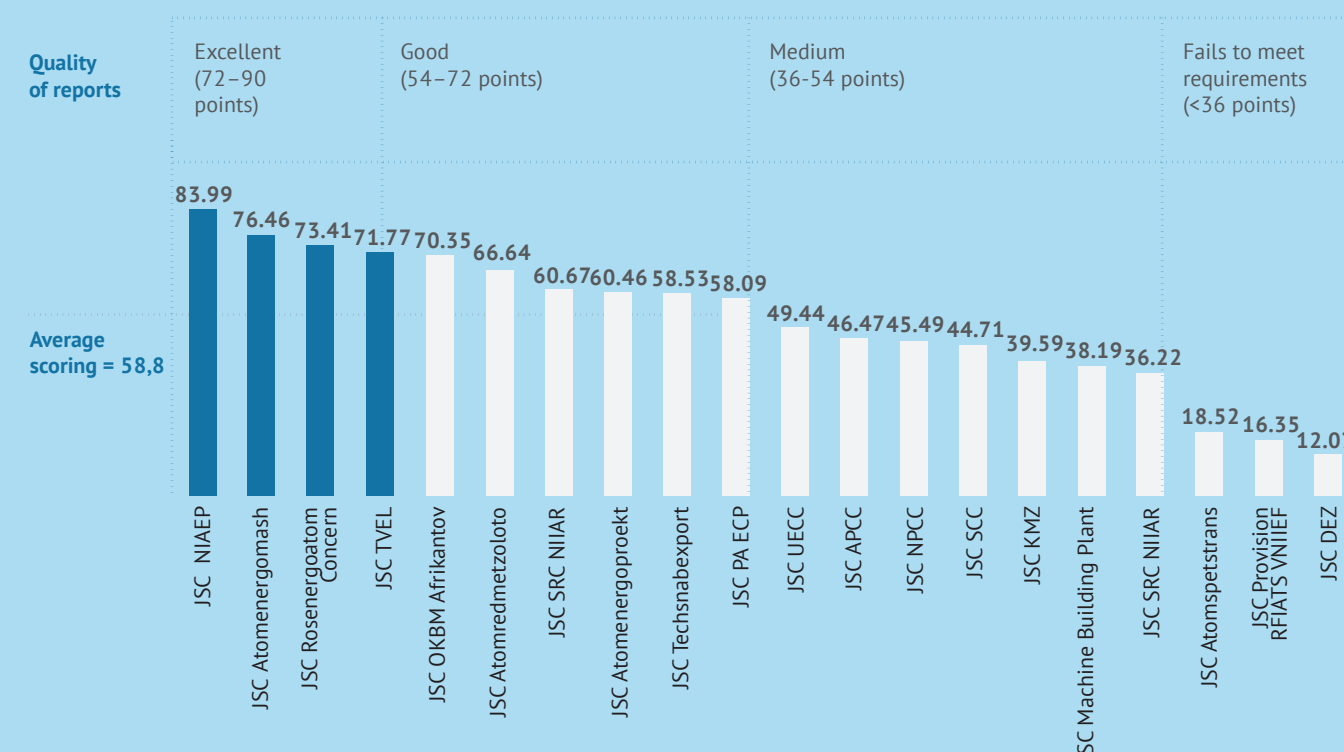
* Every year reports are released for the previous reporting year.

7.1.2.2. Industry Contest of public reports of organisations of ROSATOM

The sixth Industry Contest of public reports of organisations of the Corporation was held in 2014. The winner JSC NIAEP scored 83.99 points (out of

100). The annual report of ROSATOM did not take part in the contest, but received a score of 84.9 points from the judges.

Rating of 2013 annual reports*



* Without taking into account the quality of the interactive report

7.1.3.

PLANS TO IMPROVE THE PUBLIC REPORTING SYSTEM FOR 2015 AND MEDIUM-TERM

On an international scale:

- participation in the work of the International Integrated Reporting Council and the Russian Regional Network for Integrated Reporting,

- implementation of requirements of <IR> International Framework and GRI Reporting Guidelines (G4, Core / Comprehensive option)
- participation in international report competitions.

On an industry scale:

- updating of the regulatory and methodological basis considering the new international standards,
- quality control of reports (examination of the concepts and draft reports)
- educational and methodological support of organisations (educational materials, workshops)
- development of new forms of reporting and communication (summary records, electronic platforms of interaction with stakeholders, the development of electronic formats and so on.)
- regular interaction with stakeholders,
- improving the functional utility of reports.

7.2.

DIALOGUES

WITH STAKEHOLDERS AND TAKING INTO ACCOUNT STAKEHOLDER PROPOSALS

To enhance the transparency and accountability of ROSATOM, representatives of major stakeholders are involved in the preparation of the Report through discussions about the significant aspects of the Corporation's activities and the disclosure of these activities in the Report being prepared, as well as for the participation in the public assurance of the Report. The above-mentioned procedures are the integrated part of the following international standards: AA1000SES Institute of Social and Ethical Accountability, Global Reporting Initiative (GRI, G4 version), <IR> International Framework. When preparing the previous Report, ROSATOM undertook obligations, most of which were fulfilled in the 2014 Report, with some of the obligations undertaken for 2015.

To enhance the transparency and accountability of ROSATOM, as well as to meet the requirements of the AA1000 series international standards, two dialogues with stakeholders were conducted in the process of Report preparation, representatives were questioned to identify the material aspects of the Corporation's activities to be disclosed in the Report ([see Appendix 1](#)).

In the process of discussion, the stakeholder representatives voiced requests and specific recommendations for any information to be disclosed in the annual report, as well as proposals with respect to the development of the public reporting system (the minutes of the dialogues are available at the Communications Department upon request).



Table. Fulfilment of the obligations undertaken in the preparation of the 2013 report

Stakeholder proposals	Obligations of the Corporation	Obligations fulfilment
To disclose ROSATOM's performance indicators as compared to leading international competitors.	The proposal will be reviewed during the conceptualisation of the 2014 report.	Partially the information disclosed in "Creating of value, the business model and market presence" of this report. Overall, indicators, for which it is advisable Corporation comparison with foreign competitors, will be determined in the autumn of 2015.
To include the veteran community in the draft report assessment activities.	The proposal will be reviewed by ROSATOM's Public Reporting Committee.	The draft report was submitted for public consultation in the framework of the forum-dialogue "70 years of the Russian atom. National interest, environment, security" in Chelyabinsk November, 06, 2015. Chairman of MODV AEP V.A. Ognev took part in a public consultation.
To disclose in the report the approach concerning the precedence of production waste processing over waste disposal.	The proposal will be discussed during the conceptualisation of the 2014 report.	The proposal is considered in the "Environmental Safety."
To disclose in the report the comparison of the RPS and the production systems of other companies.	The proposal will be reviewed during the conceptualisation of the 2014 report.	The proposal will be considered in the preparation of reports concepts for the following years and taken into account in case of introduction of production efficiency in the number of material topics for the disclosure in the report.
To describe in the report, in one and the same manner, the business models, goals and results for divisions.	The proposal will be taken into account in the preparation of the 2015 reporting campaign.	A seminar on this subject was held on 03/20/2015 on which the unified guidelines for the disclosure of the theme "business model" were developed. Recommendations are implemented in the 2014 reports of divisions of the Corporation.
To disclose, for each division, the implementation efficiency indicator of investment projects and the effects thereof on the business models of the divisions.	The proposal will be reviewed during the conceptualisation of the 2014 report.	Information on the effectiveness of investment projects of divisions is disclosed in the annual reports of divisions for 2014. In preparing the report in 2015 will be considered the possibility of introducing a common set of indicators.
To give attention, when preparing the report, to the power industry evolution forecast in the report of British Petroleum (as the best practice model).	The report of British Petroleum will be analysed.	Report of British Petroleum was analysed. The approach to the disclosure of information on the subject was taken into account when drafting the section "Markets of presence."

Stakeholder proposals	Obligations of the Corporation	Obligations fulfilment
To include in the report a check list as to the fulfilment by the Corporation of the requirements in the newly worded Corporate Governance Code.	The proposal will be reviewed during the conceptualisation of the 2014 report.	The offer is not taken into account. Reason: given the specificity of the corporate governance and the structure of the share capital of the Corporation and its organisations, which implies the almost complete absence of outside shareholders, including those based on the direct requirements of the legislation of the Russian Federation, the implementation of the Corporate Governance Code, the main objectives of which is to prevent the violation of the rights of minority shareholders, the definition of mechanism for resolving corporate conflicts between shareholders, the introduction of independent boards of directors, establishment of requirements for the independence of directors, the mechanism of compensation for them, and so forth, will diverge from the existing model of management of the Corporation.

Table. Taking into account the most significant stakeholder proposals suggested in the preparation of the 2014 report

Stakeholder proposals	Consideration of proposals
To disclose information on the localisation of nuclear power plant construction, stating specific figures and examples.	Taken into account in the section 2.1. “International business”.
To disclose information about the non-nuclear products.	Taken into account in the section 2.4. “Business Diversification”.
To reflected in the report global market development in a scenario pledge just to show appreciation of the global market.	Taken into account in the section 1.4.3. “Markets of presence”.
To reflect the effect of sanctions against Russia for the activities of ROSATOM.	Taken into account in the section 2.1. “International business”, 2.2. “International cooperation”, 4.2. “Risk management”.
To specify not only the number of employees involved in the disciplinary action as a result of violations of anti-corruption, but also to disclose information on follow-up by law enforcement agencies of the Russian Federation.	Not taken into account. The measures taken by law enforcement agencies, are outside the area of responsibility of ROSATOM.



Stakeholder proposals	Consideration of proposals
To specify the impact of works on environmental protection, and not just the size of the expenditure.	Taken into account: examples of significant initiatives to reduce the impact on the environment are given in section 6.3 “Environmental Protection”.
To indicate presence or absence of accidents at the facilities of ROSATOM in the reporting year.	Taken into account in the section 6.1. “Nuclear and Radiation Safety”.
Disclose information on the impact of the Corporation on the development of human capital in the regions of presence.	Taken into account in the section 5.2. “Contribution to the development of the territories of presence”.

Table. ROSATOM’s obligations for taking into account proposals suggested in the preparation of the 2014 report

Stakeholder proposals	Obligations of the Corporation
Disclose information about the activity, aimed at finding foreign investors from the Eastern countries.	It will be considered in the preparation of the 2015 report framework.
To expand the information on corporate contributions to the economic development of the regions (in addition to interaction with suppliers and contractors).	It will be considered in the preparation of the 2015 report framework.
Explain what has caused the decline in intangible assets in 2014.	Reduction is insignificant within 1 %. International Business Department, together with the Unit of innovation management is implementing the project “Identification and protection of key products and core technologies”, aimed at the legal registration and protection of technology and intangible assets. Information about the project will be presented in the report for 2015.
Improve effectiveness of the work of Commission of stakeholders of companies of the nuclear industry.	It will be considered in the planning of works for 2016 on the improvement of the industry public reporting system.
To discuss the draft report with the public in the CATF and in the regions of presence.	It will be considered in the preparation of the 2015 report framework.
More disclose information about how in the Corporation are implemented the measures on import substitution.	Plans in the field of import substitution are reflected in the report for 2014 (in particular, in the “Nuclear Weapons Division”, “Diversification of business”). The results of this work will be presented In the report for 2015.

7.3.

REPORT'S

STAKEHOLDER ASSURANCE STATEMENT



Introductory information

ROSATOM offered us to assess the report “Results of the State Atomic Energy Corporation ‘Rosatom’ for 2014” (Report). For this, we and our representatives had the opportunity to participate in a dialogue with stakeholders on the priority theme of the Report “Strengthening the position of ROSATOM on the world market of nuclear technologies and services” (Moscow, March, 11, 2015), in public consultations to discuss the draft report, which took place on June, 11, 2015 in the city of Chelyabinsk in the framework of the dialogue Forum “70 years of the Russian atom. National interest, environment, and security”, and in the discussion of the draft Report in the Public Chamber of the Russian Federation on August, 11, 2015. We also participated in the determination of the material aspects / themes for disclosure in the Report.

In the course of this public assurance exercise, the subject matter of the analysis and assessment was the materiality and completeness of the information being disclosed therein, as well as the response of the Corporation to comments and proposals of the stakeholders. Our statement is based on the comparative analysis of two revisions of the Report (the draft Report for the public consultations and the final revision of the Report) and the materials reflecting on the held dialogues we were provided (records of the events, tables of accounting of the stakeholders’ proposals), as well as comments received from the top management and employees of ROSATOM during the Report public assurance exercise.

We have not received any reward for participation in the public assurance procedure from the Corporation.

Assessments, comments and recommendations

We are unanimous in our positive attitude to the Report, i.e. its format and scope of the information provided.

In our view, this is evidence of a consistent approach to improvement of the level of transparency and accountability on the part of ROSATOM. In the course of the Report drafting process the Corporation demonstrated strive for ensuring public acceptance of the nuclear technology development as well as readiness for an open dialogue with the stakeholders on various aspects of its activities.

In our view, the integrated format of the Report allowed to comprehensively disclose information about all main activity aspects of the Corporation, including those related to the sustainable development of business. The clear reflection of a complex value chain, the Corporation control system, the strategic objectives and management approaches, indicators of social, environmental and economic impact, challenges and plans for the medium and long term was able because of detailed study of the business model in the Report of the Corporation. Thus, complete picture of the activities of ROSATOM is presented to readers of the report, including socially significant aspects of the activity.

Another indisputable advantage of the Report is the use in its preparation of the Russian and international standards of corporate reporting (<IR> International Framework, GRI (version G4, Core ‘in accordance’ option), a series of AccountaAbility’s AA 1000 standards, key performance indicators of RSPP), as well as own corporate standard of public reporting.

We especially want to note the appearance of the first summary of the activities of ROSATOM with the most significant results of the year, which was released in March 2015. We urge to continue to look for the most suitable for stakeholders types and forms of presentation of reporting information.

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Materiality of the information

To ensure most complete accounting of requests from the stakeholders, ROSATOM, in the framework of the dialogue on discussion of the Report draft concept, held a questionnaire of the stakeholders' representatives to identify material aspects of the activity to be reflected in the Report (the received data were compared to questionnaires of top management of the Corporation). We highly appraise this initiative and recommend having the closest cooperation on this issue with representatives of stakeholders as reference representatives of target audiences of the Corporation's public reports in future.

Selection of the priority theme of the Report "Strengthening the position of the State Corporation 'Rosatom' on the world market of nuclear technologies and services" seems to us to be the best, since it is the topic of greatest interest of stakeholders in the reporting year and is extremely important for the Corporation to achieve the strategic goal of global leadership.

Completeness of the information

We believe that reported information is presented in full according to all material aspects and allows readers to make conclusions about the performance of the Corporation during the year.

Response of the Corporation to comments and offers of the stakeholders

ROSATOM responded to proposals of the stakeholders by updating and providing

additional information (or sound grounds on which the requested information cannot be disclosed) upon the recommendation of the stakeholders' representatives in the final revision of the Report.

Besides, the Corporation has expressed its readiness to consider proposals on disclosing certain information in the next reporting period and on improving the public reporting system, in particular:

- supplement the information about the contribution of ROSATOM in the socioeconomic development of the regions;
- disclose information about results of the work on import substitution plans of which are available in this report;
- expand the information about the international nuclear market of presence of ROSATOM by the addition of development scenarios.

It should be highlighted that ROSATOM has done a great job to take account of comments given in regard to the report for 2013. The report on meeting the commitments is given in Chapter 7.

Summing up, we note that over the five recent years the Corporation has achieved significant results in public reporting and continues raising the level of its transparency of and confidence in its activities. We hope that in future ROSATOM will consistently implement the principles of responsible corporate conduct in its activity through the development of the public reporting system and interaction with the stakeholders.

ALEKSANDR AGEEV

General Director of the Institute for Economic Strategies
Department of Social Sciences of RAS

SERGEY BARANOVSKY

President of the Green Cross Interregional Environmental Public Organisation

VALERY VASILIEV

Member of the Board of the Civil Assembly of Krasnoyarsk Krai,
Member of the Public Chamber of the Russian Federation

ALEKSANDR MAKARENKO

Executive Director of Association of the CATF of the nuclear industry

VLADIMIR POTSYAPUN

Member of the Russian Federation State Duma Committee
on Energy

ELENA FEOKTISTOVA

Head of the Centre of Corporate Social Responsibility and Non-financial Reporting of RSPP

IGOR FOMICHEV

Chairman of the Russian Trade Union of Nuclear Power and Industry

ABBREVIATIONS

NS	nuclear submarine
ARMIR	automated workplace for assessment of individual risk
ARMS	automated radiation monitoring system
NPP	Nuclear power plant
OECD/NEA	Nuclear Energy Agency of the Organisation for Economic Cooperation and Development
HLW	high-level waste
WANO	World Association of Nuclear Operators
VVER	water-cooled water-moderated power reactor
HEU	highly enriched uranium
HCS	harmful chemical substances
ROSATOM, Corporation	State Atomic Energy Corporation “Rosatom”
GC	gas centrifuge
EurAsEC	Eurasian Economic Community
UNS NFC	Unified National System for Spent Nuclear Fuel Management
UNS RAW	Unified National System for Radioactive Waste Management
SWU	Separative work unit
USRS	uniform standardised remuneration system
LRW	liquid radioactive waste
LC	lifecycle
CATF	closed administrative and territorial formation
INES	International Nuclear Event Scale
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
ITER	International Thermonuclear Experimental Reactor
NRF	nuclear research facility
ICUF	installed capacity utilisation factor
KPI	key performance indicator
CRMS	corporate risk management system
IAEA	International Atomic Energy Agency
IA	intergovernmental agreement
IUEC	International Uranium Enrichment Centre
LLW	low-level waste
R&D	research and development
LEU	low-enriched uranium
UNO	United Nations Organisation
EUP	enriched uranium product
SNF	spent nuclear fuel
LTAP	Long-term Activity Programme of ROSATOM
RAW	radioactive waste
RBMK	high-power channel-type reactor
RIA	results of intellectual activities
RTG	radioisotope thermoelectric generator
Rostekhnadzor	Federal Environmental, Industrial and Nuclear Supervision Service
RSPP	Russian Union of Industrialists and Entrepreneurs
RF	Russian Federation

CIS	Commonwealth of Independent States
JV	joint venture
NFA	nuclear fuel assembly
NFE	nuclear fuel element
SRW	solid radioactive waste
FAIR	Facility for Antiproton and Ion Research in Europe
FMBA	Federal Medical and Biological Agency
FTS	Federal Tariff Service
FTP	Federal target programme
NWD	Nuclear Weapons Division
NRS	nuclear and radiation safety
NRFF	nuclear and radiation hazardous facility
NFC	nuclear fuel cycle

GLOSSARY

Nuclear power	a branch of power engineering that uses atomic energy for electricity and heat generation.
Nuclear plant safety	the property of a nuclear power plant to ensure, within the specified limits, the radiological safety of the personnel, the public and the environment during normal operation and in the event of an accident.
Becquerel (Bq)	the unit of nuclide activity in a radiation source equal to the nuclide activity at which one decay takes place per second.
Organisational business model	a model including the key business processes and the resources (capital) employed, with which the organisation creates and maintains its value in the long term.
Fast neutrons	neutrons whose kinetic energy exceeds a particular given magnitude. This magnitude is variable in a broad range and depends on the application (reactor physics, protection or radiation monitoring). In reactor physics, this magnitude is mostly selected as equalling 0,1 MeV.
VVER	a water-cooled water-moderated power reactor, in which water is used both as the coolant and the moderator. The most common type of Russian NPP reactors has two modifications: VVER-440 and VVER-1000.
Radioactive release	atmospheric emission of radionuclides as the result of nuclear plant operation.
IAEA safeguards	a verification system established in the framework of the international nuclear non-proliferation policy, which is applied to the peaceful use of atomic energy; the International Atomic Energy Agency is charged with the implementation of this policy.
Global Reporting Initiative (GRI)	an international reporting system concerning economic, environmental and social performance, based on the Sustainability Reporting Guidelines, Technical Protocols and industry applications.
Dialogue with stockholders (as part of the annual report preparation)	an arrangement undertaken under the AA100 international standards for the engagement of representatives of the stakeholders during the report preparation to enhance the organisation's transparency and accountability.
Nuclear weapons non-proliferation treaty	an international agreement for arms race limitation intended to avoid the emergence of new states possessing nuclear weapons. The treaty places the states possessing nuclear weapons under the obligation not to disseminate nuclear weapons and control such weapons, while it places non-nuclear states under the obligation not to produce or purchase nuclear weapons or other nuclear explosives.
Radiation exposure	the total of individual exposure doses received or planned in the operations to decommission, maintain, repair, replace or dismantle components of a nuclear facility, e.g. of a nuclear plant.
Separative work unit (SWU)	a measure of the efforts applied to separate a given quantity of a material of a certain isotopic composition into two fractions with different isotopic compositions; it does not depend on the separation process used; kilogram is a separative work unit, and the enrichment and energy consumption cost is calculated per kilo of the separative work performed.

Natural background	ionising radiation formed by space radiation and ionising radiation of naturally distributed natural radionuclides (on the surface of the Earth, in the air, in food products, water and human body, and so on).
Stakeholders	physical and/or legal persons, as well as groups of persons, who affect the organisation's activities through their actions and/or are subject to effects from the organisation. An organisation may have different stakeholders (public and international supervising authorities, shareholders, consumers of goods and services, business partners, suppliers and contractors, civil society organisations, local communities, trade unions and others) with both mutually remote and conflicting interests.
Closed nuclear fuel cycle	a nuclear fuel cycle, in which spent nuclear fuel is processed for uranium and plutonium extraction for nuclear fuel re-fabrication.
Radioactive waste disposal	safe disposition of radioactive waste in repositories or any places that rule out waste withdrawal or the potential of radioactive releases into the environment.
Integrated report	a report that consolidates all material data on the organisation's strategy, corporate management, performance indicators and prospects such that it would "show" in an integrated way the organisation's economic, social and environmental status. The report gives a clear and distinct idea about how the organisation carries out reasonable control, as well as on how it creates its value at the present time or will create it in future.
Research reactor	a nuclear reactor designed for use as a subject of research for the purpose of obtaining data on reactor physics and technology, which is required for the design and development of a reactor of the same type or of components thereof.
Key (for the purpose of public reporting) organisations	organisations whose activities are of a major social and political importance and/or significant for the positioning of ROSATOM in Russian and international markets.
Key performance indicators (KPI)	key efficiency indicators meeting the goals of the Rosatom State Corporation which disclose the efficiency and performance of organisations (and of activities by division) and the individual efficiency of employees.
BOO (Build-Own-Operate) contract	a contract that provides for the obligation of the construction, ownership and operation of a facility.
EPC (Engineering-Procurement-Construction) contract	a contract that provides for the obligation of the turnkey construction of a facility, including the facility engineering, supply and construction obligations. Unlike a BOO Contract, it does not provide for the ownership of the facility to be built.
EPCM (Engineering-Procurement-Construction - Management) contract	a contract that provides for the obligation of the turnkey construction (including engineering, supply and construction) and management of a facility. Unlike a BOO Contract, it does not provide for the ownership of the facility to be built.
Radiation monitoring	acquisition of information on the radiological conditions in the organisation and in the environment and on human exposure levels (includes dose control and radiometric monitoring).

Corporate social responsibility	a concept based on an organisation taking into account stakeholder requests. This is a package of obligations generated, on a voluntary basis, by the organisation's executives with regard for the interests of personnel, shareholders, local communities in the operations areas, state and municipal power bodies, and other stakeholders. These obligations are largely fulfilled at the expense of the organisation's funds and are aimed at the implementation of significant internal and external social (in the broad sense of the word) programs, the results of which contribute to the development of the organisation, to the improved reputation and image thereof, as well as to the constructive stakeholder engagement.
Installed capacity utilisation factor (ICUF)	the relation of the actual electricity generation by a reactor facility during the period of operation to the electricity generation during rated-power operations with no shutdowns.
International Integrated Reporting Council (IIRC)	an international organisation engaged in the development of a global integrated reporting standard to allow for managerial, financial, social, environmental and other information to be provided in an understandable, concise, self-consistent and comparable reporting document. The IIRC objective is to develop versatile approaches to the delivery of corporate reports so as to contribute to the sustainable development of a global economy.
Uranium ore enrichment	a combination of processes for the primary treatment of uranium-bearing mineral raw material to separate uranium from other minerals contained in the ore. This does not involve any changes in the content of minerals, but only a mechanical separation thereof with the resultant production of an ore concentrate.
Stakeholder assurance of the report	the procedure for the assurance of the report by representatives of the major stakeholders to confirm the materiality and completeness of the information disclosed in the report, as well as for the organisation's response to the stakeholders' comments and proposals, as organised in accordance with the AA1000SES international standard. The public certification result is the public assurance statement signed by the stakeholder representatives and entered in the report.
Pilot operation	a stage in the nuclear plant commissioning from the power start-up to the plant's acceptance for commercial operation.
emergency response system of ROSATOM	a functional subsystem of emergency management in organisations administered by the State Corporation Rosatom.
Radioactive waste processing	operations aimed at changing the aggregate state and/or physical and chemical properties of radioactive waste and carried out to convert it into such forms as would be suitable for transportation, storage and/or disposal.
Radiation safety	state of security from the ionising radiation harmful effects of the present and future human generations and environment.
Radioactive waste	nuclear materials and radioactive wastes of no further use.
GRI Sustainability Reporting Guidelines	The Sustainability Reporting Guidelines containing the guidelines that define the content and ensure the quality of reporting information, standard reporting disclosures comprising the performance indicators of the organisation's economic, environmental and social impacts, approaches to the management of said impacts, and other characteristics, as well as recommendations on specific technical aspects of reporting.

Dump of radioactive material	controlled entry of radionuclides into water bodies with liquid waste of a nuclear facility.
HEU-LEU Agreement	the Agreement between the Government of the Russian Federation and the Government of the United States of America Concerning the Disposition of Highly-Enriched Uranium Extracted from Nuclear Weapons, under which Russia had committed itself to supplying to the U.S. for 20 years (until the end of 2013) low-enriched uranium (LEU) obtained from 500 tons of highly-enriched uranium (HEU) extracted from nuclear warheads and found by the Russian side to be excessive for defensive applications.
AA1000 Stakeholders Engagement Standard	a generally applicable regulatory framework for the planning, execution, assessment, provision of information and non-financial auditing of the stakeholder engagement quality in the organisational reporting and accountability process in the field of efficient management.
Nuclear fuel pellet	a pellet of compacted uranium dioxide is the basis of nuclear fuel and is contained inside fuel elements.
Nuclear fuel assembly	a package of fuel elements (rods, bars, plates and others) held together with the aid of spacer grids and other structural members, which are integral during transportation and in-pile irradiation. Assemblies are loaded into the nuclear reactor core.
Sustainable development	development that covers present-day needs, while not endangering the capability of future generations to cover their needs. In this connection, the organisation's transparency and accountability with respect to its economic, environmental and social impacts are the fundamental requirements applicable to every economic entity.
First criticality	a stage in the nuclear plant commissioning process, including the reactor fuelling, first criticality and required physical experiments conducted at the power level at which heat is removed from the reactor thanks to natural heat losses.
Operator	an organisation that possesses the regulator permit to operate a nuclear plant or another nuclear facility.
Power start-up	a stage in the nuclear plant commissioning during which the plant starts to generate energy and the plant's operation is checked at different power levels up to that specified for commercial operations.
Nuclear safety	property of nuclear facility to prevent the outbreak of nuclear accidents and the spread of nuclear materials.
Nuclear fuel	a material containing fissionable nuclides which, being placed in the nuclear reactor, makes it possible to sustain a nuclear chain reaction.
Nuclear fuel cycle	the sequence of manufacturing processes for ensuring the operation of nuclear reactors from uranium production to the disposal of radioactive waste.

INFORMATION ABOUT REPORT AND DETERMINING PROCESS OF THE REPORT CONTENT

1.

APPENDIX

Annual Public Report of the State Atomic Energy Corporation "Rosatom" for 2014 is the sixth report prepared by the Corporation on a voluntary basis and addressed to a wide range of stakeholders.

The report was prepared in the integrated format and comprehensive manner reflects:

- implementation of the strategy of ROSATOM, including contribution to the sustainability of the reporting year of the Corporation's business, and plans for short, medium and long term;
- significant financial, economic and operational results of the main activities;
- results in the field of nuclear and radiation safety, environmental protection, contributions to development of the regions, the implementation of social policies and other aspects of sustainable development;
- economic and ecological and social impact on the environment;
- management approaches of ROSATOM to manage the various operation aspects.

The priority theme of the report, specified by top management and representatives of the major stakeholders, is "Strengthening of positions of the State Atomic Energy Corporation 'Rosatom' on the world market of nuclear technologies and services". Information about the choice of material themes for disclosure in the report is presented below in the sections "Process for determining the materiality of the information disclosed in the Report" and "Ranking map of material aspects (matters) to be disclosed in the Report".

Annual reporting cycle is set in ROSATOM according to the internal regulations. The previous annual report was published in 2014. The report covers the activities of the Corporation for the period from 01.01.2014 to 31.12.2014.

Standards and regulations

The report is prepared according to:

- Policy in the field of public reporting and standard of annual public reports of ROSATOM,
- <IR> International Framework,
- G4 Sustainability Reporting Guidelines (Core 'in accordance' option)
- AA1000 AccountAbility standards,
- the RSPP Recommendations for use in the practice of management and corporate non-financial reporting (key performance indicators).

Interaction with stakeholders

Preparation of the report took place in cooperation with stakeholders in accordance with the international standard AA1000SES in order to improve transparency, accountability and determining of materiality of disclosed information. A study and two dialogues with stakeholders, including the public consultation on the draft report were made to determine the material aspects to be disclosed in the report. The report takes into account the main requests of stakeholders made during the dialogue (see. Section "[Taking into account stakeholder proposals](#)").

Information verification

The reliability of reporting information is confirmed by conclusions:

- Audit Commission of ROSATOM ([see. Appendix 3](#));
- an independent auditor, confirming the accuracy of the annual financial statements,
- an independent auditor, confirming the accuracy of the non-financial statements in accordance

with the standards of GRI G4 ("Core 'in accordance' option") and the AA1000 APS ([see. Appendix 5](#)).

Internal Control and Audit Department of ROSATOM conducted an internal audit of formation processes compliance to the public reporting requirements of ROSATOM Policy in the field of public reporting, and local regulations of the Corporation in the field of public reporting ([see. Appendix 4](#)).

Representatives of key stakeholders conducted procedure of report public certification in accordance with standard AA1000SES proving materiality and completeness of the information disclosed, and the Corporation's response to requests from stakeholders in the preparation of the Report (see. Section "[Report's Stakeholder Assurance Statement](#)").

Boundaries

The boundary of the report includes the activities of ROSATOM and its organisations in the Russian Federation and other countries. Information on the current activities of the Nuclear Weapons Division is not fully revealed due to the nature of activities of ROSATOM and the need to comply with state secret.

Several consolidation perimeters were used in the report (list of organisations included in different consolidation perimeters is revealed [in the online version of the report](#)). Integral performance indicators, as well as EBITDA are disclosed in accordance with the Corporation's fiscal consolidation perimeter as of 31.12.2014 (151 organisations)*. Indicators GRI, related to social category, are disclosed regarding all essential Russian organisations under the perimeter of fiscal consolidation (145 companies), GRI Indicators related to environmental category are disclosed regarding all significant organisations under the perimeter of the organisations of ROSATOM, providing information on the state of protection of the environment by reporting forms (130 organisations and 13 nuclear power plants in operation and under construction). Financial and economic performance indicators, including the value created and distributed economic value, are given in accordance with the perimeter

of the consolidated IFRS financial statements of ROSATOM (174 companies). Financial and economic performance indicators in the "Financial and economic results" are given in accordance with the perimeter of the consolidated IFRS financial statements of JSC "Atomenergoprom" (114 organisations, summarised consolidated financial statements under IFRS, as well as the Independent Auditors conclusion shown in the [report of "Atomenergoprom"](#)).

A material aspect outside the organisation is a product liability, management approaches are explained in section 2,1 "International Business". The individual elements of the Report content and related performance indicators (international cooperation, the activities of ROSATOM in the regions, environmental protection and so on) include information on the activities of key partners, suppliers and stakeholders of ROSATOM in accordance with the international standards.

Process for determining the materiality of the information disclosed in the Report

Traditionally, ROSATOM places a great emphasis on the process of determining the materiality of the information disclosed in its reports. The 2014 Report was prepared in accordance with the requirements of the international reporting standards: the GRI (G4) Guidelines and <IR> Framework. Determination of material aspects (topics) to be disclosed in the Report is material to both standards.

The Corporation used the following phased procedure for determining the materiality of information:

- preparation by the task team of a list of significant aspects of ROSATOM's activities;
- prioritisation of significant aspects (questioning for the purpose of assessing the relevance of each of the aspects proposed) by the Corporation's top management, including the Public Reporting Committee, and representatives of the major stakeholder groups;
- formation, based on results of 'double filtering',

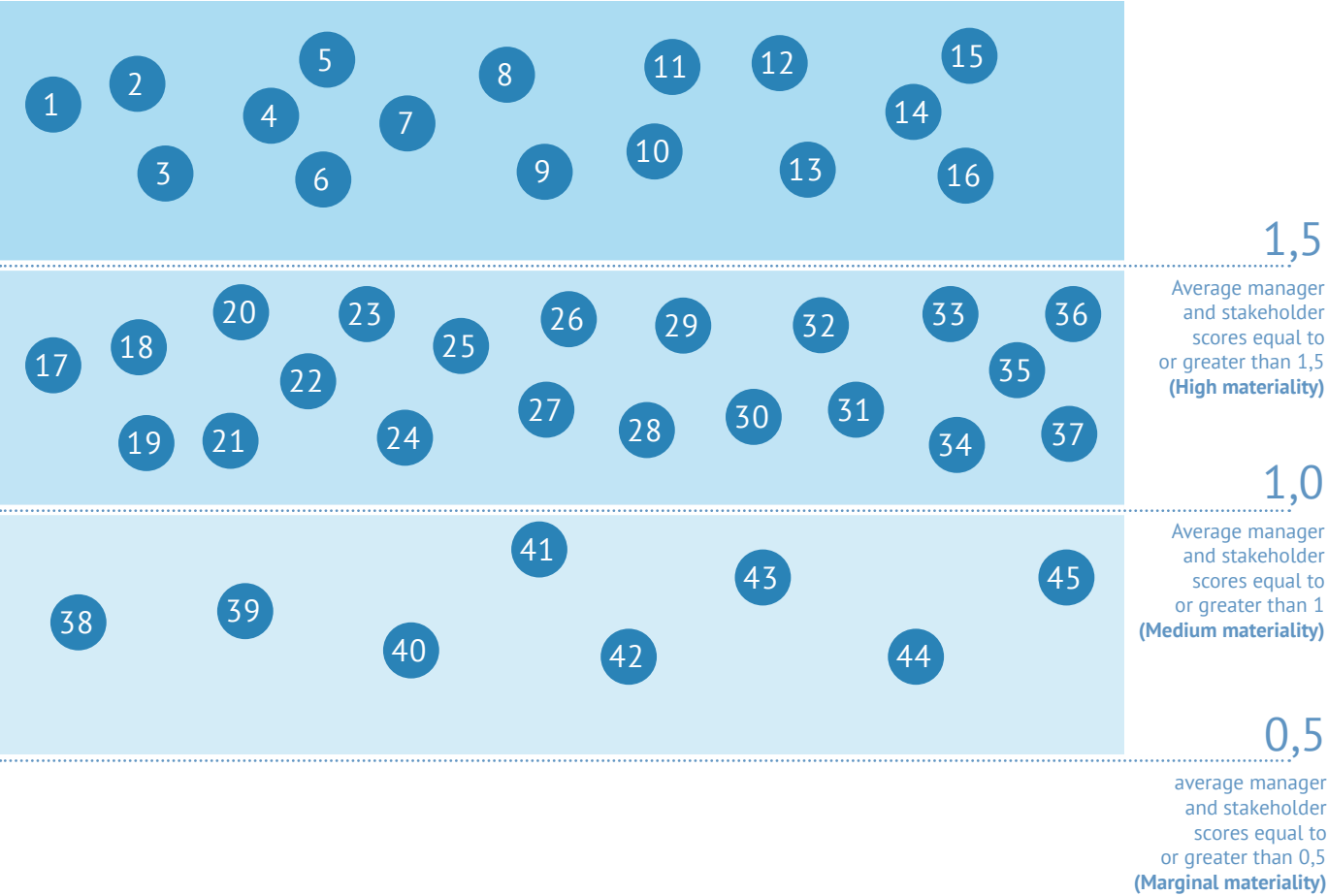
* Hereinafter not including ROSATOM.

of the final list of material aspects to be disclosed in the Report.

As the result, the ranking map of material aspects to be disclosed in the Report was prepared. The decision on which performance indicators under

the GRI (G4) Guidelines and ROSATOM's Annual Public Reporting standard should be included in the Report was made with regard for the materiality of the aspects to which these indicators applied. The aspect boundaries were determined by the workgroup.

Ranking map of material aspects (themes) to be disclosed in the Report*



High materiality

1. The presence of ROSATOM in the markets of natural uranium, conversion and enrichment of uranium, nuclear fuel, NPP facilities, and prospects of development of these markets
2. The forward looking information on the needs of

the power system of Russia and the energy systems of foreign countries, prospects for the development of nuclear energy.

3. The presence of ROSATOM in new markets (nuclear medicine, the environment, the inspection system and centres of radiation; non-nuclear engineering, services

for NPP, decommissioning of NRFF, treatment, recycling and disposal of RAW and SNF), market characteristics and prospects of ROSATOM.

4. Financial and economic results of ROSATOM.*
5. The investment programme of ROSATOM.

6. Radiation effects on the environment (including biodiversity)
7. Provision of nuclear and radiation safety when working at nuclear facilities (including international cooperation in this field)
8. Emergency Preparedness

* Aspects marked with (*) are recognised insignificant by decision of the head of the working group. The theme "compliance of ROSATOM activities to the government regulations" is relevant to the GRI aspect "Compliance" (Ecology).

9. Solving the problem of "nuclear legacy".

10. Implementation of environmental policy of ROSATOM, including activities and expenditures (investments) on environmental protection.

11. Use of natural resources (water, energy, materials *, emissions and discharges, the treatment of disturbed and polluted lands).

12. Implementation of the state functions by ROSATOM. Use of natural resources (water, energy, materials, emissions and discharges, the treatment of disturbed and polluted lands).

13. RAW and SNF handling (including UNS RAW)

14. Product safety and consumer's health

15. Conformity of the organisations of ROSATOM with national and international environmental and technical standards

16. Contribution to the economic development of the regions of presence and development of closed administrative and territorial formations (CATF) and areas of NPP
- Medium materiality

17. Participation of ROSATOM in international organisations

18. Mechanisms for cooperation and development of relations with suppliers and customers, and business partners

19. Mechanisms for cooperation and development of relations with other stakeholders (environmental groups, residents of regions where are existing and planned facilities)

20. Ensuring the creditworthiness of JSC "Atomenergoprom" in the medium and long term

21. Improvement of the corporate governance mechanisms

22. Development of organisation

23. Implementation of the project "Corporate Risk Management System" (CRMS) and its results

24. Opposition to the unfair competition

25. Procurement practices

26. The mechanisms for filing complaints on environmental issues and issues of ensuring Nuclear Radiation Safety *

27. Employees' social security
28. Cooperation with universities

29. Occupational health and safety

30. Conformity with the legislation of ROSATOM activities

31. Anti-corruption

32. Requirements for the quality of products of ROSATOM

33. Impact of the activities of ROSATOM on local communities (social programs, charity)

34. Implementation of the Programme of innovative development and technological upgrading, and the activity within the Presidential Council for Modernisation and Technological Development of Russia's Economy

35. The implementation of projects related to the creation of a new technological platform (CNFC and fast neutron reactors)

36. Developments in the field of radiation technology

37. International projects in the field of science and innovation
- Marginal materiality

38. Implementation of the project "Production system of Rosatom" (PSR) and its results

39. Implementation of the project "Energy Efficiency" and its results

40. The remuneration system

41. Career and staff efficiency management (training, personnel reserve, system evaluation)

42. Relations between staff and management (including the ability of the staff to influence on management decisions, to ensure the legitimate rights of employees)

43. Information security of ROSATOM

44. Knowledge Management System of ROSATOM

45. Protection of Intellectual Property of ROSATOM

The aspect "State policy" was recognised of high materiality and one that need to be disclosed in the report by decision of the head of the working group.

Disclaimer for the publication of forecast data

The report contains information about the plans and intentions of the Corporation for the medium and long term.

The plans are forward-looking in nature and their feasibility depends on a number of economic, political and legal factors which are outside the

influence of the Corporation (the global financial-economic and political situation, the situation on key markets, changes in tax, customs and environmental legislation and so forth.). For this reason, the actual performance indicators in future years may differ from the forward-looking statements, published in a report.

TABLES OF GRI (G4) STANDARD DISCLOSURES AND RSPP'S KEY PERFORMANCE INDICATORS

2.

APPENDIX

Table. Location of GRI G4 standard disclosures

General standard disclosures	Page of report
1. STRATEGY AND ANALYSIS	
G4-1* Provide a statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability.	14–15
G4-2* Provide a description of key impacts, risks, and opportunities. The organisation should provide two concise narrative sections on key impacts, risks, and opportunities.	140–143, 280–281
2. ORGANISATIONAL PROFILE	
G4-3* Report the name of the organisation	6
G4-4* Report the primary brands, products, and services.	26–27
G4-5* Report the location of the organisation's headquarters	297
G4-6* Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report	42–43
G4-7* Report the nature of ownership and legal form	6
G4-8* Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	26–27
G4-9* Report the scale of the organisation	6–9
G4-10* Report the total number of employees**	7, 9, 179

* Independent auditor evaluated the reliability of signed GRI G4 indicator (see Appendix 5).

** Not mentioned information on employment contract, gender and region.

General standard disclosures	Page of report
G4-11* Report the percentage of total employees covered by collective bargaining agreements.	185
G4-12* Describe the organisation's supply chain.	8, 168–170
G4-13* Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain	136
G4-14* Report whether and how the precautionary approach or principle is addressed by the organisation.	218–219
G4-15* List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses	278–279
G4-16* List membership of associations (such as industry associations) and national or international advocacy organisations:	206
<ul style="list-style-type: none"> • Holds a position on the governance body; • Participates in projects or committees; • Provides substantive funding beyond routine membership dues; • Views membership as strategic. 	
3. IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES	
G4-17* List all entities included in the organisation's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organisation's consolidated financial statements or equivalent documents is not covered by the report.	Web report
G4-18* Explain the process for defining the report content and the Aspect Boundaries.	279–280
G4-19* List all the material Aspects identified in the process for defining report content.	280–281
G4-20* Report the material aspect boundary within the organisation	279
G4-21* Report the material aspect boundary outside the organisation	279
G4-22* Report the effect of any restatements of information provided in previous reports and the reasons for such restatements	278–279
G4-23* Report significant changes from previous reporting periods in the scope and aspect boundaries	244, 247
4. STAKEHOLDER ENGAGEMENT	
G4-24* Provide a list of stakeholder groups engaged by the organisation	204–205
G4-25* Report the basis for identification and selection of stakeholders with whom to engage.	204–205

General standard disclosures	Page of report
G4-26* Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	204, 205, 264
G4-27* Report key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	265–267
5. REPORT PROFILE	
G4-28* Reporting period (such as fiscal or calendar year) for information provided.	278
G4-29* Date of most recent previous report (if any).	278
G4-30* Reporting cycle (annual, biennial etc.)	278
G4-31* Provide the contact point for questions regarding the report or its contents.	295
G4-32* GRI content index.	282–287
G4-33* External assurance.	293–294
6. GOVERNANCE	
G4-34* Report the governance structure of the organisation, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	132–135
G4-39* Report whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organisation's management and the reasons for this arrangement)	132–133
7. ETHICS AND INTEGRITY	
G4-56* Describe the organisation's values, principles, standards, and norms of behaviour such as codes of conduct and codes of ethics.	19, 22
G4-57* Report the internal and external mechanisms for seeking advice on ethical and lawful behaviour, and matters related to organisational integrity, such as helplines or advice lines.	174–175
G4-58* Report the internal and external mechanisms for reporting concerns about unethical or unlawful behaviour, and matters related to organisational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	174–175

Table. Specific GRI (G4) standard disclosures and compliance with the RSPP basic performance indicators*

Aspects	DMA and indicators	Page of report	Excluded information
Economic Performance	DMA*	86, 194–195	
	G4-EC1*	195	
Indirect Economic Impacts	DMA*	194–197	
	G4-EC7*	195–197	
	G4-EC8*	195–197	
Procurement Practices	DMA*	38, 168–170	
	G4-EC9	38	
Energy	DMA*	240–241	
	G4-EN6*	240–241	Reduction of energy consumption in joules was not disclosed because of the lack of a centralised accounting system. Disclosure of information in absolute numbers is inappropriate because it may not correctly reflect the actual effectiveness achieved in energy consumption.
Water	DMA*	247–248	
	G4-EN8*	155	
Emissions	DMA*	22, 244–247	
	G4-EN20*	244–247	The equivalent of CFC-11 was not disclosed due to the absence of centralised accounting system. Disclosure of information in the required format is planned in the medium term.
	G4-EN21*	244–247	

* GRI indicators listed in the table correspond to the following Key performance indicators of the effectiveness of RUIE: G4-EC1 – RSPP 1.2-1.7; G4-EN8 – RSPP 2.3; G4-EN21 – RSPP 2.6; G4-EN22 – RSPP 2.7; G4-EN23 – RSPP 2.8; G4-EN31 – RSPP 2.12; G4-LA6 – RSPP 3.1.5-3.1.8; G4-LA9 – RSPP 3.1.10.

Aspects	DMA and indicators	Page of report	Excluded information
Effluents and Waste	DMA*	242, 248–249	
	G4-EN22*	248–250	
	G4-EN23*	242, 251–252	
Products and Services	DMA*	230–233	
	G4-EN27*	230–233	
Compliance	DMA*	236	
	G4-EN29*	236, 239	
Overall	DMA*	236–239	
	G4-EN31*	237–239	The expenditures on the prevention of environmental impacts and environmental management system were not disclosed due to the lack of information accounting systems. Disclosure is planned in the medium term.
Employment	DMA*	179–181, 184–185	
	G4-LA2*	182–185	
Labour/Management Relations	DMA*	185	
	G4-LA4*	185	
Occupational Health and Safety	DMA*	222–225	6.1. Nuclear and Radiation Safety
	G4-LA6*	223–224	Occupational disease rate, lost day rate, absentee rate were not disclosed, due to the difficulty of collecting consolidated information from all divisions of the Corporation.
	G4-LA7*	226–227	

Aspects	DMA and indicators	Page of report	Excluded information
Training and Education	DMA*	186–189	
	G4-LA9*	187	Information about the gender of the staff was not disclosed, due to the absence of accounting system for relevant information. Disclosure is planned in the medium term.
	G4-LA10*	182–183	
Local Communities	DMA*	194–195	
	G4-SO1*	194	
	G4-SO2*	42–43, 194	
Anti-corruption	DMA*	174–175	
	G4-SO4* **	174–175	
	G4-SO5*	174–175	The information about court cases was not disclosed (the matter is outside of the jurisdiction of ROSATOM).
Public Policy	DMA*	112–115	
	G4-SO6* ***	-	
Customer Health and Safety	DMA*	218–220	
	G4-PR2*	218–220	

** Training activities for retraining and advanced training are conducted in respect of experts, whose duties include anti-corruption.

*** ROSATOM does not carry out donations for political purposes.

AN EXCERPT OF THE AUDIT COMMISSION STATEMENT ON THE FINANCIAL AND ECONOMIC ACTIVITIES OF THE STATE ATOMIC ENERGY CORPORATION "ROSATOM" AND ITS ORGANISATIONS IN 2014

3.

APPENDIX

**Приложение № 6 Выписка из заключения
Ревизионной комиссии о финансово-хозяйственной деятельности
Государственной корпорации по атомной энергии «Росатом»
и ее организаций за 2014 год**

г. Москва

30 апреля 2015 г.

Ревизионная комиссия в составе: председателя комиссии Р.Е. Артюхина – руководителя Федерального казначейства, членов комиссии: Л.Ф. Бузиной – заместителя директора Департамента бюджетной политики в сфере государственной военной и правоохранительной службы и государственного оборонного заказа Министерства финансов Российской Федерации, В.С. Катренко – аудитора Счетной палаты Российской Федерации, А.В. Рожнова – заместителя начальника 12 Главного управления Министерства обороны Российской Федерации, В.К. Уткина – начальника отдела Департамента оборонной промышленности Правительства Российской Федерации осуществила контроль финансово-хозяйственной деятельности и достоверности сведений, содержащихся в годовом отчете Государственной корпорации по атомной энергии «Росатом» (далее также – Корпорация и ГК «Росатом») за период с 1 января по 31 декабря 2014 года.

Ревизионная комиссия при осуществлении контрольных мероприятий руководствовалась статьей 31 Федерального закона от 1 декабря 2007 г. № 317-ФЗ «О Государственной корпорации по атомной энергии «Росатом» (далее – Федеральный закон № 317-ФЗ) и Положением о ревизионной комиссии Государственной корпорации по атомной энергии «Росатом», утвержденным Наблюдательным советом Государственной корпорации по атомной энергии «Росатом» (протокол от 26 декабря 2007 г. № 1 (с изменениями от 27 мая 2010 г. № 18).

Ревизионной комиссией по итогам выборочной проверки осуществления финансово-хозяйственной деятельности и достоверности сведений, содержащихся в годовом отчете Корпорации за 2014 год, установлено, что в целом во всех существенных отношениях указанные сведения являются достоверными, а именно:

годовая бухгалтерская отчетность Корпорации достоверно отражает финансовое положение Корпорации и результаты ее финансово-хозяйственной деятельности за отчетный период;

2

консолидированная финансовая отчетность Корпорации и ее организаций достоверно отражает финансовое положение Корпорации и подведомственных организаций отрасли, а также результаты их финансово-хозяйственной деятельности за отчетный период.

Ревизионная комиссия пришла к заключению:

1. Фактов неэффективного использования бюджетных средств, имущества Корпорации и ее организаций и иных ресурсов, а также нецелевого использования средств специальных резервных фондов Корпорации по данным внутреннего контроля не установлено.

2. Фактов несоответствия решений по вопросам финансово-хозяйственной деятельности Корпорации, принимаемых Наблюдательным советом, Генеральным директором и Правлением Корпорации, Федеральному закону от 1 декабря 2007 г. № 317-ФЗ «О Государственной корпорации по атомной энергии «Росатом» и иным нормативным правовым актам Российской Федерации не установлено.

3. Рекомендации ревизионной комиссии, сформулированные в заключение от 30 апреля 2014 г., в целом учтены, однако имеют место отдельные недостатки, на необходимость устранения которых указывалось по результатам предыдущих проверок.

4. Ревизионная комиссия подтверждает достоверность сведений, представленных в Годовом отчете Госкорпорации «Росатом» за 2014 год.

Рекомендации Наблюдательному совету и Правлению Госкорпорации «Росатом»:

1. При составлении Финансового плана на соответствующий период обеспечить сопоставимость его показателей с параметрами бухгалтерской отчетности Корпорации.

2. Принять меры по обеспечению проведения операций по оплате бюджетных расходов, связанных с обеспечением реализации соглашений по обязательствам Российской Федерации перед международными организациями в соответствии с Указаниями о порядке применения бюджетной классификации Российской Федерации, утвержденными приказом Минфина России от 1 июля 2013 г. № 65н.

3. Продолжить работу по обеспечению отражения в бухгалтерском учете Корпорации нематериальных активов, в том числе результатов интеллектуальной деятельности, в порядке, установленном приказом Минфина России от 1 декабря 2010 г. № 157н «Об утверждении Единого плана счетов бухгалтерского учета для органов государственной власти (государственных органов), органов местного самоуправления, органов управления государственными внебюджетными фондами,

государственных академий наук, государственных (муниципальных) учреждений и Инструкции по его применению».

4. В договорах безвозмездного пользования нежилыми помещениями с подведомственными частными учреждениями предусмотреть порядок уплаты расходов на коммунальные платежи в соответствии со статьей 695 Гражданского кодекса Российской Федерации.

5. В целях повышения прозрачности управления акционерными обществами, подведомственными Корпорации, рассмотреть вопрос о возможности внедрения в практику управления института независимых директоров в составах советов директоров данных обществ и иных институтов, предусмотренных Кодексом корпоративного управления, одобренным Советом директоров Банка России 21 марта 2014 г.

6. В целях обеспечения полноты, объективности и оперативного информирования Правления Корпорации о результатах контроля за соблюдением условий, ограничений и требований при инвестировании временно сводных средств Корпорации в соответствии с Правилами осуществления контроля за инвестированием временно сводных средств государственной корпорации, государственной компании, утвержденными постановлением Правительства Российской Федерации от 21 декабря 2011 г. № 1080, обеспечить создание в структуре Корпорации службы контроля за инвестированием временно свободных средств, а также разработку и утверждение положения о такой службе с учетом необходимости исключения структурного подразделения, уполномоченного на инвестирование временно свободных средств Корпорации, из числа подразделений, участвующих в данном виде контроля.

7. С учетом объема остатков средств специального резервного фонда № 2 «Физическая защита» по состоянию на 31 декабря 2014 года проработать вопрос об уточнении размера нормативов осуществляемых организациями отчислений средств на формирование указанного резервного фонда.

8. Обеспечить в 2015 году аккумулирование отчислений средств на формирование резервов, предназначенных для финансирования работ по безопасности особо радиационно опасных и ядерно опасных производств и объектов, в утвержденном в установленном порядке объеме.

9. В целях оптимизации работ по составлению годовых отчетов о государственном запасе специального сырья и делящихся материалов и инвентаризационной описи государственного запаса организовать работу по автоматизации мониторинга за движением государственного запаса и учета поступления, хранения и списания специального сырья и делящихся материалов без привлечения сторонних организаций.

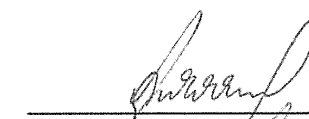
10. Инициировать обращение в Росимущество для определения целесообразности оформления акта приемки-передачи основных средств (ф. ОС-1а) на павильон «Атомная энергия», списанный с баланса Корпорации в марте 2014 года на основании распоряжения Правительства Российской Федерации от 30 декабря 2013 г. № 2588-р и акта о списании объекта основных средств (ф. ОС-4) от 21 марта 2014 г. № 4001090414.

11. Привести в соответствие с требованиями Положения по бухгалтерскому учету 14/2007 пункты 4.4, 4.5 Учетной политики для целей бухгалтерского учета ГК «Росатом» в части указания на возможность определения суммы и способа амортизации нематериальных активов Корпорации.

12. В целях обеспечения рассмотрения Правлением Корпорации дополнительных вопросов, полномочия на рассмотрение которых в Федеральном законе № 317-ФЗ и в Положении о правлении за ним не закреплены, обеспечить принятие решения Наблюдательным советом Корпорации о возложении на Правление соответствующих полномочий в соответствии с подпунктом 10 статьи 29 Федерального закона № 317-ФЗ.

13. В целях дополнительного обеспечения полномочий Правления Корпорации по определению порядка направления части прибыли предприятий в доход Корпорации, установленных пунктом 7 статьи 29 Федерального закона № 317-ФЗ, дополнить Порядок направления части прибыли предприятий в доход Корпорации, утвержденный Правлением, положениями, определяющими методику расчета чистой прибыли, подлежащей перечислению, сроки ее перечисления после издания приказа и порядок представления в Управление экономики и контроллинга платежных поручений о перечислении части чистой прибыли предприятий в доход Корпорации.

Председатель Ревизионной
комиссии



Р.Е. Артюхин

Члены ревизионной комиссии:



Л.Ф. Бузина



В.С. Катренко



А. В. Рожнов



В. К. Уткин

TRANSLATION

**Appendix No. 6 Extract from An Excerpt of the Audit Commission Statement
on the financial and economic activities of the State Atomic Energy Corporation “Rosatom”
and its organisations in 2014
Moscow 30 April 2015**

The Audit Commission : Chairman of the Commission R. E. Artyukhin, the Head of the Federal Treasury, and the Commission members: L. F. Buzina, the Deputy Director of the Department for Budget Policy of the State Military and Law Enforcement Services and the Governmental Defence Order of the Ministry of Finance of the Russian Federation; V. S. Katrenko, an Auditor of the Accounts Chamber of the Russian Federation; A. V. Rozhnov, the Deputy Head of the 12 Main Department of the Ministry of Defence of the Russian Federation; and V. K. Utkin, the Office Head of the Department of Defence Industry of the Government 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 or ROSATOM) for the period from January 1st till December 31st, 2014.

In its audit activities the Audit Commission was guided by Article 31 of the Federal Law No. 317-FZ of December 1, 2007 “On the State Atomic Energy Corporation ‘Rosatom’” (hereinafter referred to as the Federal Law No. 317-FZ and the Provision on the Audit Commission of the State Atomic Energy Corporation “Rosatom” approved by the Supervisory Board of the State Atomic Energy Corporation “Rosatom” (Record of Meeting No. 1 of December 26, 2007 with amendments (Record of Meeting No. 18 of May 27, 2010)).

In the course of the audit of the financial and economic activities and credibility of the information contained in the Annual Report of the Corporation for 2014, based on the random inspection of the documents, the Audit Commission has found out that this information is credible in all material respects, namely:

- the financial statements of the Corporation give true and fair view of the financial situation of the Corporation and results of its financial and economic activities over the reporting period in all material respects;
- the consolidated financial statement of the Corporation and its organisations give true and fair view of the financial situation of the Corporation and its organisations in all material respects as well as results of their financial and economic activities over the reporting period.

Audit Commission came to conclusion:

1. The facts of inefficient use of budget funds and property of the Corporation and its organisations and other resources, as well as misuse of funds of special reserve funds of the Corporation according to the internal control are not identified.
2. The facts of non-compliance of decisions for the financial and economic activities of the Corporation adopted by the Supervisory Board, the General Director and the Board of the Corporation, to Federal Law of December 1, 2007 No. 317-FZ “On State Atomic Energy Corporation “Rosatom” and other regulatory legal acts of the Russian Federation are not identified.
3. The recommendations of the Audit Commission, stated in the conclusion of 30 April 2014, are generally considered, but there are some shortcomings, the need of eliminating of which was indicated by the results of previous audits.
4. The Audit Commission confirms the accuracy of the information.

5. Presented in the Annual Report of ROSATOM for 2014.

Recommendations to the Supervisory Board and the Management Board of ROSATOM:

1. On drawing up the financial plan for the corresponding period to ensure the comparability of its indicators with financial parameters of the Corporation
2. Take measures to provide carrying out of operations budget on payment of costs associated with the implementation of agreements on Russia's obligations towards international organisations in accordance with the directions on the application of budget classification of the Russian Federation, approved by Order of the Ministry of Finance of Russia from July 1, 2013 number 65n.
3. Continue to work to ensure the reflection in the accounting of intangible assets of the Corporation, including the results of intellectual activity in the manner prescribed by the order of Russian Ministry of Finance dated December 1, 2010 No. 157n “On approval of the Unique chart of accounts for public authorities (government agencies), local authorities and management bodies of the state budget funds, state academies of sciences, the state (municipal) institutions and instructions on its use”.
4. Contracts for the gratuitous use of non-residential premises with a subordinated private institution should provide the procedure for paying the cost of utilities under Article 695 of the Civil Code of the Russian Federation.
5. In order to improve transparency in the management of joint-stock societies subordinate to the Corporation to consider the possibility of putting into practice of management the institution of independent Directors into the Boards of Directors of these companies and other Institutions covered by the Code of Corporate Governance, approved by the Board of Directors of the Bank of Russia on March 21, 2014.
6. In order to ensure completeness, objectivity and operative informing of the Board of the Corporation about the results of monitoring compliance with the conditions, limitations and requirements for investing temporarily consolidated assets of the Corporation in accordance with the Rules control of the investment of temporarily consolidated assets of state corporation state-owned company, approved by the Government of the Russian Federation of December 21, 2011. Number 1080, ensure the establishment in the structure of the Corporation of control services for the investment of temporary free funds and the development and adoption of the regulations for such a service, taking into account the need to exclude structural unit authorised to invest temporarily free funds of the Corporation, among of units involved in this type of control.
7. Given the volume of balances of the special reserve fund number 2, “Physical protection” as of December 31, 2014 to study the issue for clarification of the size of standards carried out by organisations deductions of funds for the formation of this reserve fund.
8. Ensure in 2015 the accumulation of contributions of funds for the formation of reserves to finance work on the safety of especially dangerous radiation and nuclear hazardous industries and facilities, in the duly approved volume.
9. In order to optimise the work on the preparation of annual reports on the state stocks of raw materials and special fissile materials and the inventory of the national reserve organise the work on the automation of monitoring the movement of the national reserve and accounting of receipt, storage and write-off of raw materials and special fissile materials without the involvement of third parties.
10. To initiate the appeal to the Rosimushestvo to determine the expediency of registration of the certificate of acceptance and transfer of fixed assets (f. OS-1a) for the pavilion “Nuclear Energy” that was taken out from the balance sheet of the Corporation in March 2014 by order of the Government of the Russian Federation from 30 December 2013 No. 2588-p, and the act of writing off of a fixed asset (f. OS-4) on March 21, 2014 number 4001090414.

11. To bring into line with the requirements of Regulation 14/2007 on accounting paragraphs 4.4, 4.5 of the Accounting Policy for accounting purposes of SC "Rosatom" in terms of indications of the possibility of determining the amount and method of amortisation of intangible assets of the Corporation.
12. In order to ensure consideration by the Board of the Corporation of additional issues, power to consider which is not fixed in the Federal Law No.317-F3 and in the Regulations on the Management Board, ensure that the Corporation's Supervisory Board entrust the to the Management Board the relevant powers in accordance with paragraph 10 of Article 29 of the Federal Law No. 317-FZ.

13. To further ensure the powers of the Board of the Corporation to determine the order of the direction of the profits of enterprises in the corporate income imposed by paragraph 7 of Article 29 of the Federal Law No. 317-FZ, to supplement Procedure of direction of the profits of enterprises to corporate income approved by the Board, with the provisions defining the methodology for calculating the net profit to be transferred, the timing of its listing after the issuance of the order and order of the Office of the economy and controlling of payment orders the listing of the company's net profit in the income of the Corporation.

Head of Audit	R.E. Artyuhin
The members of the Audit Commission:	L.F. Buzina
	V.S. Katrenko
	A.V. Roznov
	V.K. Utkin

OPINION OF THE AUDITING PROCEDURES OFFICE OF ROSATOM'S INTERNAL CONTROL AND AUDIT DEPARTMENT

4.

APPENDIX

ЗАКЛЮЧЕНИЕ

отдела внутреннего аудита Управления внутреннего аудита Госкорпорации «Росатом» по результатам внутреннего аудита бизнес-процесса «Порядок формирования публичной отчетности Госкорпорации «Росатом»»

Внутренний аудит бизнес-процесса «Порядок формирования публичной отчетности Госкорпорации «Росатом»» проведен на основании Сводного плана контрольных мероприятий специализированных органов внутреннего контроля Госкорпорации «Росатом» на первое полугодие 2015 года.

В ходе аудита:

- проведена оценка эффективности системы внутреннего контроля процесса формирования публичной отчетности;
- проведена оценка соответствия порядка формирования публичной отчетности действующему законодательству, международным стандартам и внутренним нормативным требованиям по формированию публичной отчетности;
- разработаны рекомендации по совершенствованию системы внутренних контролей при формировании публичной отчетности.

Отмечается повышение эффективности аудируемого бизнес-процесса за счет достижения экономии финансовых ресурсов, используемых при подготовке публичной отчетности за 2014 год.

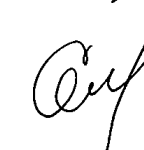
В целом, бизнес-процесс «Порядок формирования публичной отчетности Госкорпорации «Росатом»» осуществляется в соответствии с действующим законодательством, международными стандартами и нормативными требованиями по формированию публичной отчетности. Вместе с тем, аудиторы отмечают необходимость актуализации локальных нормативных актов с учетом обновленных международных стандартов в области публичной отчетности.

Руководитель аудиторской
группы



З.А. Жукова

Член аудиторской группы:



И.С. Савушкина

TRANSLATION

STATEMENT

of the Internal Audit Office of the Internal Audit of ROSATOM
regarding results of the internal audit of business processes
“Management of the Public Reporting System of ROSATOM”

The internal audit of the business process “Management of the Public Reporting System of ROSATOM” was conducted in virtue of the Consolidated Plan of Control Measures of the Specialised Bodies of Internal Control of ROSATOM for the First Half of 2015.

In the course of the audit was made:

- an assessment of the efficiency of internal controls of the public reporting processes;
- an assessment of the conformance of the public reporting procedure with the existing legislation and in-house regulatory requirements that regulate business processes of public reporting was conducted;
- recommendations for the improvement of the internal controls in public reporting were produced.

Increased efficiency the audited business process through achieving economy of financial resources used in the preparation of public statements for 2014 is noted.

On the whole, the business process “Management of the Public Reporting System of ROSATOM” is carried out in accordance with the existing legislation and in-house regulatory documents and international standards that regulate the business process of public reporting. At the same time, we note the necessity of updating local regulatory documents, which regulate the public report preparation activity as part of its compliance with international standards.

Head of the Auditors' Group

Z. A. Zhukova

Member of the Auditors' Group

I. S. Savushkina

REPORT ON RESULTS OF INDEPENDENT ASSURANCE OF THE PUBLIC ANNUAL REPORT OF THE STATE ATOMIC ENERGY CORPORATION “ROSATOM” FOR 2014

5.

APPENDIX



ЭНПИ КОНСАЛТ

КОНСАЛТИНГОВО-АУДИТОРСКАЯ ГРУППА

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Старокалужское шоссе, 65
Т/ф.: +7 (495) 221-73-79
E-mail: npg@npg.ru
www.npg.ru

Report on results of independent assurance of the Public Annual Report of the State Atomic Energy Corporation “Rosatom” for 2014

Introduction

The subject of assurance is the Annual Public Report of the State Atomic Energy Corporation “Rosatom” (hereinafter referred to as the Report) for 2014. Our statement is addressed to the management of the State Atomic Energy Corporation “Rosatom” (hereinafter referred to as ROSATOM).

Responsibilities

The management of ROSATOM bears full responsibility for the preparation and accuracy of the Report. We are responsible for the results of independent assurance of the Report only to ROSATOM within the engagement and do not assume any responsibility to any third party.

Scope, criteria and level of assurance

The Report was evaluated considering the following criteria:

- Nature and level of ROSATOM compliance with the AA1000 Accountability Principle Standard 2008 – inclusivity, materiality, responsiveness principles;
- Compliance of the Report with the GRI Sustainability Reporting Guidelines G4 (Core option).

The engagement was planned and performed in accordance with AA1000 Assurance Standard 2008 (moderate level of assurance) and International Standard on Assurance Engagements ISAE 3000 “Assurance engagements other than audits or reviews of historical financial information” (limited level of assurance). The statement corresponds to type 2, as defined by AA1000AS 2008, in accordance with the limitations specified in section “Limitations of the engagement” of the present statement.

The selective verification of information in the Report performed under aforementioned levels of assurance does not claim to provide a high level of assurance. The work was based on the supporting materials provided by the management of the entity and its employees, publicly available information and analytical methods of confirmation. In relation to the quantitative information contained in the Report the work performed cannot be considered sufficient for identification of all possible deficiencies and misstatements. However, the collected evidence is sufficient for ex-

pressing our conclusion in accordance with the above levels of assurance.

Methodology of assurance

In our engagement, we have performed the following procedures:

- Study and selective testing of systems and processes implemented by ROSATOM to ensure and analyze the compliance of the activities with AA1000APS 2008 principles; collection of evidence confirming practical implementation of these principles.
- Interviewing the management of ROSATOM and obtaining documentary confirmation.
- Participation in the Report public presentation, study of minutes of public dialogues.
- Study of information available on the website of ROSATOM related to its activities in the context of sustainable development.
- Study of public statements of third parties concerning economic, environmental and social aspects of the ROSATOM activities, in order to check validity of the declarations made in the Report.
- Analysis of non-financial reports of foreign companies working in the similar market segment for benchmarking purposes.
- Analysis of the current system of internal audit of non-financial reporting in ROSATOM.
- Selective review of documents and data on the efficiency of the management systems of economic, environmental and social aspects of sustainable development in ROSATOM.
- Study of the existing processes of collection, processing, documenting, verification, analysis and selection of data to be included into the Report.
- Analysis of information in the Report for compliance with the aforementioned criteria

Limitations of the engagement

The assurance is limited to the period from January 1, 2014 to December 31, 2014.

The evaluation of reliability of the information on performance in the Report was conducted in relation to compliance with the criteria to be applied to prepare sustainability report ‘in accordance’ with the G4 Guidelines (core option) and nonfinancial information

marked by [*] in GRI Content Index. In respect to the quantitative performance indicators the conformity assessment to external and internal reporting documents provided to us is performed.

Assurance does not apply to forward-looking statements, as well as statements expressing the opinions, beliefs and intentions of ROSATOM to take any action relating to the future. The assurance on the statements which are based on expert opinion is not performed.

The statement refers only to the English version of the Report in the PDF format which includes information to be published in digital form.

Conclusions

The following conclusions are based on the assurance work performed within the limitations of the engagement specified above.

Nature and extent of compliance with AA1000 APS 2008 principles

As a result and within the scope of our work, we did not identify material non-compliance with criteria of AA1000APS 2008 in respect to adherence to the principles (Inclusivity, Materiality, and Responsiveness).

Compliance of the Report with the GRI Sustainability Reporting Guidelines G4 (Core option)

In order to form an opinion on this issue, we have performed analysis implementation of GRI G4 Guidelines concerning principles and standard disclosures for the chosen option to prepare a report 'in accordance' with the Guidelines.

- General standard disclosures are reported mainly in compliance with the requirements of GRI G4 for the chosen 'in accordance' option. General standard disclosure G4-10 is reported with omissions (breakdown of total number of employees by gender, contract and employment type is not reported)
- The Report contains the disclosures on impacts that make the aspects material, the company's approach to managing the material aspects, as well as evaluation of the management approach for some material aspects.

- All indicators required for the Core option are reported in accordance with guidance contained in GRI G4. If it is not possible to disclose required information the Report identifies the information that has been omitted and explains the reasons for omissions.

As a result and within the scope of our work, we did not identify any material misstatements in the Report information referred to in the GRI Content Index, taking into account limitations of the engagement mentioned above.

Overall assessment of the Report

- As a result and within the scope of our work, we did not identify material non-compliance with requirements to the report prepared 'in accordance' with the Core option of the G4 Guidelines.

Recommendations

- Increase the extent of disclosure of indicators in relation to which GRI guidance is not fully taken into account (disclosures with omissions).
- It is advantageous to disclose GRI indicators in relation to target values.
- Make changes in the reporting systems to make it possible to disclose information on personnel by gender in the following reporting periods
- Take into account remarks in the foregoing sections of the statement.

Statement of competence and independence

JSC "NP Consult", an independent audit firm, professionally rendering assurance services, is a licensed provider of assurance services in accordance with AA1000AS. JSC "NP Consult" is a member of self-regulated organization Nonprofit Partnership "Institute of Professional Auditors" and acts in accordance with the IFAC Code of Ethics. The company employs a system of quality control of audit services, including control of compliance with ethical norms.

JSC "NP Consult" states that the present statement is an independent auditor's assessment. JSC "NP Consult" and its staff have no relations with ROSATOM, or its subsidiaries and affiliates that could result in the conflict of interest related to the independent assurance of the Report.

General Director
JSC "NP Consult"

Moscow, November 12, 2015



V.Y. Skobarev

FEEDBACK FORM

Dear reader!

You have read the sixth annual public report of State Atomic Energy Corporation "Rosatom" intended for a broad range of stakeholders. The opinion of the readers, for whom the report was prepared, is very important to us. We would be grateful to you if you contributed to improving the quality of the Company's reports by answering the questions below.

The completed form may be mailed to the Communications Department at 24 Bolshaya Ordynka Str., Moscow 119017, Russian Federation, or emailed at EAMamy@rosatom.ru to the Executive Secretary of the Public Reporting Committee.

1. Rate the report using the following criteria:

Confidence and objectivity levels of disclosed information

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

Has your rating been influenced by the availability of the independent auditors' opinion and the stakeholder assurance statement in the Report?

☐ Yes ☐ No

Completeness and materiality of information

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

Structure of the report, ease of reference of the information needed, wording

☐ Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory

2. Indicate below the Report section(s) you have found to be significant or useful:

.....

.....

.....

3. What aspects do you think require to be covered in the next report:

.....

.....

.....

4. Your recommendations or additional comments:

5. Indicate which stakeholder category you belong to:

<input type="checkbox"/> Employee of Rosatom State Corporation “Rosatom”	<input type="checkbox"/> Representative of a client/a consumer of goods and services
<input type="checkbox"/> Employee of an organisation within ROSATOM	<input type="checkbox"/> Business representative
<input type="checkbox"/> Representative of Federal power bodies	<input type="checkbox"/> Representative of a public organisation
<input type="checkbox"/> Representative of regional power bodies	<input type="checkbox"/> Representative of mass media
<input type="checkbox"/> Representative of local self-government bodies	<input type="checkbox"/> Representative of the expert community
<input type="checkbox"/> Representative of contractor/supplier organisation	<input type="checkbox"/> Other (indicate)

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Annual public reports:
www.rosatom.ru/aboutcorporation/public_reporting/

Official website for the placement of orders
for procurement of goods, works and
services for the needs of ROSATOM:
www.zakupki.rosatom.ru

Official group “VKontakte”:
www.vk.com/rosatomru

The official blog on Twitter:
www.twitter.com/rosatom

The official Community on Facebook:
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