

**Information Exchange in Science and Technology between the
European Research Area and Eastern
European/ Central Asian Countries**



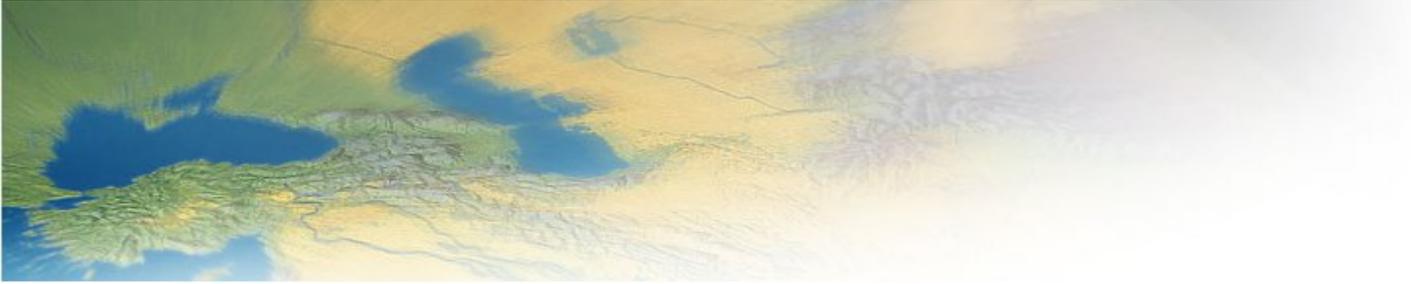
Country Report

Russia

(last updated: April 2014, source: Higher School of Economics)

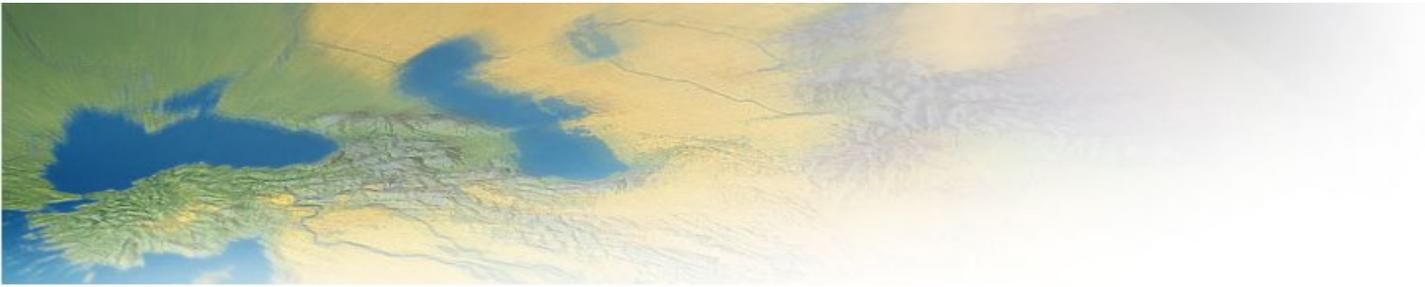
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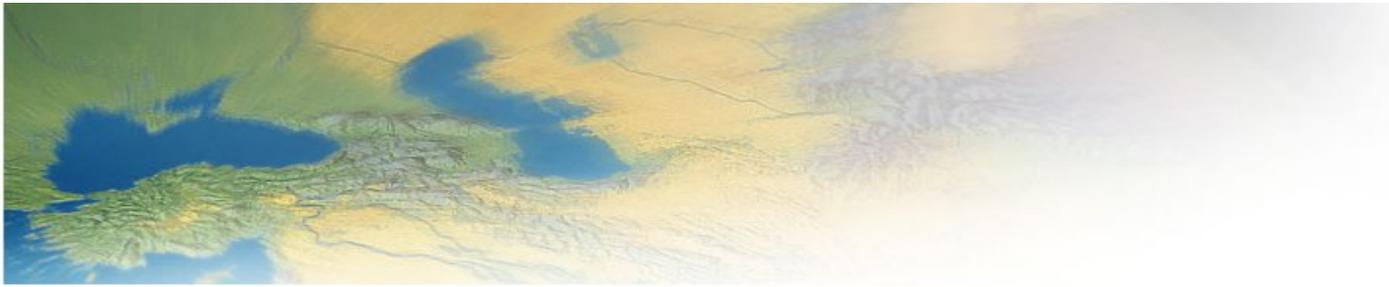
Content

- General Information about Russia 3
- Research structure 4
- Research policy 8
- International cooperation in research, science and technology 14



General information about Russia:

Official name of the country	Russian Federation
Population	143,6 million (2014, Rosstat)
Area	17,1 million square kilometers
Capital	Moscow
System of Government	Federal Presidential republic
Head of Government	Vladimir Putin (President) Dmitry Medvedev (Prime Minister)
Minister of Education and Science	Dmitry Livanov
Parliament	Federative Council (upper house), Duma (lower house)
Administrative structure	Federal subjects grouped into eight federal districts.
Geography	The Russian Federation stretches across much of the North of Eurasia.



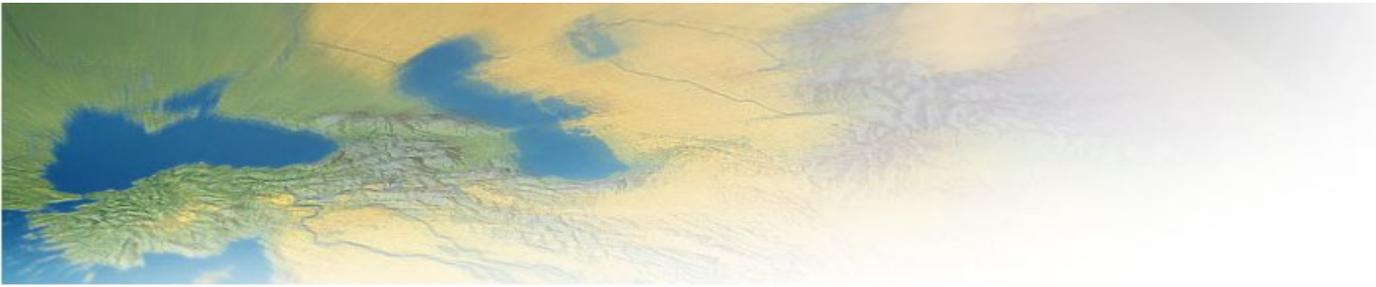
Research structure

Characterisation of the research system

Table 1. Main Science and Technology Indicators¹

	2009	2010	2011	2012
Gross domestic expenditure on R&D, million roubles, before 1998 – billion roubles:				
at current prices	485834.3	523377.2	610426.7	699869.8
at constant 1989 prices	6.07	5.86	5.90	6.11
Gross domestic expenses on R&D:				
as a percentage of GDP	1.25	1.13	1.09	1.12
as a percentage compared to the previous year at constant 1989 prices	110.6	94.2	101.0	105.7
Federal budget appropriations on civil S&T, million roubles, before 1998 – billion roubles:				
at current prices	219053.4	237644.0	313899.3	355921.1
at constant 1991 prices	7.50	7.13	8.15	8.52
as a percentage of GDP	0.56	0.51	0.56	0.57
National R&D personnel, thousand	742.4	736.5	735.3	726.3
Researchers, thousand.	369.2	368.9	374.7	372.6
Researchers per R&D institution, head-count	104	106	102	104
Researchers per 10000 employed, head-count	55	55	55	55

¹ *Science Indicators: 2014. Statistical data book. Moscow, Higher School of Economics, 2014. pp. 17-20.*



Research performers

The S&T institutional structure has a number of specific features that distinguish Russia from most of the other developed countries. There are about 3,600 R&D organizations operating in Russia (see Table 2).

Table 2. R&D institutes by type²

	2009	2010	2011	2012
Total	3536	3492	3682	3566
Research institutes	1878	1840	1782	1744
Design organisations	377	362	364	338
Construction project and exploration organisations	36	36	38	33
Experimental enterprises	57	47	49	60
Higher education institutions	506	517	581	560
Industrial enterprises	228	238	280	274
Others	454	452	588	557

2 Science Indicators: 2014. Statistical data book. Moscow, Higher School of Economics, 2014. p. 26.

Russian R&D organisations are divided into four main sectors, depending on their main activity and functions:

- Governmental sector which provide support to government institutions, working for the society as a whole.
- Business enterprise sector which support companies producing goods and services for sale (both privately and publicly owned).
- Higher education sector engaged in highly skilled professionals training at higher education institutions.
- Sector of non-profit organisations, including private companies which do not operate for profit.

The years of reform have brought significant changes to the governmental and business enterprise sectors. Paradoxically for a market economy, one can notice considerable growth in the governmental sector and an equally



significant decline in the number of R&D organisations in the business enterprise sector.

Table 3. Number of R&D organisations by sector of science³

Year	Total	Governmental sector	Business enterprise sector	Higher education sector	Sector of non-profit organisations
2009	3536	1406	1446	603	81
2010	3492	1400	1405	617	70
2011	3682	1457	1450	696	79
2012	3566	1467	1362	660	77

3 Science Indicators: 2014. Statistical data book. Moscow, Higher School of Economics, 2014. p. 122

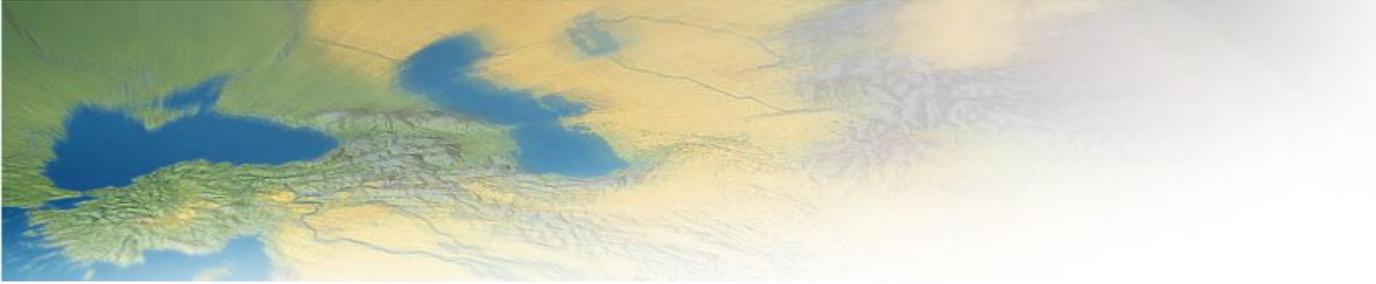
Specific weight of the government sector in overall R&D expenditure in 2012 was 32,2%, which is significantly higher than an OECD countries average (ca. 13.2% in 2012). In 2000-2012, R&D expenditure in the business enterprise sector increased 1.5 times (in constant prices), in the governmental sector – 2.4 times, in the higher education sector – 3.8 times, in the sector of non-profit organisations – 1.5 times.

Research funding system

R&D funding sources in the Russian Federation include the following:

- State funding (all levels, including provision for universities, as well as budget of state organisations, incl. own);
- Business enterprise sector;
- Higher education sector;
- Sector of non-profit organisations;
- Funds from foreign sources.

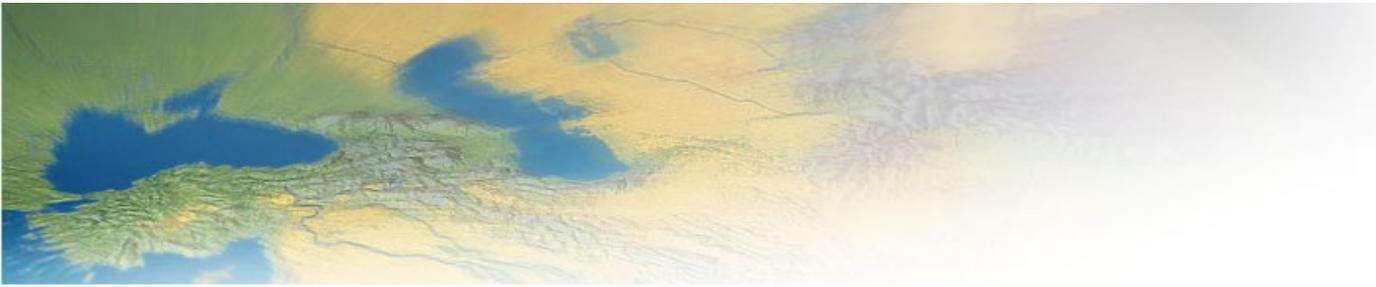
The state budget remains the biggest source of funding for Russian science. Almost 97% of the funding comes from the federal budget, and only 3% - from all regional budgets put together.



During the last ten years, the structure of sectoral R&D expenditures in Russia has remained practically unchanged. Almost all expenditure is received by the business enterprise (58.3% in 2012) and governmental (about 32.2% in 2012) R&D sectors. The business enterprise sector's share in the total R&D expenditure in Russia is comparable with the level of other developed countries (e.g. the USA had 68.3% in 2012). However, the composition of this sector in Russia is quite different from other developed countries. In Russia, the business enterprise sector includes many government-owned companies and organisations, while in other countries it mostly comprises private companies.

In 2000-2012, federal budget appropriations for civil R&D grew 2.3 times (at constant 1991 prices), mainly due to increased federal budget funding. In the organizations of the Russian Academy of Sciences (RAS), R&D expenditures financed by the state for the same period increased 2.2 times. The share of RAS in total R&D expenditure grew from 9.7% in 2000 to 10.5% in 2012.

The share of governmental funding in the gross domestic R&D expenditure in 2012 was close to 67.8%, which is much higher than, for example, the average for the OECD countries (about 35.6% in 2012). Expenditure on R&D undertaken in the governmental sector amounts to about 0.36% of the GDP (in 2012).



Research policy

The substance and procedure of shaping Russian research policy are described in **the Federal Law No. 127-FZ of August 23, 1996** "On Science and State Science and Technology Policy" (with changes of November 3, 2013; version put in force from January 1, 2014).

Research policy: objectives and priorities

National science and technology priorities of the Russian Federation are formulated as *priority S&T areas* and *critical technologies*.

The current priorities were set by the governmental decree №2433-p of December 20, 2012 **"On Approving the State Programme of the Russian Federation "Development of Science and Technology 2013-2020"**. The list of thematic areas for financing basic and applied research in priority S&T areas (Appendix I to the State programme of the Russian Federation "Development of Science and Technology 2013-2020") includes:

- New materials and nanotechnologies
- Information and telecommunication technologies
- Biotechnologies
- Medicine and health
- Rational use of natural resources
- Transport and space systems
- Energy efficiency and energy conservation
- Interdisciplinary studies in sociology, economics and humanities

The lists of priority S&T areas and critical technologies were also approved by the President of the Russian Federation in July 2011 (**Presidential Decree № 899 of July 7, 2011 "On Approving Priority Areas of Science and Technology Development in the Russian Federation and the List of Critical Technologies of the Russian Federation"**). Priority S&T areas define the general trends capable of providing new technologies and facilities that contribute to the development of national economy and social sphere.



The list of priority S&T areas includes eight priorities:

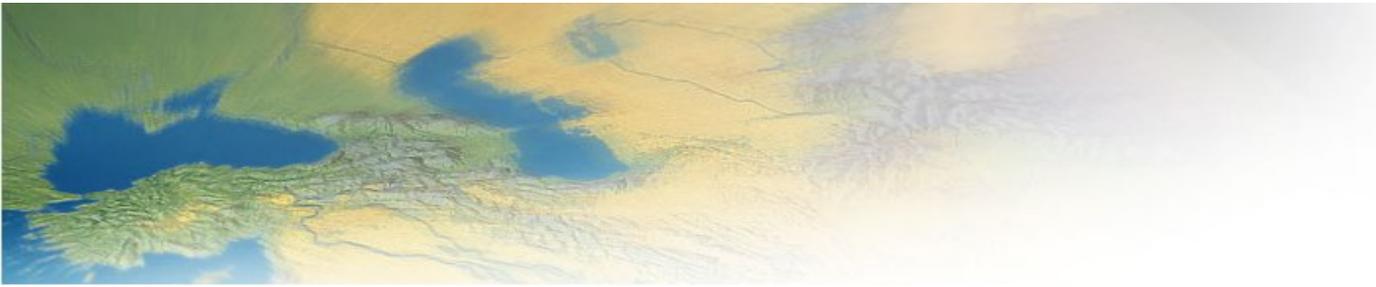
- Information and telecommunications systems
- Nanosystems industry and materials
- Living systems
- Rational use of natural resources
- Energy efficiency, energy conservation and nuclear energy
- Transport, aviation and space systems
- Safety and terrorism counteraction
- Prospective armaments, military and special equipment

Detailed priorities are specified in the List of Critical Technologies of the Russian Federation, which forms the background for making decisions on concentrating public resources in the most important areas of science, technologies and innovation as well as on implementing the available S&T potential.

The Concept for Long-term Social and Economic Development of the Russian Federation 2020 (approved by the Decree of the Government of the Russian Federation № 1662-h of November 17, 2008) emphasized the need for creating a national system for supporting innovation and technological progress. The concept also defined four main transition directions towards socially oriented innovation-based economic growth:

1. Upgrading of human potential.
2. Encouragement entrepreneurial activity and attracting investments to economy.
3. Innovation and technology modernisation, including integration of R&D and education systems.
4. Enlargement of global competitive advantages of Russia in its traditional economic sectors such as energy, transport, agriculture, nature resources processing.

In 2010 the President named the **five priorities for modernization of Russia's economy**: energy efficiency and energy conservation, including development of new types of fuel; nuclear technologies; space technologies, particularly those related to telecommunications (GLONASS and ground



infrastructure); medical technologies; strategic information technologies, including creation of supercomputers and software.

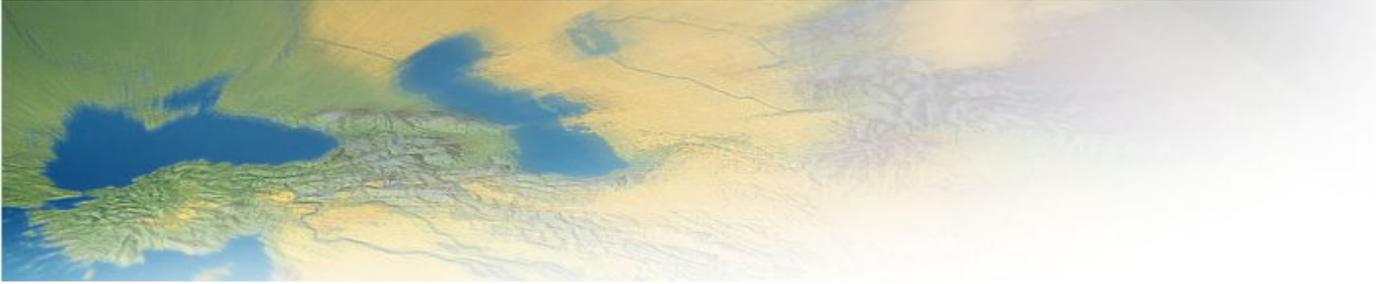
The **Strategy for Innovative Development of the Russian Federation 2020 “Innovative Russia – 2020”** (approved by the governmental decree № 2227-p of December 8, 2011) specifies, among others, the need to reestablish the leadership of Russia’s basic science on the global arena and to form a balanced R&D sector that will keep developing in a sustainable way as key vehicles for re-directing Russian economy towards an innovative way of development by 2020.

In March 2014, Russian Prime Minister Dmitry Medvedev approved **Science and Technology Foresight of the Russian Federation 2030**. The document was developed by the Ministry of Education and Science with the participation of key stakeholders. The foresight document highlights six science and technology priority areas that Russia needs to develop in order to boost the competitiveness of its economy: information and communication technologies, life sciences (biotechnology, medicine, and public health), new materials and nanotechnology, rational use of natural resources, transport and space systems, and energy efficiency. For each of these areas, the forecasters described some of the global challenges, threats, and opportunities for Russia; identified innovative markets; assessed the potential demand and competition for Russia's innovative technologies and products, benchmarked against global leaders; and identified priority R&D areas.

S&T Policy making and coordination

Medium-term and long-term trends for the state science and technology policy are defined by the President of the Russian Federation on the basis of a special report prepared by the Government of the Russian Federation.

Every year, in accordance with the President’s Letter on the current situation in the Russian Federation and with proposals of the Government of the Russian Federation, the legislative public authorities define the annual amounts allocated for the execution of federal S&T programmes and projects, the amount of financing of scientific organisations and the



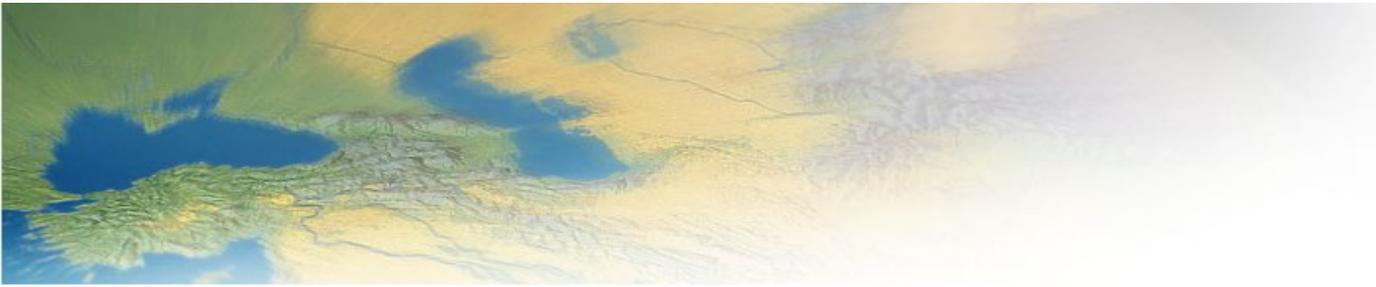
amounts channeled to federal foundations dealing with the support of science, technology, and innovation.

The setting of main trends for state S&T policy, scientific and technological forecasts, the selection of priorities for the development of science and technology, the development of recommendations and proposals on the implementation of scientific programmes, S&T programmes and projects as well as on the use of S&T achievements are all carried out under the conditions of openness, using various forms of public discussions, evaluation and competitive procedures.

State S&T policy is developed and implemented by the relevant executive authorities with the involvement of economic entities and taking into account the general state S&T policy.

The national S&T strategy is primarily developed by the following bodies:

- **Council for Economic Modernisation and Innovative Development** (established by the Executive Order of the President of the Russian Federation № 878 of June 18, 2012) and **three inter-ministerial commissions of the presidium of the Council:**
 - Inter-ministerial Commission for the Implementation of the Strategy of Innovative Development of the Russian Federation 2020
 - Inter-ministerial Commission for Technological Development
 - Inter-ministerial Commission for Technological Forecasting.



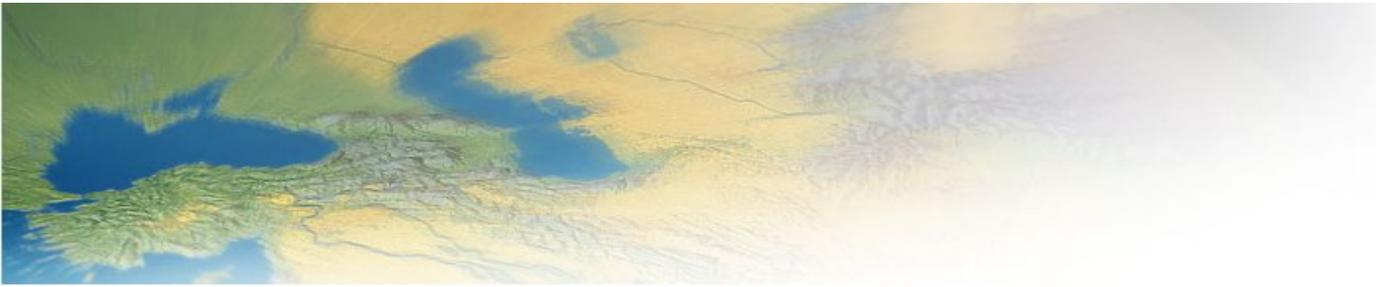
The Council is an advisory body chaired by the President of the Russian Federation and was established to facilitate economic modernisation and innovative development in Russia and improve state management in this area. The Council and its presidium are charged with preparing proposals to the President of the Russian Federation regarding the identification of trends and mechanisms of Russia's economic modernisation and innovative development, including the development of measures of state support in the area. Decisions made by the Council will be formulated as presidential instructions, and the President can issue orders and instructions for the implementation of these decisions.

- **Department for Science, High Technologies and Education of the Government of the Russian Federation** (created in March 2010)
- **Ministry of Education and Science of the Russian Federation:** Ministry Board, Department for Strategy, Analysis and Forecasting; Department of Science and Technology, International Department).
- **State Duma Committee for Science and Science Intensive Technologies.**

The Committee provides legal support for the creation of Russia's innovation system and integration of basic and applied science, education and knowledge-intensive industries.

National Research Programmes

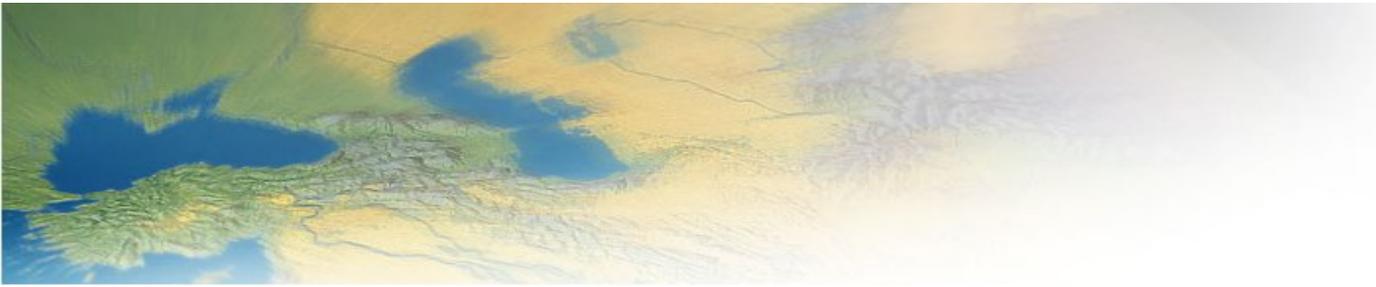
In December 2012, **State Programme of the Russian Federation "Development of Science and Technology 2013-2020"** was approved, which provides a framework for its main STI funding programmes - the Federal Targeted Programmes. The State programme is a complex umbrella measure, whose ambition is to form an integrated science and education space across the country, giving a direction for science and technology development till 2020. The goal of the programme is to form a competitive and effective R&D sector and to ensure its leading role in the process of technological modernisation of the Russian economy.



The principal tasks of the programme are:

- to support basic research;
- to lay S&T foundation for advancement in the Priority Fields
- to develop institutions in the R&D sector, improve their structure, management and finance system; integrate science and education
- to form a modern material and technology basis of the R&D sector
- to ensure integration of the Russian R&D sector into the international R&D space, etc.

National S&T priorities are also implemented via national S&T and Innovation programmes, federal and sectoral targeted programmes, including **Federal Targeted Programmes “Research and Development in Priority Fields of S&T Complex of Russia in 2014-2020”** (approved by the Governmental Decree № 426 of May 21, 2013; total funding for 2014-2020 – RUB 239 billion, including RUB 202.2 billion from the federal budget) and **“Scientific and Scientific-Pedagogical Personnel of Innovative Russia for 2014-2020”** (approved by the Governmental Decree № 424 of May 21, 2013; total funding for 2014-2020 – RUB 201.2 billion, including RUB 153.5 billion from the federal budget).



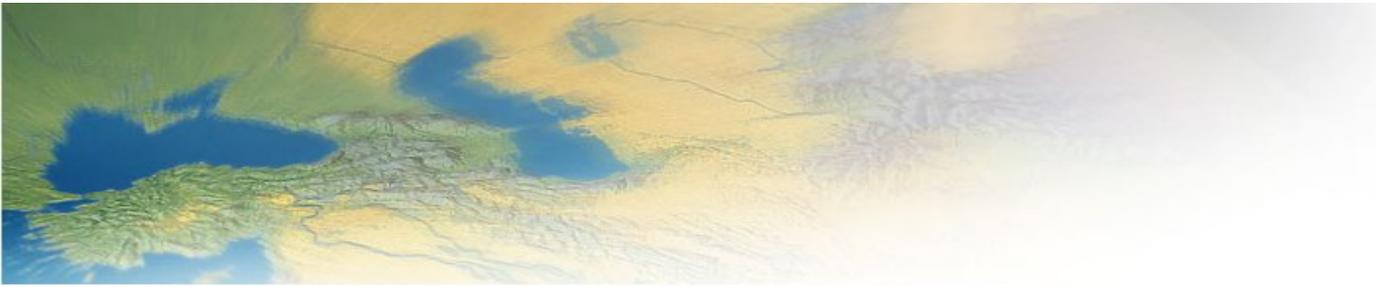
International Co-operation in Science, Technology, and Innovation

Scope and objectives

According to **Article 16 “International Scientific and S&T Co-operation of the Russian Federation” of the Federal Law No. 127-FZ of 23 August 1996 “On Science and State S&T Policy”** adopted by the State Duma on 12 June 1996 and approved by the Federal Council (with changes of November 3, 2013; version put in force from January 1, 2014), “Public authorities of the Russian Federation create necessary conditions for international S&T co-operation. The actors of S&T activities may join international scientific and S&T organisations or associations, participate in international S&T programmes or projects, S&T programmes or projects of foreign countries, conclude agreements (contracts) and other agreements with foreign legal entities to perform work in or outside of the Russian Federation in the procedure prescribed by the legislation of the Russian Federation. Scientific organisations and centres with the participation of foreign citizens, stateless persons, and foreign legal entities can be created on the territory of the Russian Federation according to the procedure prescribed by the legislation of the Russian Federation. The Russian Federation supports S&T co-operation with foreign countries on the basis of existing international agreements of the Russian Federation, international S&T programmes and projects, and promotes the expansion of S&T co-operation of researchers and research organisations”.

Main Instruments of Russia’s International Cooperation in Science and Technology

Recently, the Government of the Russian Federation has approved several major documents that create a system of measures aimed at the stimulation of Russia’s modernisation, economic transformation, and innovation-based growth, in which promotion of international S&T cooperation is set as one of the priorities. As a result, a number of important initiatives have been launched to support internationalisation of universities and public research institutes.

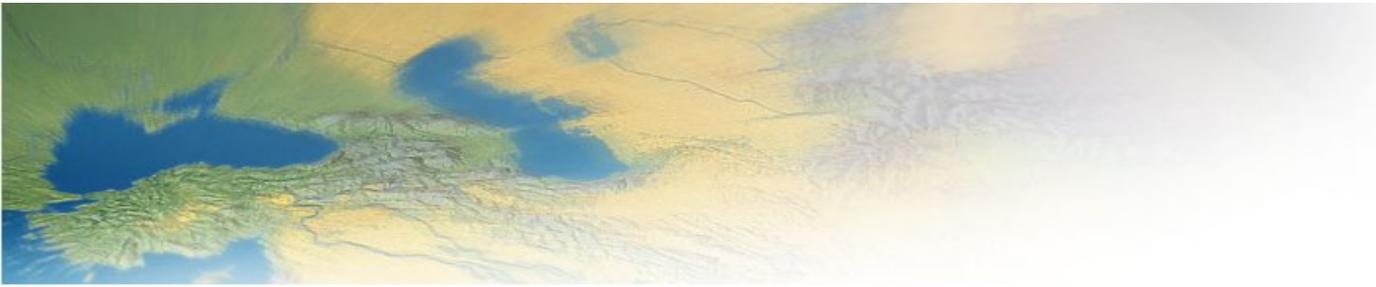


On 7 August, 2008 the President of the Russian Federation has signed the order on the establishment of the pilot project on **National Research Universities** (NRU). The Universities which were awarded the status of “National Research University” were selected on a competitive basis in 2008 and in 2009 by an independent expert group set up by the Ministry for Education and Science. 27 leading universities were awarded status of NRU in 2009-2010.

The status “National Research University” is awarded to a university for the period of 10 years. These are the best field-specific universities performing world-class basic and applied research, which provide training to high quality human resources for priority S&T areas, economy and social sector. The state funding allows for modernization of facilities and infrastructure, retraining of specialists and integration into the international research and education area. Two pilot universities - National Research Nuclear University-Moscow Engineering Physics Institute (State University) and National Research Technological University-State Technological University “Moscow Institute of Steel and Alloys” - were identified by the Decree of President D. Medvedev in 2008. Later in 2008, 12 more universities were selected through competition (thus bringing a total to 14 universities), which will receive an amount of RUB 1.8 billion (approximately EUR 40.5 million) each for the years 2009-2018. In 2009, another 15 universities were identified through competition, which will obtain RUB 49.8 billion from the federal budget for the years 2009-2014. Co-funding of their development programmes from extra-budgetary funds shall amount to RUB 45 billion.

National Research Universities implement their own strategy of internationalisation, which fit national priorities, universities’ development programmes, performance indicators set by the Ministry and available funding. Mobility programmes, especially incoming mobility (invitation of foreign professors and researchers to Russia) is an important requirement for National Research Universities.

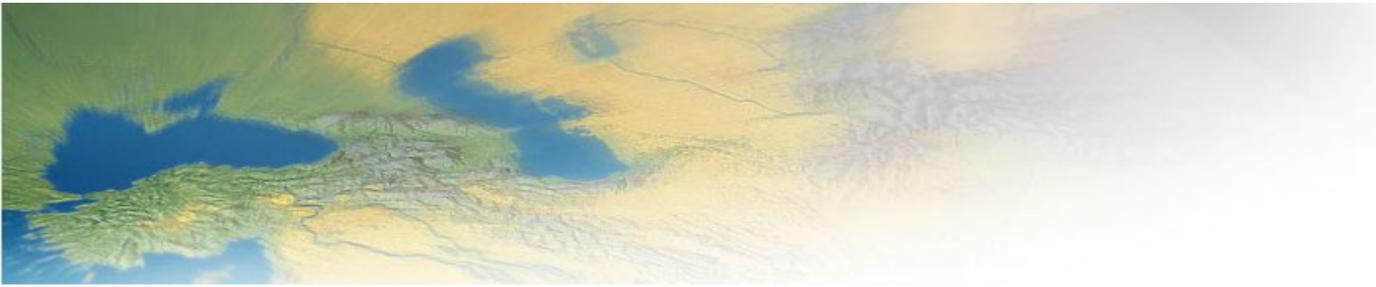
The substantial amount of resources (RUB 226.3 million) was allocated by the NRUs in 2010 to train academics abroad. The researchers were trained in 58 countries. The priority regions included countries of the Western Europe, such as France, Germany and UK, and North America, where about 66% of academics participated in study programmes.



The goals of **Russian National Priority Project “Education”** include training of high quality professionals for macro-regions and integration of education and research. Priority Project also previews support to the mobility of students, teachers and researchers, which shall contribute to Russia’s integration into the global education area. Activities within the Priority Project are aimed at international recognition of the educational programmes; provision of support to basic and applied research in national priority areas.

A programme to establish top level university centres has been introduced with the **Federal Universities (FU) programme**. Two university centers, the Siberian and Southern Federal Universities have been created in Krasnoyarsk and Rostov-on-Don in 2006 in execution of the Decrees of the Government of the Russian Federation. The ambition is to upgrade the performance of selected universities to allow them to reach a position within the top 100 universities worldwide by 2015-2020. 24 February 2009 the Federal Law of the Russian Federation on “Introduction of modifications into separate acts of the legislation of the Russian Federation on activities of Federal Universities” was put in force. In execution of series of Decrees of the Government of the Russian Federation other 6 FUs were created in 2010 namely Arctic (Arkhangelsk), Volga (Kazan in Tatarstan), Urals (Ekaterinburg), Far-Eastern (Vladivostok), North-Eastern (Yakutsk) and Immanuel Kant Baltic FU (Kaliningrad). Implementation of basic and applied research in national priority areas, creating conditions for academic mobility of students, teachers and researchers, enhancement of international cooperation with universities of Europe, Asia and US, achievement of international recognition of realized educational programmes and integration of university into the worldwide education and research areas are envisaged within the FU’s directions of growth. In July, 2011 the President of the Russian Federation has signed a Decree, which established the 8-th North-Caucasus Federal University. Federal Universities obtained substantial financial resources from the state budget: in 2007 RUB 6 billion; in 2007-2009 RUB 13,4 billion; RUB 48 billion in 2011-2013 as well as co-financing by businesses and regional administrations. These resources may be used, inter alia, for attraction of leading professors and researchers.

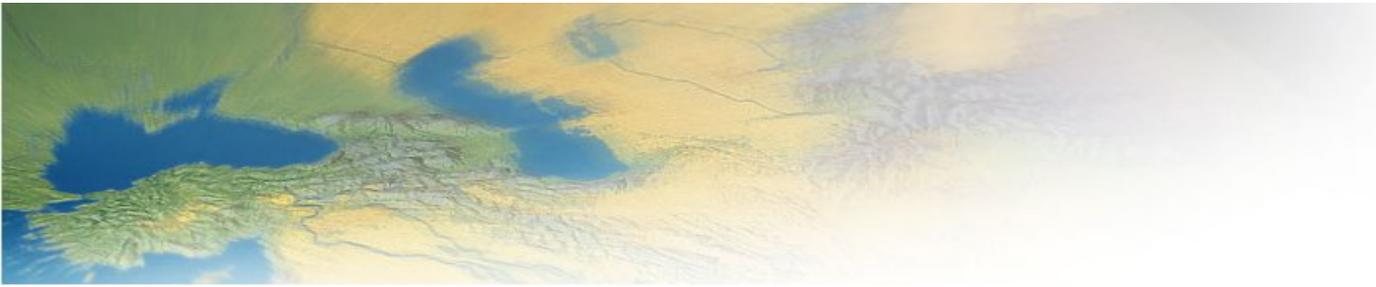
The difference between Federal and National Research Universities is that the first group will focus on the particular region where they are located,



while the latter will train highly-qualified specialists for different sectors nationwide. National Research Universities will be characterized by a high percentage of university funds earmarked for research and science, effective systems for the commercialization of scientific research and development activities, and their affiliation with innovation companies. Federal universities aim at optimizing regional educational structures and strengthening links with economics and social sphere of the federal districts. One of the directions of the development of the FUs is the creation of conditions for academic mobility of students, teachers and scientific workers. In this respect, they contribute to the internationalization of higher education in Russia.

In 2010 56 Russian universities were awarded (via completion) with grants **to create and develop innovation infrastructure facilities in universities** such as business-incubators, technological parks, centers for technology transfer. The financial support for these activities amounts RUB 3 billion (2010), RUB 2 billion (2011), RUB 3 billion (2012) at federal budget and up to RUB 50 million per year per university up to 3 years. Among other activities the universities are allowed to spend their budget for advanced training of university's staff in the fields of innovation entrepreneurship and technology transfer abroad and invitation of foreign experts for knowledge transfer and consulting.

On April 9th, 2010 Russian Prime Minister Vladimir Putin signed the **Decree No. 220 on "Measures to Attract Leading Scientists to Russian Educational Institutions, Scientific Institutions of State Academies of Sciences and Scientific Centres"** (Mega-grants), through which assignment from the federal budget have been approved, RUB 12 billion in 2010-2012, and about RUB 11 billion in 2013-2016. Programme funds are available through a competitive grant process. Grant stipends were offered in amounts of up to RUB 150 million for each research project in 2010-2013, and RUB 90 million in 2014-2016 with opportunity to extend the research period 2 years. Research projects are implemented by university or research organisation research teams under the supervision of leading scientists in the following research areas determined by the Grants Council of the Government of the Russian Federation: astronomy and astrophysics, nuclear power and nuclear technologies, biology, biotechnologies, information technologies and computing systems, space research and



technologies, mathematics, engineering, health sciences and technologies, mechanics and management processes, nanotechnologies, Earth sciences, material sciences and technologies, psychology, cognitive research, construction and architecture, physics, chemistry, ecology, economics, international research, sociology, power production, energy efficiency and energy saving. Scientists are free in determining their research area, limited only by the general guidelines set by the Council. The number of projects undertaken by each institution is unlimited, but only one research project is allowed per leading scientist. Upon approval of project funding, scientists collect their research team, composed of students and employees of the host organisation. Each research team should consist of no fewer than two PhD candidates, three graduate students, and three undergraduate students. Salaries and compensation for the visiting scientist and members of the research team can not exceed 60% of the total grant allotment. All requirements to project proposals are subject to special agreements between visiting scientists and their host universities. In accordance with that agreement, visiting scientists will assume responsibility for organizing and managing their work.

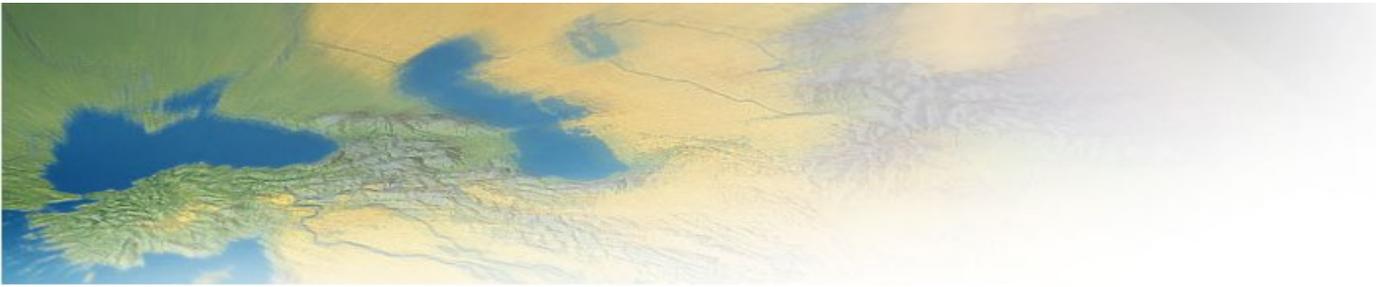
Four calls were organised with the following results:

1st call (2010): 507 applications were received from leading scientists together with 179 higher educational institutions. 39 grant contracts were signed. Among winners 22 are Russian citizens (including 10 with dual citizenship) and 17 are nationals of foreign countries.

2nd call (2011): 517 applications were received from researchers together with 176 Russian universities. 38 grant contracts were signed. Among winners 19 are Russian citizens (including 13 with dual citizenship) and 19 are nationals of foreign countries.

Total amount of funding for 77 projects in 2010-2012 was RUB 8.31 billion (including RUB 0.6 billion in 2010, RUB 3.77 billion in 2011 and RUB 3.94 billion in 2012). Russian universities provided 17% of the federal budget from the own sources.

3rd call (2012): 720 applications were received from researchers with 576 Russian universities and 144 Russian research organisations. 42 grant

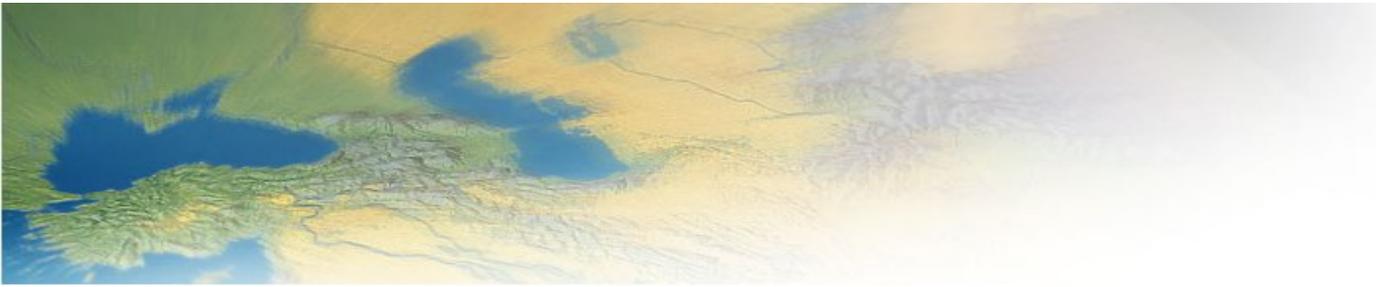


contracts were signed. Among winners 19 are Russian citizens (including 9 with dual citizenship) and 23 are nationals of foreign countries.

4th call (2013): 503 applications were received. 42 grant contracts were signed. Among 23 foreign grantees nineteen are EU MS and AC citizens.

The **Federal Law № 385-FZ signed by the President of Russia on December 5th, 2011 allows to recognize foreign education and qualification certificates** affected under the appropriate international agreement on mutual recognition and equivalence without any additional procedures i. e. automatically. The Government of the Russian Federation approved the list of 210 leading universities from 25 countries which diplomas are recognized automatically in Russia by the Decree of 21 May 2012. Such leading universities are identified as a result of Academic Ranking of World Universities, QS World University Rankings and The Times Higher Education World University Rankings. There are 66 universities of USA, 33 – UK, 13 – Germany, 11 – China, 9 – Japan in recently published list of leading universities. The list includes also universities from France, Canada, Israel, Sweden, Belgium, Spain, Italy, Austria, Singapore, Denmark, the Netherlands, South Africa, Ireland, Brazil, Australia and other countries. The privilege for alumnus of the specified universities is very significant, because graduates of all other universities are demanded to proceed the procedure of diplomas recognition – nostrification to study or work in Russia. Besides a significant amount of documents an applicant should also pay state duty of RUB 4000 and wait for the result about 4 months.

The Strategy of Innovation Development of the Russian Federation until 2020 the **“Innovative Russia 2020”** which defines aims, priorities and instruments of the state policy in innovation development of the country was approved in December 2011. “Innovative Russia 2020” focuses on the creation of an effective economic and moral impetus to attract the most qualified specialists, active entrepreneurs and creative youth to education and science which are the economic sectors forming innovation progress. The Strategy specifies long-term milestones for innovation parties as well as objectives to finance basic and applied research and results commercialisation. The restructuring in higher education focuses on promotion of R&D in universities, enlargement of communication between universities and industries, universities and research centres, as well as

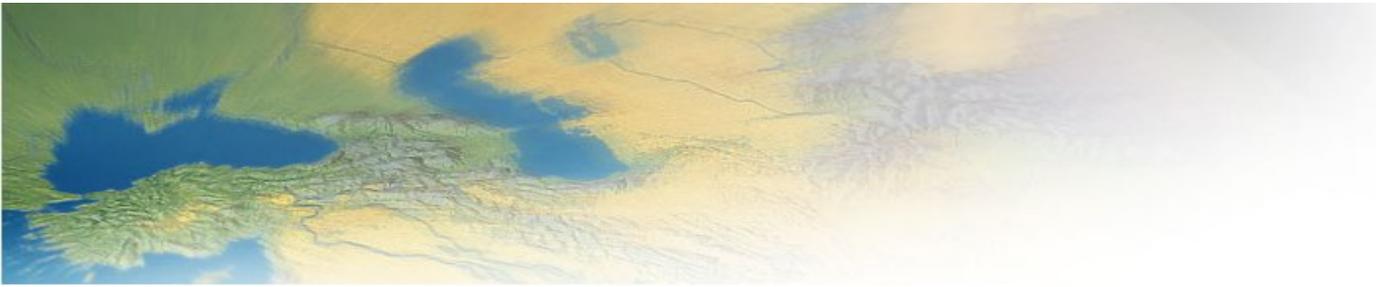


integration of Russian universities into education and research communities world-wide, inter alia by means of academic mobility enhancement, Russian personnel training in the leading universities abroad and engaging of highly qualified specialists including foreign nationals to Russia. The new approach focused on integrating science, business and education can be accomplished through developing the environment with laboratories and world level competence centers; establishing a competitive market of the specialists trained in Russia and abroad; the graduates of the universities have to respond to the needs of the corporate environment and the needs of the civil service; foreign partners also should be interested in the skills gained by the graduates of the Russian universities.

According to the **Decree of the Government of the Russian Federation № 211 of March 16th 2013**, RUB 9 billion was assigned to support competitive recovery of the Russian leading universities among the key research and educational centres worldwide. Among other activities the leading universities are allowed to spend their budget for development and realization of joint research and educational programmes in partnership with foreign research centres and universities as well as for advanced training of university's staff and students abroad and invitation foreign researchers and teaches for leading of joint laboratories and implementation of joint research and educational projects.

In November 2013 the State Duma approved the Federal Law **"On the Russian Science Foundation and Amendments to Certain Legislative Acts of the Russian Federation"**. The Russian Science Fund (RSF) is aimed to support research and development in the Russian Federation on the grant basis. It is envisaged that the fund will support advanced basic and applied research, assist the excellence of human resources in science, the creation of high-tech products, development of experimental facilities for research. One of the RSF's activities is support of international S&T cooperation. The budget allocated for the Russian Science Foundation is about RUB 48 billion for the next three years.

In December 2012, the **State Programme of the Russian Federation "Development of Science and Technology 2013-2020"** was approved, which provides a framework for its main STI funding programmes - the Federal Targeted Programmes. In early May 2013, the Russian Government approved the concept of the two main Russian STI funding programmes



relevant for international cooperation: the **Federal Targeted Programmes (FTP) “R&D in Priority Fields of Russia’s S&T Complex 2014-2020”** (total resources from the Russian federal budget: RUB 202.23 billion) and **“R&D Personnel for Innovative Russia 2014-2020”** (total resources from the federal budget RUB 153.48 billion). In the FTP - R&D in Priority Fields, activities in the area of international research cooperation are incorporated into block No. 2:

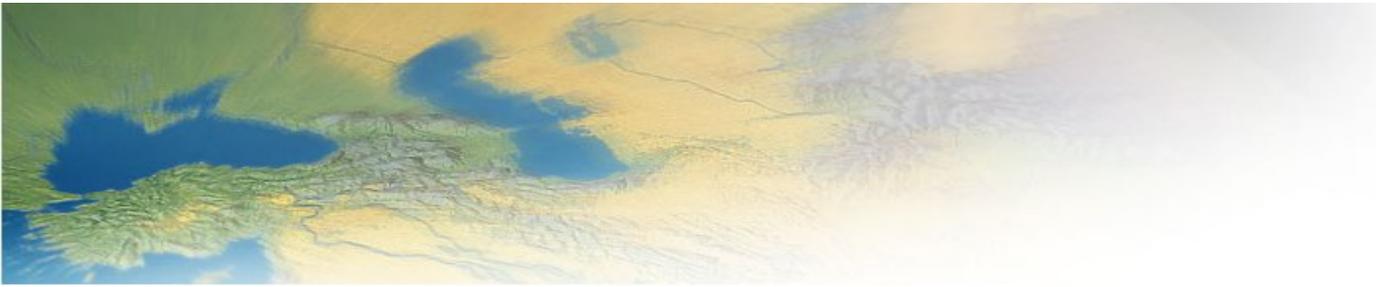
- Activity 2.1 Research in the framework of international multilateral and bilateral cooperation (total federal budget: RUB 6,135 million for the years 2014-2020);
- Activity 2.2 Supporting cooperation in R&D with EU countries (total federal budget: RUB 6,180 million).

Cooperation with Countries of Central and Eastern Europe and Central Asia

Due to the availability of highly integrated S&T potential and because of established S&T links, public authorities of the Russian Federation encourage the development of S&T co-operation on the basis of multilateral and bilateral agreements, first of all in the frame of the Commonwealth of Independent States (CIS) and the Eurasian Economic Community (EurAsEC).

S&T Cooperation between Russia and EU MS/AC

The enhancement of international S&T cooperation is seen by the Russian government as one of the key vehicles to stimulate economic modernisation and innovation-based growth of Russia. Therefore, special emphasis is put on Russia’s cooperation with a broad range of international and foreign organisations, including multilateral institutions and EU programmes, as well as EU MS/AC, with the aim to create the basis for intensifying economy, increasing competitiveness and efficiency in implementing innovations, improving the quality of higher education and mobility of researchers, students, and faculty of EU and Russia.



Legal and institutional framework

EU-Russia science and technology cooperation is based on the following:

- EU-Russia Partnership & Cooperation Agreement (chapter on science & technology – articles 62-63);
- Agreement on cooperation in science and technology between the European Community and the Russian Federation (2000, renewed in 2003, 2009);
- Roadmap for the EU-Russia Common Space in Research and Education including Cultural Aspects (2005);
- Agreement for cooperation between the European Atomic Energy Community and the Government of the Russian Federation in the field of controlled nuclear fusion (2001).

At the summit in Rostov-on-Don (June 2010) a joint statement on "**Partnership for Modernisation**" was signed by leaders of Russia and the EU. The document sets the priorities and the scope for intensification of cooperation in the interests of modernization between Russia and the European Union.

Science and technology cooperation is coordinated by the **Joint S&T Cooperation Committee** and **EU-Russia thematic working groups** established under the Cooperation Agreement. The joint working groups meet regularly to discuss potential research topics of mutual interest for joint actions in common scientific and technological priority areas.

The trilateral EU- Russia Dialogue on Space Cooperation between the European Commission, the European Space Agency, and the Federal Space Agency of the Russian Federation oversees the cooperation in the areas of Satellite Systems (in particular Earth Observation, Satellite Communication and Satellite Navigation) and Space Science and Technology (in particular Fundamental Space Sciences and Applied Space Sciences).



One of the key areas of Russia-EU S&T cooperation involves the development of **global research infrastructures**, including the large-scale **“mega-science” projects**. Russia and the EU actively collaborate in a number of research infrastructure initiatives, for example the EU X-ray Free-Electron Laser (XFEL) and the Facility for Antiproton and Ion Research (FAIR); the International Thermonuclear Experimental Reactor (ITER); the European Organisation for Nuclear Research (CERN); and others.

Russia and the EU also collaborate within the framework of the **Group of Senior Officials (GSO) on global research infrastructures**, composed of representatives from the G8+O5 countries.

At the 30th EU-Russia Summit on 21 December 2012 in Brussels, EU and Russian leaders agreed to make 2014 the 'EU-Russia Year of Science'. **The EU-Russia Year of Science 2014** is a joint initiative of the EU-Commission and the Ministry of Education and Science of the Russian Federation organised with the EU Member States across the EU and Russia. Its objective is to highlight the achievements and the potential of the rich science and research cooperation between Russia and Europe.

Source:

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