



**COMPENDIUM OF SCIENCE & TECHNOLOGY COOPERATION
BETWEEN THE EUROPEAN UNION, THE EU MEMBER STATES
AND THE RUSSIAN FEDERATION**



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COMPENDIUM

OF SCIENCE & TECHNOLOGY
COOPERATION BETWEEN THE EUROPEAN
UNION, THE EU MEMBER STATES
AND THE RUSSIAN FEDERATION





Robert-Jan Smits
Director-General,
European Commission
Directorate-General for
Research and Innovation,
Co-Chair of the
Joint EU-Russia S&T
Cooperation Committee

I am pleased to introduce a new edition of the Compendium of Science & Technology Cooperation between the European Union, the EU Member States and the Russian Federation. It is the result of a joint effort between the European Union Delegation and the EU Member State Embassies in Moscow. It continues with the same aims and objectives laid down in the previous edition of the Compendium – to give an overview of various forms of science and research cooperation between Europe and Russia and to serve as a useful reference tool for all interested readers on different agreements, programmes, institutions, and funding opportunities that exist between the EU, its 27 Member States and the Russian Federation.

The European Union attaches great importance to international cooperation in its research and innovation activities. We believe that it is only by bringing the world's best research and best researchers together that we can tackle global challenges such as climate change, energy and food security, health and an ageing population.

Russia stands out among EU international cooperation partners in the area of research and innovation. Indeed, the number of joint scientific and technology-related initiatives, programmes and projects which are underway between the EU and Russia, both at the level of the EU Member States and at the level of the European Union itself, is truly impressive. It is not only the number of projects that is significant, but also the cross-cutting nature of this cooperation. It covers virtually all scientific disciplines and technology areas, and it involves all the main actors - from individual researchers, universities, SMEs, Academies of Sciences, laboratories and institutes, to large transnational industrial enterprises.

Russia has been a very successful international partner in the EU Framework Programme for Research and Technological Development, both in terms of the number of participants and in the EU funding awarded. Going forward, significant steps have been made in moving towards a new and equitable partnership in science, research and innovation cooperation between the EU and Russia, based on sharing responsibility through co-funding and programme-level coordination mechanisms.

I hope that this positive trend continues for many more years and that we will see an even stronger cooperation between the European Union and the Russian Federation in the area of research and innovation. It would build on the good collaboration we enjoy under the Framework Programme, on joint EU-Member States initiatives and on the considerable bilateral cooperation between EU Member States and the Russian Federation. Such cooperation should contribute significantly to tackling global and societal challenges of common interest, help to grow our economies and strengthen the international dimension of our innovation policies.



Sergei V. Ivanets,
Deputy Minister
of education and science
of the Russian Federation,
Co-Chair of the Joint
EU-Russia S&T
Cooperation Committee

DEAR COLLEAGUES!

Diverse and dynamic international cooperation in scientific research and technology development is one of the modern world's required conditions for us to be able to find the solutions to global problems challenging mankind. Such priority problems include health care and nutrition, climate changes and environmental protection, development of ecologically safe and energy-saving technologies, production and transfer of knowledge. These problems can be only resolved by formation of a common international education and scientific research space. Ever since the endorsement of the Agreement on cooperation in science and technology in 2000, Russia has been working consistently to form such a common space with the European Union. In 2005, the principal provisions of this work were included in the "Roadmap" for the development of a common space in science, education, and cultural aspects.

Today, the necessity in such a common environment is evident for the Russian participants. All innovation initiatives that have appeared in our country over the recent years, such as the national research universities, federal universities, national research and education centres, small and medium-sized innovation businesses, etc. consider international activities as one of their key development directions.

Another important initiative of the Russian government designed to promote international cooperation with the European Union, among others, has to do with attracting the world's leading scientists to the Russian institutions of higher learning with the view to create advanced international-class research laboratories.

Russian organisations take an active part in the international projects sponsored by the European Union, including its Seventh Framework Programme. At present, more than 350 Russian research organisations are taking part in 190 collaborative projects with the partner countries as part of international consortia. At the moment our cooperation with Germany, France, Italy, Netherlands, Austria, and Spain is most advanced. These collaborative research projects are primarily implemented in the fields of nanotechnologies and nanomaterials, medicine, pharmaceuticals, information and telecommunication systems, energy and energy saving, as well as nuclear power and space exploration.

Finally, long-term international research and technology development projects, including the large-scale "MegaScience" infrastructural projects, are of the utmost importance for the achievement of significant scientific results. Russia takes part in most of those that also involve European research structures, including the free electrons x-ray laser XFEL, the FAIR ionic centre, the ITER thermonuclear reactor, the European Nuclear Research Organisation and others. In a number of cases the Russian intellectual and financial contributions in their development and operation are comparable with those made by our collaboration partners.

It is evident, therefore, that the mutual interest of Russian and European research organisations and independent scientists in cooperation is significant as is the interest in ensuring that this cooperation continues to grow. I hope that the Compendium of Science & Technology Cooperation between the European Union, the EU Member States and the Russian Federation that you are holding in your hands will enable all interested Russian parties to obtain all the necessary information regarding their opportunities for participation in the European Union programmes and establishment of international partnerships.

I am certain that a growing cooperation between Russia and the European Union in the field of science and technology will enable researchers from different countries to not only advance the frontier of our knowledge of this world and create and deploy new technologies, but also to strengthen the friendly ties between our peoples.

I wish you every success in designing and implementing new creative ideas!



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Introduction

EU-Russia science and technology cooperation has been, and continues to be, a great success. European and Russian scientists and research organisations work together in all areas of science in the context of many bilateral programmes of the EU 27 Member States, in the context of programmes funded and managed by the European Union (such as EU Framework Programmes for Research & Technological Development), as well as through international organisations and initiatives (such as CERN, ITER and the International Space Station).

Many EU Member States have bilateral inter-governmental or inter-institutional cooperation agreements with Russia. For its part, the EU has concluded cooperation agreements with Russia on science & technology, on nuclear safety, and on controlled nuclear fusion.

At the same time, Russian research programmes and foundations, such as the Russian Federal Targeted Programme for Research & Development, the Russian Foundation for Basic Research, the Foundation for Assistance to Small Innovative Enterprises, the Russian Foundation for the Humanities, have over the same period increasingly reached out to their European partners to involve them in their activities.

In order to best use the many opportunities which exist for research cooperation between the EU and Russia, and so as to contribute to the realisation of the 4th Common EU-Russia Space¹ on a practical level, this second edition of the Compendium of Science & Technology Cooperation between the European Union, the EU Member States and the Russian Federation provides an overview of the support which is available for science cooperation between the EU, its 27 Member States and Russia.

The first edition of this Compendium was published in 2009. Its format is inspired by the very popular European Scholarship Guide². It is addressed to scientists and research organisations in the EU and in Russia who are interested in cooperation with each other, and at policy-makers and science managers who require an overview of the agreements and programmes which underpin scientific cooperation between the EU and its Member States and Russia.

This Compendium has been prepared jointly by the Science and Technology team at the Delegation of the European Union to Russia and the EU Member States Embassies in Russia, with the support of the Ministry of Education and Science of the Russian Federation.

This publication is distributed free of charge and can be downloaded from the web-site of the Delegation of the European Union to Russia at: <http://eeas.europa.eu/delegations/russia/>

MOSCOW, AUGUST 2011

¹ At the St. Petersburg Summit in May 2003, the EU and Russia agreed to reinforce their cooperation by creating four 'common spaces' in the framework of the Partnership and Cooperation Agreement and on the basis of common values and shared interests: (http://www.eeas.europa.eu/russia/common_spaces/index_en.htm)

² Your Scholarship in Europe: A comprehensive guidebook of scholarships provided by the European Union and its Member States to Russian students, http://eeas.europa.eu/delegations/russia/documents/eu_russia/your_scholarships_europe2011_2012_ru.pdf



RESEARCH AND DEVELOPMENT IN THE EUROPEAN UNION

EUROPEAN RESEARCH AREA – AN OPEN SPACE FOR KNOWLEDGE

With the entry into force of the Treaty of Lisbon³ on 1st December 2009 the European Union's (EU) action in the field of research has also been strengthened by setting the objective of creating a genuine European Research Area. Research has already been at the heart of the Lisbon Strategy (2000) and the new Europe 2020⁴ strategy continues in this vein and sets the objective of making the EU a smart economy based on the development of knowledge and innovation. Research and technological development are essential fields in achieving this objective.

The Treaty of Lisbon introduces a legal basis for the creation of a European Research Area⁵ (ERA), composed of all research and development activities, programmes and policies in Europe which involve a transnational perspective. Together, they enable researchers, research institutions and businesses to increasingly circulate, compete and co-operate across borders. The aim is to give them access to a Europe-wide open space for knowledge and technologies in which transnational synergies and complementarities are fully exploited. ERA consists of activities, programmes and policies which are designed and operated at all levels: regional, national and European.

There are a number of fully integrated European-level structures and programmes: the EU RTD Framework Programmes, including the current Seventh Framework Programme (2007-2013), related European agencies and undertakings, as well as a number of intergovernmental infrastructures and research organisations. Some have existed for more than 50 years, such as the European Organisation for Nuclear Research (CERN) and the research activities of the European Atomic Energy Community (Euratom). Many were created in the 1970s and 1980s, such as the European Space Agency (ESA) and the first Framework Programmes. But there are also important new organisations which are changing the ERA 'landscape': notably, the European Research Council, the Joint Technology Initiatives and the European Institute for Innovation and Technology.

Some public policies which have an important impact on research are defined at the European level. This is notably the case for state aid and competition law, as well as for many relevant internal market rules. The EU also develops and promotes voluntary guidelines and recommendations which serve as common European references. Examples can be found in areas such as researchers' careers and mobility, knowledge transfer and cooperation between public research and industry. The EU also fosters a broad-based approach to innovation. While most research activities, programmes and policies take place at regional and national levels, no single country offers sufficient resources to be competitive on the world scale. To strengthen ERA, such activities and policies should be increasingly designed and operated from a transnational perspective, including, where relevant, cross-border cooperation. Transnational cooperation helps make the most efficient and effective use of national and regional resources.

EUROPE 2020 FLAGSHIP INITIATIVE – INNOVATION UNION ⁶

Europe 2020 is the EU's growth strategy for the coming decade. In a changing world, the EU aims to become a smart, sustainable and inclusive economy. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion.

Concretely, the European Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy.

³ Official Journal C 83 of 30.3.2010

⁴ COM(2010) 2020 final

⁵ http://ec.europa.eu/research/era/index_en.htm

⁶ COM(2010) 546 final of 06.10.2010, Communication from The Commission to The European Parliament, The Council, The European Economic And Social Committee and The Committee of the Regions - Europe 2020 Flagship Initiative - Innovation Union , and http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=hom



With an ageing population and strong competitive pressures from globalisation, Europe's future economic growth and jobs will increasingly have to come from innovation in products, services and business models. This is why innovation has been placed at the heart of the Europe 2020 strategy for growth and jobs.

With the launch of the Innovation Union Flagship Initiative in 2010 a strategic approach to innovation is now on the European agenda. With over thirty action points, the Innovation Union aims to improve conditions and access to finance for research and innovation in Europe, to ensure that innovative ideas can be turned into products and services that create growth and jobs. One such action point is about European Innovation Partnerships. For example, the pilot Partnership on active and healthy ageing aims to add an average of two years of healthy life for everyone in Europe. The Innovation Union also introduces the strategic use of public procurement budgets to finance innovation, a comprehensive Innovation Scoreboard based on 25 indicators, a European knowledge market for patents and licensing.

It also includes measures to reinforce successful existing initiatives like the Risk Sharing Finance Facility (RSFF), which has so far levered 15 times the combined Commission and European Investment Bank contribution of over 1 billion Euro ⁷.

INTERNATIONAL COOPERATION IN THE INNOVATION UNION FLAGSHIP INITIATIVE

One important feature of the Innovation Union Flagship Initiative is on international cooperation. According to various rankings, while EU Member States like Sweden, Finland, Germany and Denmark are among the world leaders in innovation performance, the aggregate score for the EU27 Member States is mid-range. There is also a significant gap between the performance of the EU27 and that of the US and Japan, and even though the EU27 has a strong lead over the BRIC countries, China and India are catching up rapidly.

The emergence of new innovation powers has accelerated the globalisation of research and innovation activities and increased the pressure on the EU to maintain and improve its innovation performance and competitive position. But globalisation also means that this can only be done via improved access to global knowledge sources and global markets for innovative products and services. Developing an appropriate and coherent relationship with international partners is therefore a key factor. Europe's future depends on global knowledge sourcing, which involves attracting and working with the best talents, researchers and entrepreneurs, and on coherent and coordinated relationships with third countries to ensure the efficient promotion of European interests abroad. Europe's researchers and entrepreneurs would also benefit from 'support platforms' located in strategic partner countries where they could obtain advice about potential sources of expertise and scientific and commercial contacts. Against this background, EU policy objectives concerning international cooperation are to:

- Strengthen Europe's competitiveness and scientific excellence through international research and innovation cooperation, improve our capacity to respond to global challenges and attain leading positions in the biggest growth markets.
- Pool Europe's resources through enhanced partnerships between the EU and its Member States in the area of international cooperation to overcome fragmentation, increase focus and thereby strengthen Europe's global research and innovation performance.
- Ensure the engagement of EU, Member States and the business community so that Europe acts coherently in its cooperation with third countries.

Making Europe attractive to foreign researchers is one obvious way of encouraging global knowledge exchange, and efforts geared towards the reduction of obstacles to such flows would reap great benefits. However, there is also a case for schemes that encourage EU researchers to both share their expertise and enhance their own capabilities by working in other countries, thus making the concept of 'brain circulation' a reality.

⁷ http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=key



Another way of improving knowledge flows and enhancing innovative potential is via schemes that aim to strengthen international links. While much EU research and innovation policy so far has been based mainly on actions addressing internal deficits in Europe's research and innovation system, the EU nevertheless has a strong track record in international S&T cooperation. The 6th Framework Programme, for example, established about 8,600 collaborative links with 130 countries around the world.

Similarly, the 7th Framework Programme has deepened and extended these partnerships to 185 countries. In terms of thematic areas, most are centred on the global challenges, with 'sustainable development, global change and ecosystems' heading the list of areas of cooperation.

Most Member States also have their own independent strategies for international research cooperation. More than 20 EU Member States, for example, have established cooperative links with the BRIC countries⁸. These strategies generally reflect national priorities and interests, with little consideration of the potential advantages that could be derived at a European level from reduced fragmentation and the promotion of common European concerns and interests through a more rationalised, focused and coherent international S&T&I cooperation strategy.

There is thus certainly scope for synergy. A more coherent European 'voice', particularly in multilateral fora addressing the global dimensions of societal challenges, will facilitate cooperation and ensure that European expertise is channelled towards the search for global solutions. It will also ensure that Europe plays a leading role in the determination of global priorities.

An important consideration when determining future policy actions will be that of reciprocity. Global knowledge sourcing is not a one-way street. Level playing fields are a precondition for international cooperation. This is reflected in the Council Conclusions of 2 December 2008, which called for international scientific and technological activities to "be based on principles and practices which uphold reciprocity, fair treatment and mutual benefits, as well as adequate protection of intellectual property".

Global research infrastructures provide an ideal space for interaction and the exchange of knowledge, yet the high cost of cutting edge facilities are beyond the financial means of individual countries or regions (the European contribution to the ITER budget, for example, is currently around 7.2 billion Euro). For the EU, therefore: "The joint planning, establishment, running and financing of S&T infrastructures provides the ground for efficient international research cooperation on a long-term basis through sharing knowledge, efforts and risks".

International cooperation is also important for innovative businesses. Internationally active SMEs are far more likely to innovate than those without any international activities. In a recent study, for example, 26% of internationally active SMEs introduced products or services that were new to their sector in their country, whereas for other SMEs the comparable figure was only 8%. Internationally active SMEs also reported greater employment growth (exporters reported employment growth of 7% compared to 3% for non-exporters). However, only 13% EU27 SMEs are active in markets outside the EU. To promote the internationalisation of EU business and to support business cooperation in innovation, EU member states and the Commission have established a number of business support centres, innovation support centres, joint technology institutes and joint funding programmes. But the use of these public support measures needs to be improved, as only 16% of SMEs are aware of their existence and an even smaller number actually use them. One possibility would be to create 'one-stop shops' housing all EU business support services under a single roof in major conurbations. This could be particularly interesting for SMEs and start-up firms trying to enter new markets or to operate globally.

⁸BRIC : Brazil, Russia, India China



STRATEGIC EUROPEAN FRAMEWORK FOR INTERNATIONAL SCIENCE AND TECHNOLOGY COOPERATION

In 2008, the European Commission proposed the Strategic European Framework for International Science and Technology Cooperation to strengthen science and technology cooperation with non-EU countries. The objective was for Member States and the European Commission to define together priority research and technology areas where a coherent EU effort would generate more added value than bilateral activities.

EU Member States and the European Commission are involved in a multitude of research cooperation activities with non-EU countries. However, the absence of a common strategy at European level has led to duplication of efforts and often a waste of resources and a reduced impact. At the same time, global challenges such as climate change, food and water supply or energy security, highlight the need for better coordination in science and research in Europe to promote EU policy goals as well as global sustainable development.

A new strategy, adopted by the European Commission on 24 September 2008⁹, set out a framework for a European approach to international cooperation in science and technology. It identified general principles which should underpin European cooperation with the rest of the world and proposed specific orientations for action to:

- reinforce the international dimension of the European Research Area (ERA) by strengthening cooperation with Europe's neighbours through the Framework Programme and fostering strategic cooperation with key third countries through geographic and thematic targeting;
- improve the framework conditions for international cooperation in science and technology and for the promotion of European technologies worldwide.

The Competitiveness Council of 2 December 2008 welcomed the Strategic European Framework and invited the EU Member States and the Commission to form a **European Partnership** in the field of international scientific and technological cooperation based on consultation and sharing of information. The Partnership aims to identify common priorities which could give rise to coordinated or joint initiatives and positions vis-à-vis non-European countries and within international fora. The Council also invited the Member States and the Commission to establish a Strategic Forum for International Science and Technology Cooperation (SFIC) to drive forward the European Partnership for S&T cooperation.

THE EUROPEAN UNION'S 7TH FRAMEWORK PROGRAMME FOR RESEARCH & TECHNOLOGICAL DEVELOPMENT (2007-2013)



The European Union's research policy is as old as the EU itself; the initial elements appeared with the creation of what was known at the time as the European Community, at the end of the 1950s. Both the 'European Coal and Steel Community' and the 'Euratom' treaties - in the fields of coal and steel, and nuclear energy respectively - included provisions for research.

Since their launch in 1984, the EU's Framework Programmes (FPs) have played a lead role in multidisciplinary research and cooperative activities in Europe and beyond. The FPs have been the main financial tools through which the EU supports R&D activities covering almost all scientific disciplines. The FPs are proposed by the European Commission and adopted by EU Council of Ministers (= currently 27 Member States) and the European Parliament following a co-decision procedure.

It is important to note that the FPs cover only a very limited part of the funding for research in the EU; for instance, the current (seventh) EU Framework Programme for Research & Technological Development (FP7) only accounts for approximately 5% of this total in Europe today. The main funding, i.e. the "other" 95% are provided by the EU Member States. Nevertheless, as the EU's main instrument for funding primarily trans-national research in

⁹ COM(2008) 588 final of 24.09.2008



Europe in 2007-2013, the Seventh Framework Programme has been designed as a cornerstone in the EU's knowledge and growth policy to stimulate competitiveness and welfare in Europe.

WHAT IS THE EUROPEAN UNION'S 7TH FRAMEWORK PROGRAMME FOR RESEARCH & TECHNOLOGICAL DEVELOPMENT?

The 7th Framework Programme for Research & Technological Development (FP7) ¹⁰ became fully operational in January 2007 and will end in 2013. It aims at building upon the achievements of its predecessor FP6 towards the creation of the European Research Area, a key reference for research policy in Europe since the 2000 Lisbon Council, which combines:

- a European «internal market» for research, where researchers, technology and knowledge freely circulate,
- effective European-level coordination of national and regional research activities, programmes and policies, and
- initiatives implemented and funded at European level,

to carry it further towards the development of the knowledge economy and society in Europe. The budget for the seven year period is 50.5 billion Euro and the Euratom budget for nuclear research & training activities carried out under the Euratom treaty for five years is 2.7 billion Euro.

HOW IS FP7 STRUCTURED?

FP7 is organised in four programmes corresponding to four basic components of European research:

The “Cooperation” Programme

Support is given to research activities carried out in trans-national cooperation, from collaborative projects and networks to the coordination of national research programmes. International cooperation between the EU and third countries¹¹ is an integral part of this action.

FP7 allocates 32.41 million Euro to the Cooperation programme. The budget is devoted to supporting cooperation between universities, industry, research centres and public authorities throughout the EU and beyond.

The Cooperation programme is sub-divided into ten distinct themes. Each theme is operationally autonomous but aims to maintain coherence within the Cooperation programme and to allow for joint activities cutting across different themes, through, for example, joint calls.

Themes of the FP7 “Cooperation” Programme

- Health
- Food, Agriculture and Biotechnology
- Information & Communication Technologies
- Nanosciences, Nanotechnologies, Materials & new Production Technologies
- Energy
- Environment (including Climate Change)
- Transport (including Aeronautics)
- Socio-economic Sciences & Humanities
- Space
- Security

Across these themes, support to trans-national cooperation is implemented through Collaborative research which receives the majority of EU research funding in FP7, to establish excellent research projects and networks able to attract researchers & investments from Europe and the entire world. This is to be achieved through a range of funding schemes: Collaborative projects, Networks of Excellence, Coordination / Support Actions, etc.

The “Ideas” Programme

Investigator-driven “frontier research”, within the framework of activities commonly understood as “basic research”, opening new opportunities for scientific and technological advance, which is instrumental in producing new knowledge leading to future applications and markets.

The objective of the specific programme “Ideas” is to reinforce excellence, dynamism and creativity in

¹⁰ Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013)

¹¹ “Third countries” in this context are not EU Member States and not countries associated with FP7 (= “second countries”). According to this definition, the Russian Federation is a “third country”.



European research and improve the attractiveness of Europe for the best researchers from both European and third countries, as well as for industrial research investment, by providing a Europe-wide competitive funding structure, in addition to and not replacing national funding, for “frontier research” executed by individual teams.

For its implementation, a European Research Council (ERC), consisting of an independent Scientific Council and a dedicated implementation structure, has been established by the European Commission under this specific programme. The ERC operates according to the principles of scientific excellence, autonomy, efficiency, transparency and accountability, and supports investigator-driven projects in ‘frontier research’, carried out by individual teams competing at the European level, within and across all fields of research.

The ERC complements other funding activities in Europe such as those of the national research funding agencies, and is a flagship component of FP7 with an overall budget of 7.5 billion Euro for seven years (2007-2013).

ERC grants are awarded through open competition to projects headed by young and established researchers, irrespective of their origins, who are working in Europe - the sole criterion for selection is excellence. The aim is to recognise the best ideas, and retain and confer status and visibility to the best brains in Europe, while also attracting talents from abroad. By challenging Europe’s brightest minds, the ERC expects to bring about new and unpredictable scientific and technological discoveries - the kind that can form the basis of new industries, markets, and innovations for the future.

The “People” Programme

The Marie Curie Actions have long been one of the most popular and appreciated features of the EU’s FPs. They have developed significantly in orientation over time, from a pure mobility fellowships programme to a programme dedicated to stimulating researchers’ career development. The Marie Curie Actions have been particularly successful in responding to the needs of Europe’s scientific community in terms of training, mobility and career development. This has been demonstrated by a demand in terms of highly ranked applications which in most actions has extensively surpassed the available financial support.

Entirely dedicated to human resources in research, the “People” Programme has a significant overall budget of more than 4.7 billion Euro for the seven-year period until 2013.

The “People” Programme is being implemented through actions under five headings:

- Initial training of researchers to improve mostly young researchers’ career perspectives in both the public and private sector, by broadening their scientific and generic skills, including those related to technology transfer and entrepreneurship.
- Life-long training and career development to support experienced researchers in complementing or acquiring new skills and competencies or in enhancing inter-/multi-disciplinarity and/or intersectoral mobility, in resuming a research career after a break and in (re)integrating into a longer term research position in Europe after a trans-national mobility experience.
- Industry-academia pathways and partnerships to stimulate intersectoral mobility and increase knowledge sharing through joint research partnerships in longer term co-operation programmes between organisations from academia and industry, in particular small and medium-sized enterprises (SME) and including traditional manufacturing industries.
- International dimension, to contribute to the life-long training and career development of EU-researchers, to attract research talent from outside Europe, and to foster mutually beneficial research collaboration with research actors from outside Europe.
- Specific actions to support removing obstacles to mobility and enhancing the career perspectives of researchers in Europe.

The “Capacities” Programme



The FP7 Capacities programme aims to enhance research and innovation capacities throughout Europe and ensure their optimal use. The Capacities programme is provided with a budget of 4.1 billion Euro to operate in seven broad areas:

- Research infrastructures
- Research for the benefit of SMEs
- Regions of knowledge and support for regional research-driven clusters
- Research potential of Convergence Regions
- Science in society
- Support to the coherent development of research policies
- International cooperation

This specific programme also aims to support the coherent development of policies; to complement the Cooperation programme; to contribute to EU policies and initiatives to improve the coherence and impact of Member States' policies, and to find synergies with regional and cohesion policies, the EU Structural Funds, education and training programmes and the EU Competitiveness and Innovation Programme (CIP).

EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM) RESEARCH IN FP7

Euratom energy research activities are carried out under the Treaty with the same name, which in 1957 established the European Atomic Energy Community (Euratom). Euratom has its own Framework Research Programme, but managed by the EU institutions.

Although EU Member States retain most competencies in energy policy, whether based on nuclear or other sources, the Euratom Treaty has achieved an important degree of harmonisation at European level. It legislates for a number of specific tasks for the management of nuclear resources and research activities.

The Council Decision concerning the Seventh Framework Programme of the European Atomic Energy Community (Euratom FP7) for nuclear research and training activities includes 2.75 billion Euro to be spent initially over five years (2007-2011). On 07 March 2011 the European Commission proposed to extend the budget of the Euratom Framework Programme to cover the years 2012 and 2013. The proposal is still under consideration and a final decision is expected to be taken by the end of 2011.

In Euratom FP7 there are two associated specific programmes, one covering indirect actions in the fields of fusion energy research and nuclear fission and radiation protection, the other covering direct actions in the nuclear field undertaken by the European Commission's Joint Research Centre (JRC). The JRC was initially established by the Euratom Treaty as an institute of nuclear research. At the request of its customers, the JRC has expanded its competencies to also embrace other fields important to policy making, such as life sciences, energy, security and consumer protection. The seven JRC institutes are located on five separate sites in Belgium, Germany, Italy, the Netherlands and Spain. The Institutes are:

- The Institute for Reference Materials and Measurements (IRMM)
- The Institute for Transuranium Elements (ITU)
- The Institute for Energy (IE)
- The Institute for the Protection and Security of the Citizen (IPSC)
- The Institute for Environment and Sustainability (IES)
- The Institute for Health and Consumer Protection (IHCP)
- The Institute for Prospective Technological Studies (IPTS)

Euratom indirect actions are managed by the European Commission's Directorate-General for Research & Innovation. The specific programmes allocate 1.95 billion Euro to fusion energy research and 287 million Euro for nuclear fission and radiation protection. 517 million Euro are reserved for nuclear activities of the JRC. The JRC



is also a partner in many of the consortia implementing indirect actions in the fission area.

FP7 Euratom aims to address the major issues and challenges in nuclear research and to contribute to the further consolidation of the European Research Area in the nuclear energy sector. In general terms, the Euratom research programme aims to develop and assemble knowledge and to improve scientific and technical competences and know-how in support of safety, security, reliability, sustainability and cost-effectiveness of nuclear energy.

PARTICIPATION AS AN INDEPENDENT EXPERT EVALUATOR IN FP7

Suitably qualified experts are invited to register themselves in the «independent experts» registration service for FP7, which is available on CORDIS at <https://cordis.europa.eu/emmf7>. It is from this database that independent experts are regularly selected for the evaluation of proposals submitted to FP7 calls. It should be noted that participation as an expert evaluator is remunerated and - for researchers not yet familiar with FP7 - an excellent opportunity to get acquainted with the quality of the project evaluation process and the type of projects eventually selected for funding.

DEDICATED INTERNATIONAL S&T COOPERATION OPPORTUNITIES WITHIN FP7

1. International collaborative research in the Cooperation Programme is supported in the following ways, to ensure a balanced thematic and geographic participation by third countries and regions:

- (i) The opening of the thematic areas to all third countries. This includes new dedicated actions and calls for third countries (mainly industrialised and emerging economies). The expectation is that international expertise can be attracted to Europe which can contribute to projects in the interest of European and global research advancement.
- (ii) Specific International Cooperation Actions (SICAs) area dedicated to third countries where there is mutual interest on the basis of both the S&T level and the needs of the countries concerned. These actions are aimed at reinforcing research capacity in specific third countries and at addressing the particular needs of developing and emerging economies by means of dedicated cooperative activities. These actions apply to the International Cooperation Partner Countries.
- (iii) Coordinated calls are parallel research calls published by both the EU and a third country with common research content and a requirement that research teams on both sides that wish to collaborate, establish links and submit separate but complementary proposals to the EU and to the third country's funding agency involved.

2. The People Programme's international dimension reinforces international cooperation in FP7 by supporting researcher mobility and their career development. It includes two main action lines (for details see <http://ec.europa.eu/mariecurieactions>):

i) Career development/life-long training for EU researchers

International outgoing fellowships at postdoctoral level and beyond (with an in-built mandatory return phase): enable European researchers to be trained and acquire new knowledge within high-level third country research organisations. A mandatory return fellowship is included.

International re-integration grants encourage European researchers, who have carried out research outside Europe for at least 3 years, to return to an EU Member State or FP7 Associated Country in order to contribute to European research and to transfer the knowledge they have acquired in a third country.

ii) International cooperation for and with researchers from third countries

International incoming fellowships for experienced researchers: for knowledge transfer with Europe, and enrichment of research collaboration. Researchers from third countries are offered support to undertake research projects in EU Member States or FP7 Associated Countries with a view to enhancing the possibility of future collaborative research links with Europe. A return fellowship may be requested.

Marie Curie host driven actions: as a general rule, all are open to third country nationals (e.g. the Research Training Networks targeting doctoral candidates).



International Research Staff Exchange Scheme (IRSES): its grants focus on staff exchanges between several European research organisations and organisations from countries covered by the European Neighbourhood Policy and countries with which the European Union has an S&T Cooperation Agreement.

Support to (European) scientific diasporas: a new action to network European researchers abroad by means of **the EURAXESS Links initiative**. These activities establish links between Europe and expatriate European researchers, promote collaborations with the European research community, and support networking activities of third country researchers in Europe.

In addition to these international cooperation activities, it should be noted that all the People Programme's Marie Curie actions are in general open to international participation. For instance, the Marie Curie Initial Training Networks (ITN) for early stage training may include an additional host from third countries and are open to researchers from third countries; the Marie Curie Industry Partnerships and Pathways may involve entities from third countries as additional partners.

3. The "Capacities" Programme includes an international cooperation activity which offers support measures for third countries and regions on the ICPC list (see above) and which supports dialogues and information exchange activities with them. The activities supported have three major objectives: (i) to strengthen bi-regional and bilateral dialogues in scientific cooperation and assist in joint identification of topics for collaboration under the FP7 thematic programmes; (ii) to network different stakeholders (such as universities, industry, government, civil society and donors) in order to strengthen research capacity, and (iii) to facilitate the development and implementation of a coherent European-level approach towards international S&T cooperation.

Other activities of the Capacities Programme also address international cooperation. As well as encouraging new international collaboration in scientific infrastructures, it provides support to existing Research Infrastructures in all fields of S&T, with the objective of maximising their use, access and development, and with a clear opening to international cooperation. Under the Research Potential activity, support can be provided to promote closer S&T cooperation between Europe and other regions in the world by improving research capacity in those other regions. Finally, international dialogue will be supported on issues which relate to topics in the Science in Society programme with a strong international remit.

4. The "Ideas" Programme (European Research Council, ERC) aims to reinforce European activities in leading edge or 'frontier' research, providing support for individual teams rather than for multinational consortia. Individual international researchers are encouraged to join with Europe-led teams, where they will bring specific expertise from outside Europe to enrich the research undertaken. Full recognition is given to the need to associate top scientists from elsewhere in the world in reinforcing excellence, dynamism and creativity in European research.

5. International cooperation in the area of research in fission and radiation protection is an important element of the Euratom Framework Programme. High-level agreements between Euratom and certain third countries facilitate the cooperation; moreover participation of third countries in projects is possible on an ad hoc basis. Dedicated research topics (e.g. nuclear plant lifetime management with Russia) ensure greater international cooperation. The growing importance of global initiatives, such as the Generation-IV International Forum that coordinates research on the next generation nuclear reactors, enhances the potential for future international cooperation under Euratom.

6. The Joint Research Centre (JRC) aims to develop international collaborations in areas of strategic importance, e.g. global warming; sustainable development; external security; metrology; nuclear safety and safeguards (in the context of the Euratom Programmes); food security and global resources. It promotes research cooperation with third country partners to ensure harmonized approaches to reference measurements, safety testing (e.g. for hydrogen storage), and detection (e.g. for GMOs in food and feed, in support of EU legislation and international agreements).



SCIENCE AND TECHNOLOGY COOPERATION OF THE RUSSIAN FEDERATION WITH THE EUROPEAN UNION

INSTITUTIONAL & LEGAL FRAMEWORK

The Partnership and Cooperation Agreement (PCA) constitutes the legal basis for EU-Russia relations. It came into force on 1st December 1997 initially for a duration of 10 years, to be automatically extended beyond 2007 on an annual basis - unless either side withdraws from the agreement. It sets the principal common objectives, establishes the institutional framework for bilateral contacts, and calls for activities and dialogue in a number of areas. The PCA covers three major areas of relations — politics, trade and economy and culture. It is the first bilateral international legal act in which Western countries addressed Russia as a country “with transitory economy” and assume the obligation to contribute to “the gradual integration of Russia into a broader cooperation area in Europe”. The programme covers over 30 policy areas: industrial cooperation, conversion, innovation, research and development, agriculture, energy, nuclear energy, transport, post and communications, information technology, space, environmental protection, small and medium-size business, protection for consumers, the social sector, education and professional training, regional development, standardization, statistics, tourism, etc.

The Agreement on Cooperation in Science and Technology between the European Union and the Government of the Russian Federation provides the framework for EU-Russia science and technology cooperation. It was signed in 2000 and has been renewed twice, most recently in 2009, each time for a duration of five years.

At their 15th Summit in Moscow in 2005, the EU and Russia adopted the “Roadmaps” for the four Common Spaces to act as the joint action plans to create the Common Economic Space, the Common Space on Freedom, Security and Justice, the Common Space on External Security and the Common Space on Research and Education, including cultural aspects. The Common Space on Research, Education and Culture aims at promoting the economic growth, strengthening competitiveness, optimizing the link between research and introduction of innovations, stimulating close cooperation in the field of education, including greater integration for higher education and greater research and academic mobility between the EU and Russia.

The EU-Russia S&T policy dialogue includes, at ministerial level, the Permanent Partnership Council (first meeting in May 2008), the joint EU-Russia S&T Cooperation Committee (under the S&T cooperation agreement) which meets annually at Director-General / Vice-Minister level, alternately in Moscow and Brussels; and to date 11 joint EU-RU Thematic Research Working Groups¹² in common priority areas.

The separate trilateral EU (European Commission & ESA) – Russia Space dialogue oversees EU-Russia cooperation in the areas of Space Applications (in particular Earth Observation; Global Navigation Satellite Systems (GNSS); Satellite Communications); Access to space and space transportation systems; Space exploration and the use of the International Space Station (ISS); and Space technologies development. It works through seven Working Groups.

The implementation of the separate Euratom-Russia Agreement on cooperation in the area of controlled nuclear fusion is overseen by the Euratom-Rosatom Fusion Coordinating Committee. (EU-Russia cooperation in the multilateral ITER framework takes place outside this bilateral Agreement.)

Important instruments and platforms through which EU-Russia S&T cooperation has been supported, funded & promoted at pan-European level (with each of them having its own mandate, legal status and procedures) include the EU Framework Programmes for R&D (FPs), ITER, CERN, etc.

¹² Health; Food, agriculture & biotechnology; ICT; Nanotechnologies and new materials; Aeronautics; Environment; Non-nuclear energy; Nuclear fission energy research; e-Infrastructures; Research infrastructures, and Researchers mobility.



RUSSIA'S PARTICIPATION IN THE EU FRAMEWORK PROGRAMMES

The EU and Russia have been pursuing cooperation in science and technology since 1994. Initially, the cooperation was limited to Russia's participation in several parts of the EU's Framework Programmes. Thus, the INCO Copernicus-2 Programme was specially launched within the Fifth Framework Programme in order to establish S&T collaboration between the EU Member States and the countries of Central and Eastern Europe and the Commonwealth of Independent States. The EU funding of approximately 20 million Euro was made available to about 250 institutes in the CIS, including in Russia.

In order to improve interaction and to foster the participation of Russian scientists and researchers in the EU's Framework Programmes, a network of **National Contact Points (NCPs)** has been set up in Russia and operating since 2004 on the basis of several leading thematic research entities and higher education institutions in accordance with the respective regulation by the Russian Ministry of Education and Science. The network of Russian NCPs is a key element of basic infrastructure laid to support the EU-Russia S&T cooperation aimed at contributing to the full-scale participation of Russian research entities in various thematic areas of the Framework Programmes.

Under the **Sixth EU's Framework Programme (2002-2006)**, a dedicated call for research proposals was launched for non-EU-country research entities providing the possibility to join a select number of already ongoing projects, in all thematic areas of the FP6.

The Russian side had made available funding to research groups until 2006 within the **Russian Federal Targeted Programme "R&D in Priority Areas of Russia's Scientific and Technological Development in 2002-2006"**. Thus, ten projects with the participation of Russian organisations - winners of the above EU call received considerable public financial support for the project implementation.

In total, Russian researchers were partners in 310 international consortia under the Sixth Framework Programme and participated in projects worth 2 billion Euro. For this participation, the Russian Federation contributed 16 million Euro. The most successful were the projects in the areas of environment and sustainable development; nanotechnologies; information technologies; aeronautics; life sciences; genomics and biotechnologies for health; food products and agriculture.

In 2007, the **Seventh EU's Framework Programme for Research & Technological Development (FP7)** was launched. It introduced a new approach to international cooperation with a move away from dedicated budgets for international co-operation in favour of integration of the international dimension throughout the thematic programmes of the FP. New funding instruments were introduced to promote this approach, to improve the coordination with Third Country research actions, as well as improve geographic and thematic targeting.

Participation in the EU Seventh Framework Programme is open to a wide range of organisations and individuals. Universities, research centres, multinational corporations, SMEs (small to medium-sized enterprises), public administrations, even individuals, from anywhere in the world – all have the opportunity to participate in FP7. Different participation rules apply depending on the research initiative in question.

Please note that while FP7 participants can in principle be based anywhere, there are different categories of country which may have varying eligibility for different specific and work programmes:

- Member States - the EU-27;
- Associated countries – contributing financially to the Framework Programme budget;
- Candidate countries – currently recognised as candidates for future accession to the EU;
- Third countries - countries that are not EU Member States, are not candidates for EU accession, and are not associated with the FP7.



In terms of FP7 terminology, Russia is both a Third Country and an International Cooperation Partner Country (ICPC) (see the list of ICPCs at <ftp://ftp.cordis.europa.eu/pub/fp7/docs/icpc-list.pdf>).

As of June 2011, organisations from Russia participate in 218 FP7 signed grant agreements benefiting from a total of some 46 million Euro of EU financial contribution. Among the Third Countries in all FP7 signed grant agreements, the Russian Federation ranks 1st in number of participations and 1st in budget share.

In parallel to FP7, the **Russian Federal Targeted Program (FTP) "R&D in Priority Areas of Russia's Scientific and Technological Development in 2007-2012"** gained the approval of the Russian Federation Government and is currently being implemented in Russia¹³.

Russia's R&D Programme consists of five major blocks: Life Sciences, Nanotechnologies & New Materials, Information and Telecommunication Technologies, Sustainable Use of Environment, and Energy Efficiency. It provides opportunities for all interested entities, including foreign organisations, to implement promising R&D drawing on Russian federal funding.

The resources of both programmes (FP7 and Russian R&D FTP) were combined in a new cooperation mechanism of **coordinated calls** for co-funded research proposals between the European Union and Russia (the Ministry of Education & Science, the Ministry of Industry & Trade, Ministry of Information, and Rosatom) first launched in 2007:

- –**2007-2008**: Two EU-RU coordinated calls for research proposals in Energy and Food-Agriculture-Biotechnology;
- –**2008-2009**: Three EU-RU coordinated calls for research proposals in Health, Nano-technologies & New Materials and in Nuclear Fission Energy research;
- –**2009-2010**: One EU-RU coordinated call for research proposals in Aeronautics;
- –**2010-2011**: Two EU-RU coordinated calls for research proposals in ICT, Nano-technologies & New Materials.

These are parallel research calls published by both the EU and Russia with common research content and a requirement that research teams on both sides that wish to collaborate, establish links and submit separate but complementary proposals to the EU and to the Russian funding agency involved. These co-funded activities demonstrate that EU S&T cooperation with Russia is moving towards a partnership between equals based on sharing funds and responsibilities.

OTHER FORMS OF COOPERATION

Russia's interest in European science goes beyond the EU R&D Framework Programmes. For instance, Russia actively participates in a number of international large-scale projects such as CERN, ITER, International Space Station, Gloriad, etc.

Russia signed a cooperation agreement with **CERN**¹⁴ in 1993. The main achievement of CERN to date is the Large Hadron Collider (LHC) project. The project was conceived as a large international venture, and Russia was invited to join it. The cooperation was formalised in a Protocol signed by CERN and the Russian Ministry of Science and Technical Policy on behalf of the Russian Government on 14 June 1996. Russia participates both in the construction of the accelerator and the development of the CMS (Compact Muon Solenoid) detector; it is also involved in research activities that are carried out using these facilities.

¹³The programme has recently been extended for one more year – till end of 2013.

¹⁴European Organisation for Nuclear Research (the European Laboratory for Particle Physics) – an intergovernmental organisation headquartered in Geneva, Switzerland.



The **ITER**¹⁵ project was launched in 1986. The initial signatories of the ITER cooperation were the former Soviet Union, the USA, the European Union (via EURATOM) and Japan. Meanwhile, the People's Republic of China and the Republic of Korea in 2003, and India in 2005, joined the project. The ITER installation is being built at Cadarache, near Aix-en-Provence in Southern France. ITER facilities will benefit from Russian nuclear scientists' high potential and at the same time will provide Russian scientists with unique research data.

In addition to Russia's participation in these international «megaprojects», it also participates in European large-scale research facilities (research infrastructures). For example, Russia is taking over 23 percent (approx. 250 million Euro) of the construction costs of the European XFEL. Russia is also participating in the FAIR project (its declared contribution to the FAIR construction is 178.05 million Euro) and is responsible for the development and delivery of many key components within the FAIR experiments. On 22 June 2011, the European Synchrotron Radiation Facility (ESRF) signed a Memorandum of Understanding with the National Research Centre Kurchatov Institute (NRC-KI) in Moscow which opens the way for the Russian Federation to become a full member of the ESRF.

Russia also participates in the Enterprise Europe Network (EEN) of the EU Competitiveness and Innovation Programme (CIP), through the Gate2RuBIN (Russian Gateway to Russian Business and Innovation Networks) project. This project is run by a consortium of three major Russian innovation organisations (Russian Union of Innovation & Technology Centres, Russian Technology Transfer Network, Russian Agency for Support of SMEs) and is the recognised partner in Russia of the European Enterprise Network. The project is supervised by the EU Executive Agency for Competitiveness and Innovation (EACI) and has the potential to serve as a useful bridge between innovation-oriented European and Russian SMEs.

RESEARCHERS' MOBILITY OPPORTUNITIES

A wide range of EU programmes providing for greater mobility is open today for scientists, researchers and post-graduates. The most well-known among them are the **Marie Curie Programme** within FP7, **TEMPUS** (promotion of higher education development in Russia), **Erasmus Mundus** (establishment of partnership networks between European and non-European higher education institutes elaborating joint Master programmes) and the mobility schemes linked with the latter, such as Socrates, Comet, Lingua, and Jean Monet. There is also a great variety of programmes and organisations promoting scientific exchanges at the EU Member States' level.

Through mobility programmes European and Russian funding organisations set up conditions by making available grants and training for talented young scientists and also for specialists with a good professional record to substantially improve their knowledge, accumulate human and social capital, thus helping to become part of a scientific elite.

Finally, two initiatives which ease mobility between the EU and Russia, in particular for researchers, should be noted. On 01 June 2007, the EU-Russia Visa Facilitation Agreement¹⁶ came into force, which eases the procedures for issuing short-stay visas and waives visa fees for certain categories of persons, including students, participants of exchange programmes and researchers. Separately, a European "Researchers' visa" package aims to facilitate the administrative procedures for third country researchers, including Russian citizens, entering the European Union. It consists of three European instruments, a directive and two recommendations. The directive and one recommendation cover longer-term admission (researchers intending to stay in Europe for more than three months), while the second recommendation addresses short-term visas (entry for less than three months, for instance to attend a conference in a European country). Specific provisions apply to certain countries¹⁷.

¹⁵ International Thermonuclear Experimental Reactor – a large-scale scientific experiment intended to prove the viability of fusion as an energy source, and to collect the data necessary for the design and subsequent operation of the first electricity producing fusion power plant.

¹⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:129:0027:0034:EN:PDF>

¹⁷ For more information please use this link: <http://ec.europa.eu/euraxess/index.cfm/services/scientificVisa>



OVERVIEW OF OPPORTUNITIES FOR EUROPEAN RESEARCHERS TO PARTICIPATE IN RUSSIAN S&T PROGRAMMES¹⁸

There are three key schemes to access Russian S&T programmes:

- **Russian Federal Targeted Programmes**
- **Bilateral and Multilateral Programmes**
- **New Russian Initiatives**

In the following, a brief summary is provided on opportunities for European researchers to access these programmes.

Federal targeted programmes (FTP) are open to foreign applicants. However, as in any other national programme involving public funding the legislative and financial norms and procedures for participating in Russian FTPs are more oriented towards Russian applicants. Nonetheless, EU researchers can participate as sub-contractors to a main applicant, i.e. a Russian organisation. Moreover, within the framework of some FTPs the contracting organisations launch special calls addressed to international cooperation. These calls encourage the participation of foreign partners. Finally, FTPs occasionally resort to external scientific and marketing expertise by inviting foreign experts to participate in the evaluation process.

Historically, the most straightforward way for cooperation with Russian organisations was and still is through **bilateral and multilateral programmes** realised either in Russia or with Russian participation. As financing of a foreign partner usually goes through the respective country's budget, the access to such funding is easier and the rules for participation and reporting are usually very transparent.

With regard to **bilateral and multilateral programmes** different educational programmes of universities or internship programmes can be mentioned. It is relatively easy to take part in such programmes as they are not funded from the Russian federal budget. In contrast with the programmes that are funded by the federal budget, and which have strict rules and reporting procedures, these schemes are the most open for international cooperation and the most flexible in decision making.

New Russian initiatives such as the programme «**Measures to Attract Leading Scientists to Russian Educational Institutions**» or the **Skolkovo project**¹⁹ are quite easy to participate in because their design has been based on the idea to attract foreign specialists.

The following table provides an overview of access parameters to different schemes.

Scheme	Funding	Simplicity of access for EU applicant	Rules of participation
Joint Russian-French and Russian-German projects under Bilateral agreements with FASIE (Foundation for Assistance to Small Innovative Enterprises)	Co-funding	++	Simple
Joint fundamental research project under Bilateral programmes of the RFBR (Russian Foundation for Basic Research)	Parity-funding / co-funding	+	Simple
Federal Targeted Programme (FTP) – direct application	Public funding from RU side	--	Complex
Sub-contracting under FTP	Customer funding	+	Simple
Leading Scientists	Public funding from RU side	++	Simple
Sub-contracting in industrial research	Customer funding	-	Simple

¹⁸ Extracted from the ACCESSRU project deliverable N°2.4 OPPORTUNITIES REPORT FOR EU R&D ACTORS.

¹⁹ Skolkovo Innovation Centre is a planned high technology business area to be built near Moscow. The project aims at creating conditions to develop innovation in 5 priority industries (space and telecom, medical equipment and pharmaceuticals, energy efficiency, information and nuclear technology) and its further commercialisation. For more information, please visit the official website: <http://www.i-gorod.com/en/>



The following table presents an overview of how the different schemes can be accessed.

Scheme	Entry channel
Joint Russian-French and Russian-German projects under Bilateral agreements with FASIE	Russian SME partner
Joint fundamental research project under Bilateral programmes of the RFBR	Russian scientific partner
Federal Targeted Programme	<ul style="list-style-type: none">- Special calls addressing international cooperation;- Coordinated calls under FP7 in dedicated thematic areas;- Status of resident in Russia;- Sub-contracting;- External evaluator
Bilateral and multilateral programmes	Partner Russian University/Institute
Leading Scientists	Partner Russian University/Institute accredited by the Russian Ministry of education
Sub-contract	Opening of a representative office in Russia

Russia continues to facilitate the process of opening its R&D and innovation programmes to European participation and engaging foreign research excellence. Over the past year a number of significant changes in the legislation have been implemented by the Russian Federation which consequently facilitate the participation of foreign researchers in Russian programmes.

An important breakthrough has been achieved in migration legislation²⁰. The procedures for obtaining work permits have been substantially simplified and the number of required permits has been reduced for top-level specialists. Moreover, this category of specialists has been put beyond the quota regime of work permits and invitations, and the employer (university or research centre) has the right to decide the degree of qualification of such employees on the basis of reliable and verifiable information and documents confirming the professional knowledge and skills.

Based on the priorities of economic development, the Russian government has also decided two main exceptions with respect to the Skolkovo project: (i) no necessity to obtain permits in state bodies - invitations and permits are obtained through the Managing Company or its affiliated branches; (ii) no need to receive special quotas for hiring foreign employees as opposed to the standard procedure. The maximum term of a work permit is three years since the date of arrival in Russia, but that term can be prolonged every three years.

In addition, it should be mentioned that in November 2009 Russia and France signed an agreement on the temporary employment of citizens on the territory of their respective states.

The Russian Ministry of Education and Sciences is currently preparing a bill on the unilateral recognition of diplomas and certificates of academic degrees obtained in leading world universities. This will remove some restrictions to hire scientists and researchers who have been trained abroad.

²⁰ In particular, with the amendments to the Federal Law of 25 July 2002 № 115-FZ "On the Legal Status of Foreign Citizens in the Russian Federation"



WHERE CAN I FIND MORE INFORMATION?

EUROPEAN UNION:

European Commission

<http://ec.europa.eu>

European Commission Directorate-General for Research and Innovation

www.ec.europa.eu/dgs/research/

Delegation of the European Union to Russia

http://eeas.europa.eu/delegations/russia/index_en.htm

European Research Area

http://ec.europa.eu/research/era/index_en.htm

Innovation Union

http://ec.europa.eu/research/innovation-union/index_en.cfm

Research Participant Portal – entry point for electronic administration of EU-funded research and innovation projects <http://ec.europa.eu/research/participants/portal/page/home>

Community Research & Development Information Service (CORDIS)

<http://cordis.europa.eu/>

Seventh EU Framework Programme for Research & Technological Development (FP7)

<http://ec.europa.eu/research/fp7>

- Cooperation programme
- http://ec.europa.eu/research/fp7/index_en.cfm?pg=cooperation
- Ideas programme
- http://ec.europa.eu/research/fp7/index_en.cfm?pg=ideas
- People programme
- http://ec.europa.eu/research/fp7/index_en.cfm?pg=people
- Capacities programme
- http://ec.europa.eu/research/fp7/index_en.cfm?pg=capacities

Flyer on the Marie Curie Actions under the FP7 People programme

ftp://ftp.cordis.europa.eu/pub/fp7/people/docs/fp7-flyer_en.pdf

EURAXESS – Researchers in Motion

<http://ec.europa.eu/euraxess/>

FP7 Helpdesk

<http://ec.europa.eu/research/index.cfm?pg=enquiries>

EU Competitiveness and Innovation Framework Programme (CIP, 2007-2013)

<http://ec.europa.eu/cip/>

Joint Research Centre

www.jrc.ec.europa.eu

Practical guide to EU funding opportunities for research and innovation

ftp://ftp.cordis.europa.eu/pub/fp7/docs/practical-guide-eufunding_en.pdf

Research*EU (Magazine of the European Research Area)

<http://ec.europa.eu/research/research-eu/>

INFORMATION ON NATIONAL AND REGIONAL RESEARCH AND INNOVATION PROGRAMMES

EUREKA – Pan-European network for market-oriented industrial R&D

www.eureka.be

COST – European co-operation in the field of scientific and technical research

www.cost.esf.org

European Science Foundation (ESF)

www.esf.org



ERAWATCH provides information on national research policies, structures, programmes and organisations

<http://cordis.europa.eu/erawatch/>

INNO Policy TrendChart describes and analyses major innovation policy trends at national and regional levels across Europe, including information on programmes

www.proinno-europe.eu/trendchart/

Links to official web-sites of the Member States and regions

http://ec.europa.eu/regional_policy/country/gateway/index_en.cfm

RUSSIAN FEDERATION:

Ministry of Education and Science of the Russian Federation

www.mon.gov.ru

Russian Academy of Sciences (RAS)

www.ras.ru

Russian Foundation for the Humanities

www.rfh.ru

Russian Foundation for Basic Research

www.rfbr.ru

Foundation for Assistance to Small Innovative Enterprises

www.fasie.ru

Federal Targeted Programme “R&D in Priority Areas of Russia’s Scientific and Technological Development in 2007-2013”

www.fcpir.ru

NETWORK OF RUSSIAN NATIONAL CONTACT POINTS:

NCP for Health – Moscow State University n.a. M.V. Lomonosov (Department of Fundamental Medicine)

<http://fp7-health.ru/>

NCP for Information and Communication Technologies - National association of research and educational - Infrastructures «e-ARENA»

<http://www.e-arena.ru>

NCP for Nanotechnologies – RAS Institute of Crystallography n.a. A.V. Shubnikov

www.ncp-nanotech.ru

NCP for Biotechnologies – RAS Institute of Biochemistry n.a. A.N. Bakh

<http://www.fp7-bio.ru/>

NCP for Energy – Autonomous Nonprofit Society RUSDEM - Energoeffect

www.fp7-energy.ru

NCP for Sociology – State Institute Center for Research and Statistics of Science

<http://fp7.csr.ru/>

NCP for Mobility – National Research University ‘Higher School of Economics’

<http://fp7.hse.ru/mobility/>

NCP for INCO – National Research University ‘Higher School of Economics’

<http://fp7.hse.ru/inco/>

NCP for Infrastructure - National University of Science and Technology «MISIS»

<http://fp7-infra.ru>

NCP for Small and Medium-Size Business - Foundation for Assistance to Small Innovative Enterprises

<http://www.ncp-fp7-sme.ru/>

NCP for Aeronautics – Federal State Unitary Enterprise Central Aerohydrodynamic Institute n.a. N.E Zhukovsky

<http://ncp.tsagi.ru/>

NCP for Environment (including climate change) - RAS Institute of Geography



<http://fp7-climate.igras.ru/>

NCP for IDEAS - Saint Petersburg Scientific Centre of the Russian Academy of Sciences

<http://www.fp7-ideas.spbcas.org/>

OTHER INFORMATION SOURCES:

Central Black-Earth Regional Information Centre for Cooperation in Science and Technology with the EU (Voronezh State University)

www.ric.vsu.ru

National Science and Innovation Information Centre

www.strf.ru

Poisk, a weekly newspaper of the Russian scientific community

www.poisknews.ru

NT-inform (Information web-portal)

www.rsci.ru



AUSTRIA

BASIC INFORMATION ABOUT THE STRUCTURE (GOVERNANCE) OF SCIENCE IN AUSTRIA

Austria has a long and strong tradition of scientific research, dating back at least to the foundation of the University of Vienna in 1365, and more recently producing Nobel Prize laureates in the research fields of medicine, chemistry, physics, and economics. Today, scientific research is carried out in 22 universities and 21 universities of applied sciences across the country, by the numerous commissions, institutes and research units of the Austrian Academy of Science, the Austrian Institute of Technology (AIT), the Institute of Science and Technology Austria (IST Austria) and also private institutes – especially in the area of social sciences. Research in Austria is characterised by relatively small and rather heterogeneous units. Research funding is provided by the Austrian government, the Austrian Science Fund (FWF), the Austrian Research Promotion Agency (FFG), private enterprises, the European Union and others. Austrian research expenditure has recently increased to 2.76 % of GDP. The total investment in RTI²¹ in 2010 was 7.8 billion Euro (public sector: 3.13 billion Euro, corporate sector: 4.55 billion Euro, of which 1.17 billion Euro is financed from abroad). Austria scored 7th in the ranking of the European Innovation Scoreboard 2010 and is heading the group of “Innovation followers”. Austria’s RTI share (relative to GDP) shall reach 3.76% by 2020. Austria’s research and innovation system is to be strengthened for establishing Austria as “Innovation Leader”. Therefore, the Austrian Federal Government launched its Strategy for Research, Technology and Innovation “Tapping the potential, raising dynamics, creating future: The Path Towards Innovation Leadership” on 8 March 2011.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Science and research cooperation between Austria and Russia is based on a bilateral agreement concluded in 1997. The objective of the agreement is to intensify scientific cooperation by promoting the mobility of researchers in the framework of joint bilateral scientific projects; under the agreement, costs for travel and stay can be covered for researchers from universities and other public institutions for science and research. Overall, 110 projects have been carried out, with a financial input from the Austrian side of about 280,000 Euro; about as much was contributed by the Russian side. Projects are mostly in the areas of biotechnology, microbiology, genetics, nanotechnology and new materials. A joint commission meets regularly to agree on new projects.

Since 2007 an agreement between the Austrian Science Fund (FWF) and the Russian Foundation for Basic Research (RFBR) has existed: bilateral research projects with duration of 3 years and conferences are funded in the frame of this agreement.

The cooperation with Russia is also one of the Austrian priorities for international cooperation in the EU RTD Framework Programmes. The Division for European and International Programmes (EIP) of the Austrian Research Promotion Agency (FFG) actively promotes this cooperation.

The Austrian and the Russian Academies of Sciences cooperate in the framework of an academy agreement concluded in 1993.

The International Institute for Applied Systems Analysis (IIASA), located in Laxenburg near Vienna, has been cooperating with Russian researchers for more than thirty five years. In particular, junior scientists from Russia can apply for its annual Young Scientists Summer Programs (YSSP; for details see www.iiasa.ac.at).

²¹ Research, Technology and Innovation.



AUSTRIA

There is a very tight network between universities, research institutes and governmental and non-governmental agencies with a wide range of bilateral cooperation agreements. Also, universities cooperate in the framework of the multilateral university network Eurasia-Pacific Uninet (EPU; www.eurasiapacific.net).

The Austrian Federal Ministry of Science and Research, together with the Centre for Social Innovation and the Austrian Research Promotion Agency are involved in 3 FP7 strategic instruments to foster structural cooperation with the Russian Federation: the ERA.NET RUS, INCO.Net EECA and BILAT-RUS.

A very strong cooperation between Austrian and Russian scientists and researchers can be observed in the European Framework Programmes for Research and Technological Development. In FP6 252 Austrian and Russian teams cooperated in 82 projects while 76 Austrian and 96 Russian teams are cooperating in 57 projects funded under the FP7 programme.

A wealth of information is available in the Austrian database for scholarships and research grants (www.grants.at), the most comprehensive online database in Austria concerning all available research areas. Inner-Austrian grant opportunities for students, graduates and researchers as well as incoming (to Austria) and outgoing (from Austria to ...) grants are described in this database. Moreover, research allowances, prizes and other funding opportunities can be found there. The information includes details of application conditions (application deadline and place) as well as on the duration, allocation and financing of each grant. The database is regularly updated both by the Austrian Agency for International Cooperation in Education and Research (www.oead.at) and directly by grant-awarding institutions.

A funding scheme for applied sciences is offered by the Austrian Federal Ministry for Economy, Family and Youth (BMWFJ) together with the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT). The Programme COIN – Cooperation & Innovation which funds innovation projects and networking of research institutions and SMEs is targeting Technology and Innovation centres, Centres of competence, technology and innovation oriented SMEs.

WHERE CAN I FIND MORE INFORMATION?

Austrian Database for Scholarships and Research Grants

www.grants.at

Austrian Embassy in Moscow

www.aussenministerium.at/moskau

Austrian Agency for International Cooperation in Education and Research

www.oead.at

Austrian Federal Ministry of Science and Research

www.bmwf.gv.at

Austrian Federal Ministry for Economy, Family and Youth

www.bmwfj.gv.at

Austrian Federal Ministry of Transport, Innovation and Technology

www.bmvit.gv.at

Austrian Academy of Sciences

www.oeaw.ac.at

Universities Austria

www.uniko.ac.at/

Researcher's mobility portal Austria

www.researchinaustria.info



AUSTRIA



www.euraxess.at/

Institute of Science and Technology Austria (IST Austria)

<http://www.ist.ac.at/>

Austrian Association for Research

www.oefg.at

Austrian Science Fund

www.fwf.ac.at

Austrian Research Promotion Agency

www.ffg.at

Austrian Institute of Technology

<http://www.ait.ac.at/>

University Network Eurasia-Pacific Uninet (EPU)

www.eurasiapacific.net

International Institute for Applied Systems Analysis IIASA

www.iiasa.ac.at

COIN – Cooperation & Innovation

<http://www.ffg.at/coin>



BELGIUM

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN BELGIUM

In Belgium, public support to science is provided by the Belgian Federal Science Policy Office on a federal level and by the science & research funding agencies of the Flemish Region and Community, the Walloon Region and French-speaking Community and the Region Brussels-Capital. Coordination of Belgian science policy between these entities is provided by the IMCSP (Inter-ministerial Conference for Science Policy).

Prime responsibility in the field of scientific research is assigned to the Belgian Communities and Regions. The Federal Authority holds certain «exclusive» responsibilities. The Communities are responsible for the general support of research carried out in higher education institutions. The Regions provide the general support of industrial and technological research and innovation. The Federal Authority, besides supporting research required for the fulfilment of its own assignments, also finances the federal scientific institutions, space research conducted in an international context, data transfer networks between scientific institutions as well as several other activities requiring uniform implementation at national or international level.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Scientific research between Belgium and Russia is based on cooperation agreements between, respectively, the Flemish Community and the French Community of Belgium and the Russian Federation. In the framework of these agreements, cooperation programs are renegotiated once every two years.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION BELGIUM - RUSSIA

The Federal Science Policy Office uses a fellowship scheme for highly qualified researchers (i.e. postdoctoral level or equivalent experience) from specific regions, granting them an opportunity to work for six to twelve months in a Belgian research team.

The potential Belgian host units are those which are involved in the research programmes and actions of the Federal Science Policy Office. Applications are sent to the Federal Science Policy Office by the Belgian project leaders. The selection takes place once a year (see «Where can I find more information?» below).

FLEMISH COMMUNITY AND FRENCH COMMUNITY

Scholarships for postgraduate students and young researchers/scientists – Research grants: research grants are awarded in all areas of studies. Grants are awarded to postgraduate students and scientists, researchers. Research grants can last from three to nine months. Candidates for grants are officially nominated by the Russian Academy of Sciences.

WHERE CAN I FIND MORE INFORMATION?

Belgian Federal Science Policy Office

Avenue Louise 231 Louizalaan
B-1050 Brussels

Tel.: +32 (0)2 238 34 11

Fax: +32 (0)2 230 59 12

www.belspo.be/belspo/home/port_en.stm



BELGIUM



ISIRIB (Institute for the Encouragement of Scientific Research & Innovation of Brussels)

Domaine de Latour de Freins

Rue Engeland 555

1180 Brussels

Tel.: +32 2 600 50 34

Fax: +32 2 600 50 47

info@irsib.irisnet.be

www.irsib.irisnet.be/index_en.htm

Flemish Government - Department of Economy, Science and Innovation (EWI)

Koning Albert II-laan 35, bus 10

1030 Brussel

Tel.: +32 2 - 553 59 80

Fax: +32 2 - 553 60 07

info@ewi.vlaanderen.be

www.ewi-vlaanderen.be

Institute for the Promotion of Innovation by Science & Technology in Flanders (IWT)

Koning Albert-II-laan 35, bus 16

1030 Brussel

Tel.: + 32 2 432 42 00

Fax: + 32 2 432 43 99

info@iwt.be

www.iwt.be/iwt_engels

FWO (Fund for Scientific Research Flanders)

Egmontstraat 5

B-1000 Brussels

Tel.: +32-2-512 91 10

Fax: +32-2-512 58 90

post@fwo.be

www.fwo.be

Direction Générale des Technologies, de la Recherche et de l'Energie (DGTRE)

Avenue Prince de Liège,

7 B-5100 Jambes

Tel.: +32 (0)81 33 40 79

Fax: +32 (0)81 33 46 21

d.thys@mrw.wallonie.be

<http://recherche-technologie.wallonie.be>



BULGARIA

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN BULGARIA

The Law on Support to Research constitutes the basic framework document for research in Bulgaria ²².

The Ministry of Education, Youth and Science (MEYS) coordinates the country's national research policy. The Research Department (RD) is a structural unit, implementing national and European scientific policy provisions. The Ministry of Education, Youth and Science makes use of this unit to implement research initiatives at the national, regional and international level, to provide support to research, to fund, on a competitive basis, fundamental and applied research and to assess its results. The Ministry of Education, Youth and Science manages and controls activity of the Research Fund established to provide competitive funding to national scientific projects.

The National Research Council includes prominent members of the academic and scientific community and acts as the authority contributing to the state policy of support to research conducted by the Ministry of Education, Youth and Science.

The National Assembly is expected to adopt Bulgaria's National Research Development Strategy until 2020.

The research institutes of the Bulgarian Academy of Sciences (BAS), higher education institutions and the Agrarian Academy (AA) pursue research in all scientific fields and are amongst the organisations involved in research in Bulgaria.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

The Agreement on Trade, Economic and Scientific & Technical Cooperation, concluded by Bulgaria and Russia in 1995, constitutes the legal basis for S&T cooperation between the two countries. Based on this Agreement the Ministry of Education, Youth and Science of the Republic of Bulgaria and the Ministry of Education and Science of the Russian Federation signed in October 2010 an Agreement for science and research cooperation.

On the basis on this Agreement the Bulgarian Academy of Sciences and the Agrarian Academy concluded agreements with their Russian counterparts - the Russian Academy of Sciences (RAS) and the Russian Academy of Agricultural Sciences (RAAS).

The existing normative base makes it possible for each Bulgarian higher education institution and research organisation to sign bilateral agreements on specific research tasks with any Russian research entity without approval or coordination by the Bulgaria's Ministry of Education, Youth and Science.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION BULGARIA - RUSSIA

Joint participation of Bulgarian and Russian research teams in the EU Framework Programmes for Research & Technological Development, as well as participation of Russian researchers in Bulgaria's national programmes and calls for proposals, offer opportunities for broad scientific cooperation between the two countries. In this context it should be noted that, in accordance with Bulgarian legislation, foreign research teams, including those from Russia, can in principle participate in competitions organised by the Bulgarian Ministry of Education, Youth and Science.

²² Published in the National newspaper, #15, 2003



BULGARIA



WHERE CAN I FIND MORE INFORMATION?

Bulgarian Ministry of Education, Youth and Science

www.mon.bg

Research Department

www.nsfb.net

Research Fund

www.nsfb.net

Bulgarian Academy of Sciences

www.bas.bg

National Centre of Agrarian Sciences

www.mzgar.government.bg/NacSlujbi/NCAN/Ncan.htm

Sofia University of St. Kliment Ohridski

www.uni-sofia.bg

Technical University of Sofia

www.tu-sofia.bg

University of National and World Economy

www.unwe.acad.bg

University of Architecture, Civil Engineering and Geodesy

www.uacg.bg

University of Chemical Technology and Metallurgy - Sofia

www.uctm.edu

Medical University – Sofia

<http://mu-sofia.bg>



CYPRUS

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN CYPRUS

The organisations involved in science and research policy development in Cyprus are:

- **Planning Bureau:** The Government agency engaged in the formulation of strategy, the identification of objectives and the introduction of policy measures to promote research activities in Cyprus.
- **Ministry of Commerce, Industry and Tourism:** Responsible for the “Programme for the Creation of New Enterprises of High Technology and Innovation through the Institution of Business Incubators”, through which new high-tech and innovative enterprises are created. The Ministry is also responsible for the forthcoming creation of a Science & Technology Park for business incubators, research centres, start-up companies, and institutions of tertiary education.
- **Research Promotion Foundation:** A non-profit organisation established by the Government of Cyprus to serve as the national organisation for the promotion of scientific and technological research in Cyprus, through the development, implementation and management of all national research programmes.

SUMMARY REVIEW & OPPORTUNITIES FOR SCIENTIFIC COOPERATION CYPRUS – RUSSIA

Research collaboration between Cyprus and Russia is possible through the national programmes of the Research Promotion Foundation. In particular, non-Cypriot researchers and research organisations may participate as partners (only) in all national research programmes offered by the Research Promotion Foundation, and receive grants. The Foundation’s programmes cover various thematic areas, aiming at increasing the competitiveness of enterprises, developing the human potential in research and strengthening research infrastructure and providing access to international research infrastructures.

There are specific programmes for collaboration between Cypriot and foreign researchers in the area of human potential, for the transfer of knowledge and experience of foreign researchers through their participation in research activities conducted for the benefit of Cypriot research organisations. Another aim is the creation of long-term cooperation networks between Cyprus research units and foreign researchers for future participation in national and European Programmes – see the Cyprus’ Mobility Portal under «Where can I find more information» below.

Finally, there are opportunities for science and research cooperation (between Cyprus and Russia) through the participation in European programmes. Cyprus participates in all EU research related programmes, such as the EU’s 7th Framework Programme for Research & Technological Development, COST, the European Science Foundation including EUROCORES, and EUREKA. The National Contact Points for the abovementioned programmes, which are responsible for providing support and information services, are employed by the Research Promotion Foundation (www.research.org.cy).

Finally, negotiations have been started between Cyprus and Russia on a bilateral agreement in the field of science and research.

WHERE CAN I FIND MORE INFORMATION?

POLICY DEVELOPMENT ORGANISATIONS:

Planning Bureau

www.planning.gov.cy



CYPRUS



Ministry of Commerce, Industry and Tourism

www.mcit.gov.cy

Research Promotion Foundation

www.research.org.cy

MOBILITY OF RESEARCHERS:

Cyprus' Mobility Portal

Information on research opportunities in Cyprus for foreign researchers and on legal, administrative and cultural matters of the country

<http://www.euraxess.org.cy/>

RESEARCH ACTIVITIES - ACADEMIC INSTITUTIONS:

University of Cyprus

www.ucy.ac.cy

Cyprus University of Technology

www.cut.ac.cy

Cyprus Institute

<http://www.cyi.ac.cy/>

Cyprus International Institute for the Environment and Public Health

www.hsph.harvard.edu/cyprus

Cyprus Forestry College (Ministry of Agriculture, Natural Resources & Environment)

www.moa.gov.cy/moa/fc/Forestry.nsf

Cyprus College

www.cycollege.ac.cy

P.A. College

www.pacollege.ac.cy

Intercollege

www.intercollege.ac.cy

Frederick Institute of Technology

www.frederick.ac.cy

Americanos College

www.ac.ac.cy

Philips College

www.philips.ac.cy

RESEARCH ACTIVITIES – NON-ACADEMIC INSTITUTIONS:

Cyprus Institute of Neurology & Genetics (CING)

www.cing.ac.cy

Agricultural Research Institute (ARI)

www.ari.gov.cy

Bank of Cyprus Oncology Centre

www.bococ.org.cy

State General Laboratory (Ministry of Health)

www.moh.gov.cy

Geological Survey Department

www.moa.gov.cy/moa/agriculture.nsf

Department of Fisheries and Marine Research

www.moa.gov.cy/moa/agriculture.nsf

Cyprus Forestry Department



CYPRUS

www.moa.gov.cy/moa/agriculture.nsf

Meteorological Service

www.moa.gov.cy/moa/agriculture.nsf

Cyprus Institute of Energy

www.cie.org.cy

Cyprus Telecommunications Authority (CYTA)

www.cyta.com.cy

Electricity Authority of Cyprus (EAC)

www.eac.com.cy

INCUBATOR COMPANIES:

Diogenes High Tech Business Incubator of the University of Cyprus Ltd

www.diogenes.com.cy

Promitheas Business Innovation Centre

www.promitheas.com

Ermis Research and Incubator Centre (ERIC) Ltd

www.ermis.org

Helix Business Incubator Ltd

www.helixincubator.com



CZECH REPUBLIC

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN THE CZECH REPUBLIC

Public support for research and development in the Czech Republic is much decentralised. The largest providers of R&D support from public funds are the Ministry of Education, Youth and Sports, the Academy of Sciences of the Czech Republic, the Ministry of Industry and Trade, the Czech Science Foundation, the Technology Agency of the Czech Republic, the Ministry of Health, and the Ministry of Agriculture.

The state R&D support is provided in two forms:

- a) targeted support, i.e. support for R&D projects;
- b) institutional support, i.e. support provided for institutions involved in R&D activities.

Research and Development Council is the leading expert and advisory body to the Government of the Czech Republic in the field of R&D. The Council processes regular annual analyses and assessments of R&D situation in the Czech Republic, compares them with foreign countries and submits the findings to the Government of the Czech Republic. The Council also develops a mid-term draft forecast for R&D support and estimates the total costs of R&D covered from individual budget chapters and proposes their allocation. Important documents concerning R&D are assessed by the Council before being discussed by the Government of the Czech Republic.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

The Czech-Russian scientific and technological cooperation has been developing within the framework of the Agreement between the Government of the Czech Republic and the Government of the Russian Federation on Economic, Industrial, Scientific and Technological Cooperation (signed in Moscow on May 26th, 2005) and the Agreement between the Ministry of Education, Youth and Sports of the Czech Republic and the Ministry of Science and Technical Policy of the Russian Federation (signed in Prague on May 23rd, 1995; the responsible body for implementation of the provisions of the Agreement on the Russian side is the Ministry of Education and Science).

Joint Committee for Economic, Industrial, Scientific and Technological Cooperation, which has been set up under the inter-governmental Agreement and which meets annually, comprises a working group consisting of representatives of the Czech Ministry of Education, Youth and Sports and the Russian Ministry of Education and Science. The current Czech-Russian R&D cooperation and R&D national policies of both countries are discussed at this forum.

Joint Committee for Scientific, Technological and Innovative Cooperation, which has been set up under the inter-departmental Agreement, meets on an annual basis as well. The Committee makes a selection of Czech-Russian joint R&D projects to be supported from the public funds.

Association of Innovative Entrepreneurship of the Czech Republic plays an important role in the promotion of cooperation with international organisations in the field of research, development and innovations. In accordance with the decision of the inter-governmental Joint Committee for Economic, Industrial, Scientific and Technological Cooperation the Association focuses its activity on the following:

- commercialization of technologies and research projects' outputs;
- transfer of technologies;



- creating databases of researchers and research projects' outputs;
- cooperation with international governmental and non-governmental organizations;
- presentation of R&D outputs on national and international conferences and trade fairs.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION CZECH REPUBLIC - RUSSIA

MINISTRY OF EDUCATION, YOUTH AND SPORTS

Coordinators of bilateral R&D projects selected for public funding support by the inter-departmental Joint Committee for Scientific, Technological and Innovative Cooperation may apply for financial support under the public tenders organised within the KONTAKT II programme. The applicants may be public universities, public research institutes or other research organizations defined by Article 2.2. d) of Community Framework for State Aid for Research and Development and Innovation (2006/C 323/01), eventually small and medium enterprises defined by Article 2.2. a) of Community Framework for State Aid for Research and Development and Innovation (2006/C 323/01), especially if they cooperate with research organizations.

Coordinators of multilateral projects in the field of industrial research and experimental development may apply for financial support under the public tenders organised within the EUREKA programme.

The Czech Republic is a member of the Joint Institute for Nuclear Research (JINR) in Dubna. The participation of the Czech Republic in JINR projects have been partly supported within the INGO II programme public tenders. (The aim of INGO II programme is to support the membership of R&D institutions in international non-governmental R&D organisations.)

ACADEMY OF SCIENCE OF THE CZECH REPUBLIC

The Agreement between the Academy of Sciences of the Czech Republic and the Academy of Sciences of the Russian Federation and the Agreement between the Academy of Sciences of the Czech Republic and the Academy of Medical Sciences of the Russian Federation are the framework for cooperation between the academies of sciences of both countries. The Academy of Sciences of the Czech Republic supports the implementation of joint R&D projects by funding mobility costs.

Ministry of Industry and Trade funds projects within research programmes that are focused on industrial research. It is support for projects with target-oriented research, the results of which are to be used in subsequent industrial R&D, in new products, technologies, services, new materials, industrial products, information and management products.



CZECH REPUBLIC



WHERE CAN I FIND MORE INFORMATION?

Research and Development Council

<http://www.vyzkum.cz/>

Ministry of Education, Youth and Sports

<http://www.msmt.cz/>

<http://www.msmt-vyzkum.cz/>

Academy of Sciences of the Czech Republic

<http://avcr.cz/>

Ministry of Industry and Trade

<http://www.mpo.cz/>

Czech Science Foundation

<http://www.gacr.cz/>

Technology Agency of the Czech Republic

<http://www.tacr.cz/>

Association of Innovative Entrepreneurship of the Czech Republic

<http://www.aipcr.cz/>



DENMARK

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN DENMARK

Denmark has a history of more than 500 years of scientific research. The main goal is to continuously develop science and innovation in the globalized society.

The Danish Ministry of Science, Technology and Innovation is responsible for policies regarding research legislation, strategic research policy, technological foresight and mobility of researchers and industrial PhD. The Ministry's primary activities within this framework are carried out by the Danish Agency for Science, Technology and Innovation (DASTI), which is an institution under the Ministry.

The Danish government financially supports various kinds of research, which are mainly conducted at universities, innovation environments and Approved Technological Service Institutes (ATS institutes). Many new initiatives aim to establish cooperation between the business sector and research institutions and to increase the exchange of knowledge between Danish and foreign research institutions.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Collaboration, development and knowledge sharing between Danish and Russian scientists have existed for many years. Partnerships and exchange of researchers between Russia and Denmark were and are often initiated out of common interest in a research topic and agreements of exchange are concluded between involved institutions or research centres, sometimes with governmental support in financing the projects.

For many years Danish and Russian scientists and researchers have collaborated closely through the EU framework programmes for research and technological development. Currently in the 7th Framework Programme (FP7), researchers from the two nations are collaborating on more than 40 projects. This collaboration alone has created a network of 85 unique collaborative relations between Danish and Russian universities, research institutes, and private companies.

The collaboration between Denmark and Russia in FP7 tends to focus on research projects within the areas of Environment and Space as well as within the area of Food, agriculture and fisheries, and biotechnology. Furthermore, a significant part of the collaboration aims at optimising the use and development of research infrastructures in Europe.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION DENMARK - RUSSIA

The Danish Ministry of Science, Technology and Innovation

The Ministry focuses on international collaboration in science and encourages employment and exchange of foreign scientists.

The Danish Agency for Science, Technology and Innovation

The Agency performs tasks relating to research and innovation policy and provides secretariat services to and supervises scientific research councils, which allocate funds for independent research, for strategic research and for innovation and which advise the political system.

The Agency is also responsible for interaction between research institutions and business and industry as well as for international research and innovation partnerships.



DENMARK



The Danish Agency for Science, Technology and Innovation is divided into centres, which are supervised by the Agency's Executive Management. The organisational structure of the Agency can be found here: <http://en.fi.dk/the-agency/organisation>

The Danish Agency for International Education

The Danish Agency for International Education is a government agency within the Danish Ministry of Science, Technology and Innovation responsible for supporting the internationalisation of education and training in Denmark. The Danish Agency for International Education is the national agency for two EU programmes within education: The Lifelong Learning Programme and Youth in Action, as well as for the Nordic Nordplus programme, and similar Nordic and Danish programmes and initiatives supporting cooperation and mobility.

The Agency is also the central authority in Denmark where persons with qualifications from other countries can get these assessed and recognised.

Another important task for the Agency is to attract and retain international talent, for instance via the webpage www.studyindenmark.dk.

In addition, the Agency is an information centre on internationalization of all the educational sectors.

Royal Danish Academy of Science

The academy was established in 1742 and aims to promote scientific understanding at the national as well as the international level. The academy collaborates with similar institutions all over the world; one of these is the Russian Academy of Natural Sciences.

Work in Denmark

Workindenmark.dk is a web-site for foreign workers and their families in Denmark. The web-site contains information on all practical aspects such as taxation and housing and aims to ease access to Denmark for foreign workers and scientists.

Study in Denmark

If you want to know more about the possibilities for studying at a Danish university you can visit studyindenmark.dk or contact The Danish Agency for International Education.

The Danish Council for Independent Research (DFF)

The Danish Council for Independent Research funds specific research activities, within all scientific areas that are based on the researchers' own initiatives and that improve the quality and internationalisation of Danish research.

The Danish Council for Strategic Research (DCSR)

The Danish Council for Strategic Research seeks to ensure that strategic research in Denmark is organised to meet the challenges facing Danish society. The aim is to ensure Denmark's position as a global frontrunner regarding welfare, wealth and science in the short and long term.

Strategic research takes place in a problem-oriented context, not a discipline-oriented context. This means that strategic research often spans several disciplines and is carried out in a matrix organisation across public and private-sector institutions where disciplines or subjects are included as required.

Strategic research has a strong international dimension with Danish researchers working closely together with the best international researchers.



DENMARK

UNIVERSITIES

The eight universities in Denmark are obliged to function as a natural partner for businesses and public organizations at both national and international levels.

Danish universities participate actively in the international cooperation on student and teacher exchange, study programmes and research. Many Danish university students study abroad during their university education, and Denmark attracts many international students. In addition, the universities are increasing their focus on creating attractive international knowledge networks and entering into strategic collaborations with the best universities worldwide.

Denmark has entered into a number of collaborative relations within higher education in the form of multilateral and bilateral agreements. The Danish University and Property Agency coordinates Danish participation in organisations and forums for collaboration within higher education at Nordic, European and global level. These include the EU, the Nordic Council of Ministers, the Bologna Process, OECD and the UN.

INDUSTRIAL PHD INITIATIVE

This initiative was established to enhance research and development in the Danish business environment. The goal is to build personal networks between companies of Danish as well as foreign research institutions and universities. An Industrial PhD project is a three-year industrially focused PhD project where the student is hired by a company and enrolled at a university at the same time. The Industrial PhD programme is open for foreign candidates as well as foreign universities participation. The application, however, must be handed in by a research oriented private company based in Denmark. The Industrial PhD student is employed by the company during the Industrial PhD programme and the PhD project must be embedded in R&D activities of the company. The Industrial PhD shares his or her time evenly between the company and the host university, but 3-6 months studies abroad as an integrated part of the study is encouraged. DASTI is funding half of the salary, the tuition fee to host university, grants for participation in international conferences as well as allowances for studies abroad. Around 10-15 percent of all Industrial PhD are of foreign origin.

APPROVED TECHNOLOGICAL SERVICE INSTITUTES

The ATS Institutes are, among other things, a link between institutions in Denmark and abroad and Danish business and industry. The institutes are independent and run as private enterprises. The competence of the institutes comprises mechanics, chemistry, biotechnology, microelectronics, management and organisation, and the majority of their turnover comes from selling advice

INNOVATION ENVIRONMENTS

The innovation environments are an initiative of the Ministry of Science, Technology and Innovation, which offers innovative entrepreneurs and investors financial support, advice and knowledge during the pre-project phase.



DENMARK



WHERE CAN I FIND MORE INFORMATION?

The Danish Ministry of Science, Technology and Innovation

Bredgade 43
DK - 1260 Copenhagen K
Tel.: + 45 33 92 97 00
Fax: +45 33 32 35 01

www.vtu.dk

Danish Agency for Science, Technology and Innovation

Bredgade 40,
DK - 1260 Copenhagen K
Tel: +45 35 44 62 00
Fax: +45 35 44 62 01

<http://en.fi.dk/>

The Danish Agency for International Education

Bredgade 36,
DK - 1260 Copenhagen K
Tel: +45 3395 7000
Fax: +45 3395 7001

<http://en.iu.dk/>

The Royal Danish Academy of Sciences

H.C. Andersens Boulevard 35
DK - 1553 Copenhagen V
Tel: +45 33 43 53 00
Fax: +45 33 43 53 01

<http://royalacademy.net.dynamicweb.dk>

The Danish Council for Independent Research (DFF)

<http://en.fi.dk/councils-commissions/the-danish-council-for-independent-research>

The Danish Council for Strategic Research (DCSR)

<http://en.fi.dk/councils-commissions/the-danish-council-for-strategic-research>

Danish Universities

<http://www.ubst.dk/en/universities-in-denmark>

Industrial PhD Initiative

<http://en.fi.dk/research/industrial-phd-programme/>

Approved Technological Service Institutes

<http://www.teknologiportalen.dk/EN>

Innovation environments

<http://www.catscience.eu/>

<http://dsinnovation.squarespace.com/english>

<http://www.innovationmidtvest.dk/>

<http://novi.dk/en.html>

<http://www.sdti.dk/>

http://oeiuk.itide.dk/about_oestjysk_innovation.asp



ESTONIA

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN ESTONIA

The higher education and research centres in Estonia are concentrated in two main cities, Tallinn and Tartu. In Estonia, R&D is closely connected with universities in these cities. There are also several research institutes performing research at a high level.

The research, development and innovation strategy document for 2007-2013, Knowledge-based Estonia II, sees Estonia as an innovative, highly competitive and successful country within the European research area.

The science reform implemented in the 1990s led to the integration of research institutes (former institutes of the Estonian Academy of Science and institutes subordinated to various ministries) into universities. Nowadays, most research and development in Estonia is performed at universities. The largest public research university is the University of Tartu, followed by the Tallinn University of Technology, the Estonian University of Life Sciences and Tallinn University.

STUDY AND RESEARCH OPPORTUNITIES IN ESTONIA

The Estonian Government offers a number of scholarships intended for university students, researchers or lecturers for studying and doing research at Estonian public universities and institutions. Mostly scholarships are for master's degree and doctoral degree. As applicants usually apply for a scholarship through their institution in Estonia, it is recommended to consult the university considering the scholarship schemes for international students.

The Estonian government has launched strategic initiatives for supporting the internationalisation of the Estonian higher education and research institutions. The universities of Estonia offer more than 100 fully accredited degree programmes taught in English. Also, Estonian universities that offer degree programmes in English have signed the Agreement on Good Practice in the Internationalisation of Estonia's Higher Education Institutions. This is to ensure the high quality of both the programmes and the support services provided to international students.

Estonian-Russian cooperation is based on the bilateral Agreement on Cooperation in the Field of Education²³ signed in 1994. Under this Agreement, both sides support the development of cooperation between educational, scientific and research institutions, as well as enterprises, and they develop cooperation in the fields of science and research. The Agreement also promotes academic mobility between the two countries.

Russian Master's and PhD students are welcome to apply for the following grants:

Scholarships for international Master's students

Financed by: European Social Fund (DoRa activity 9), Estonian Ministry of Education and Research

Which programmes: Accredited Master's programmes offered by universities in Estonia that are taught exclusively in a language other than Estonian.

Who can apply: Students who have been accepted onto these programmes.

Remuneration: A monthly allowance of 287 Euro from September to June.

How to apply: For detailed information on eligibility requirements, deadlines and applications, consult your university in Estonia.

Deadline for Application: Set by the institution

²³ In Russian: Соглашение между правительством Эстонской Республики и Правительством Российской Федерации о сотрудничестве в области образования



ESTONIA



Contacts are available at <http://www.studyinestonia.ee/study/scholarships>

Scholarships for international PhD students

Financed by: European Social Fund (DoRa activity 4), Estonian Ministry of Education and Research
Which programmes: Accredited doctoral programmes in information and communication technology, materials technology, environmental technology, biotechnology, power engineering and health.

Who can apply: Doctoral students of the listed subjects in Estonian universities.

Remuneration: Monthly allowance of 383 Euro; tuition fees; one return trip home at a fixed rate; health insurance premiums and the stamp duty payable on your residence permit; plus a mobility allowance of up to 3,195 Euro per year. The grant is worth an estimated 8,000 Euro per year (excluding travel grant).

How to apply: For detailed information on eligibility requirements, deadlines and applications, consult your university in Estonia: Tallinn University of Technology, Tallinn University, University of Tartu, Estonian University of Life Sciences. The university nominates the applicants for the scholarship.

Deadline for application: Throughout the year. The applicant must consider the length of the enrolment process and the academic calendar.

Contacts are available at <http://www.studyinestonia.ee/study/scholarships>

Scholarships for visiting PhD students

Financed by: European Social Fund (DoRa T5), Estonian Ministry of Education and Research

Which programmes: Doctoral studies (1-10 months research work).

Who can apply: The eligible candidate must be enrolled in a doctoral programme at an educational institution that has been recognised by its own national authorities.

Remuneration: A monthly scholarship of 383 Euro and monthly allowance of up to 255 Euro, health insurance, travel grant.

How to apply: Through the host university in Estonia. The selection of candidates will be made by the host university.

Deadline for application: The universities submit applications to the Archimedes Foundation by the 10th of each month.

Contacts are available at <http://www.studyinestonia.ee/study/scholarships>

POSTDOCTORAL RESEARCH GRANTS

Researcher mobility programme MOBILITAS (2008-2015)

Through the researcher mobility programme "Mobilitas" postdoctoral researchers and top researchers can apply for a grant to carry out research in Estonia or abroad. Up to 85% is granted by the European Social Fund, state funding is no less than 10% and self-financing of the partners (Estonian R&D institutions) is at least 5%. Through the programme the following people will be supported:

Top researchers who come from abroad to work in an Estonian R&D institution to create their own research group and carry out research in priority areas of the Estonian Research and Development and Innovation Strategy 2007-2013 (information and communication technology, material technology, biotechnology, energy, environment technology, and health).

The duration of the top researcher grant is 3 years, 4 years or until the end of the eligibility period for the programme on 31 July 2015.

Postdoctoral researchers who come from abroad to work in an Estonian R&D institution. It is also possible to be awarded a grant for going from Estonia to a R&D institution in the European Union, the European Economic Area, Switzerland, USA, and Canada (in cases where the research belongs to the priority areas of the RD&I Strategy) as well as an inter-Estonian grant. The number of researchers going to a foreign state cannot exceed 20% of all grants



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awarded from the programme. The amount of inter-Estonian grants will not exceed 10% of all postdoctoral grants. The duration of the postdoctoral grant is 2 or 3 years.

Further information: www.etf.ee

Postdoctoral Research Grant of the programme ERMOS (Estonian Research Mobility Scheme)

Supported by the FP7 Marie Curie COFUND the "People" Programme, ERMOS offers fellowships to non-Estonian researchers who obtained their PhD degree no more than 5 years prior to the ERMOS deadline.

Applications are accepted across all scientific disciplines. The scheme is designed to support trans-national mobility of foreign and Estonian researchers. The duration of a post-doctoral research grant is either two or three years. If a two year grant is awarded, a one year extension may be applied for at the end of this period a 2-year grant may apply for extension at the end of that grant.

Further information: www.etf.ee

SCIENTIFIC EXCHANGE

Academic exchange programmes for researchers can also be implemented within the framework of the cooperation agreement signed between the Estonian and Russian Academies of Sciences:

Scientific exchange programme between the Estonian Academy of Sciences and the Russian Academy of Sciences
Area of study or research: All areas of science and humanities.

Target group: In Russia, researchers affiliated to institutes of the Russian Academy of Sciences are eligible (incl. PhD students). In Estonia, all public universities and research institutes are eligible as host institutions (a letter of invitation is required from a Russian applicant). Excellent research and strong links with Estonian research institutions are the criteria for recommendation. The potential to trigger other sources of funding and/or expand existing links into wider international collaboration is an asset.

Authority awarding grant: Nomination in Russia: Russian Academy of Sciences. Final decision: Estonian Academy of Sciences.

Duration of grant: Short study stays or conference visits (1-2 weeks).

Grant paid: The Estonian Academy of Sciences covers the living costs (accommodation, daily subsistence allowance) during the stay in Estonia.

Further information: www.akadeemia.ee/en/international/bilateral

Partner institutions of the Estonian public universities

- University of Tartu (www.ut.ee): Herzen State Pedagogical University of Russia, Russian State University for Humanities, St. Petersburg State University of Economics and Finance, St. Petersburg State University, Voronezh State University, Pskov State Pedagogical University, Lomonosov Moscow State University;
- Tallinn University: Lomonosov Moscow State University, Russian State University for the Humanities;
- Tallinn University of Technology (www.ttu.ee): St. Petersburg State Polytechnic University, Samara State Technical University, St. Petersburg State University of Engineering and Economics, St. Petersburg State University of Information Technologies, Mechanics and Optics, Bauman Moscow State Technical University;
- Estonian University of Life Sciences (www.emu.ee): St. Petersburg State Agrarian University, Russian St. Petersburg State Academy of Veterinary Medicine, St. Petersburg State Forest Technical Academy, Petrozavodsk University etc.



ESTONIA



WHERE CAN I FIND MORE INFORMATION?

Study opportunities in Estonia

www.studyinestonia.ee

www.facebook.com/studyinestonia

Scholarships for international students

<http://www.studyinestonia.ee/study/scholarships>

Estonian Researcher's Mobility Portal

www.smartestonia.ee

Estonian Ministry of Foreign Affairs

www.vm.ee

Estonian Ministry of Education and Research

www.hm.ee

Estonian Science Foundation

www.etf.ee

Archimedes Foundation

www.archimedes.ee



FINLAND

BASIC INFORMATION ABOUT THE FINNISH EDUCATION AND RESEARCH SYSTEM

Research policy occupies a key position in the Finnish Government programme. Science policy is designed to raise the level, coverage, impact on society and international visibility of Finnish research. In 2009 research and development expenditure represented 4.0% of the gross domestic product, which puts Finland among the OECD top.

The organisational structure of the Finnish innovation and research system consists of four levels, the highest one being the Parliament and the National Government. The Government is supported by a high-level advisory body, the Research and Innovation Council of Finland. The national science, technology and innovation policies are formulated by the Research and Innovation Council of Finland, chaired by the Prime Minister.

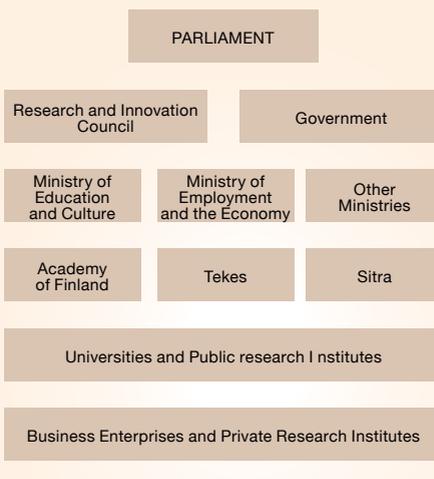
At the second level, the key ministries with respect to research policy are the Ministry of Education and Culture (with responsibility for science policy) and the Ministry of Employment and the Economy (with responsibility for technology and innovation policy). Other ministries are responsible for R&D in their sectors. As a general trend, there is a move from narrowly defined science & technology policy towards a broad-based innovation policy incorporating issues of research, technology, and various other policy elements.

The third level consists of the R&D funding agencies - the Academy of Finland, Tekes and Sitra. The Academy of Finland funds basic research through competitive grants. Tekes is the Finnish Funding Agency for Technology and Innovation. While the majority of Tekes funds is allocated to R&D projects carried out by companies, Tekes is also a large financier of university research. Sitra, the Finnish Innovation Fund is under the auspices of the Finnish Parliament and its work consists of various programmes.

At the fourth level there are the organisations that conduct research. The Finnish higher education system comprises two sectors: universities and polytechnics. The network of 16 universities covers the entire country. As of 01 January 2010 universities became independent legal persons as they were separated from the State as a part of the University Reform. However, the State continues to be the primary financier of the universities. The annual enrolment in universities is about 21,000, which corresponds to 30.8 percent of age group. Approximately 11,000 Bachelor's degrees, 11,000 Master's degrees and 1,600 doctorates are conferred annually.

The allocation criterion for university core funding is guaranteed by law. About 1/3 of the total university budget is funding from external sources (e.g. enterprises, public funding organisations). Furthermore, about half of university R&D expenditure comes from sources outside the State university budget. However, most of external financing is still government funding, allocated for instance by the Academy of Finland and Tekes.

FINNISH SCIENCE AND TECHNOLOGY SYSTEM





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The network of 26 polytechnics admits annually some 37,000 new students and confers over 21,000 degrees. Polytechnics have an important role in promoting development and business in their regions. Polytechnic R&D expenditure, though still modest, is growing rapidly.

There are 20 government research institutes in Finland. Most of their funding comes from the state budget, but the share of external funding is on the increase, constituting 44 percent of their R&D funding at present. The largest government research institutes are the Technical Research Centre (VTT), the Forest Research Institute, the Agrifood Research Finland, the National Public Health Institute, the Institute of Occupational Health, the National Research and Development Centre for Welfare and Health STAKES, the Environment Institute, the Game and Fisheries Research Institute, the Meteorological Institute and the Geological Survey GTK.

Research training and career in research

Finland is making a determined effort to develop researcher training by strengthening and internationalising the graduate school (i.e. doctoral programmes) system. The Finnish graduate school system was established in 1995 to supplement traditional doctoral education.

The system has been expanded gradually and the number of doctoral programmes has doubled since the 1990s. The aim is high-quality doctoral education and dynamic researcher communities which have close international contacts and work in collaboration with Finnish society and industry.

A key target of Finnish science policy is to develop more structured research training and transparent career in research, to ensure an adequate supply of high-quality researchers and experts in the public and private sector. One objective is to increase the number of people with a doctoral degree in the enterprise sector. Currently 53% of R&D personnel are employed by the enterprise sector, 33% by the higher education sector and 14% by other public sectors.

Annually Ministry of Education and Culture funds 1,600 doctoral school positions at the universities. The Academy of Finland has different forms of funding targeted at supporting careers in research from the researcher training phase to the established researchers (including for researcher training and research abroad). Annually 5,300 people benefit from Academy research funding.

Internationality and mobility

The strategic objective of internationalisation is to support Finland's own development and competitiveness and ability to bear its share of responsibility for responding to global challenges. Emphasis has been on both bilateral and network partnerships in response to growing global responsibility and interaction.

Finland works actively to develop a European Research Area and to strengthen global cooperation. Finland is a member of all major European research organisations (CERN, EMBL, ESA, ESO, ESRF) and works actively to further develop science & technology cooperation with other regions, countries and research organisations in the world.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Finland shares a longer border with Russia than any other EU member country. The EU's policy vis-à-vis Russia is dependent upon its Russian strategy and the Northern Dimension initiative, which is particularly important to Finland.

Intergovernmental cooperation in the field of innovation is supported by the Innovation Working Group which operates under the Finnish – Russian Intergovernmental Commission for Economic Cooperation. The Ministry of Employment and the Economy, Tekes and Finnish Industry Investment are also cooperating



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with RUSNANO, Russian state-owned nanotechnology corporation in the field of nanotechnology related growth companies.

FinNode Russia operates in St. Petersburg (since 2008) and Moscow (since spring 2010). FinNode network is globally operating innovation network promoting Finland's competitiveness and collaboration. It brings together Finnish and international professionals and knowledge for creating innovations. FinNode serves as a gateway to the Finnish innovation ecosystem.

The Ministry of Education and Culture of Finland has a special programme in higher education and research, «Finland, Russia, and International Cooperation», which is being implemented.

The Academy of Finland is the prime funding agency for basic research in Finland. The Academy operates within the administrative sector of the Ministry of Education and Culture. The Academy's international strategy identifies Russia as one of its main areas of collaboration. Finland and Russia share a long tradition of scientific cooperation. During the past few years, this cooperation has increased in several fields. Russia is taking an active part in international research funding cooperation. This can be considered a sign of an active internationalisation of Russian science. The Academy of Finland engages in close cooperation with three Russian science and research funding organisations:

- Russian Academy of Sciences (RAS)
- Russian Foundation for Basic Research (RFBR)
- Russian Foundation for Humanities (RFH)

The Academy allocated 8.2 million Euro for the Research Programme on Russia in Flux for 2003-2007. The programme also involved funding and research cooperation with the Russian Foundation for Humanities.

Funding opportunities for research

Joint research projects

The Academy of Finland has so far carried out four thematic joint calls with Russian funding organisations, RFBR and RFH. The themes of the joint calls were selected separately each time. Joint calls have been launched in various fields of science.

Research programmes

Research programmes offer another funding opportunity for Finnish-Russian joint research projects. Finnish and Russian research teams can submit a joint application to one of the Academy's research programmes once funding cooperation with Russian funding organisations (RFBR and RFH) have been agreed. Joint calls have been carried out within seven research programmes.

Joint research projects (in thematic joint calls and in research programmes) are required to include research teams from both Finland and Russia.

Researchers mobility

The Academy of Finland chiefly channels its funding into researchers mobility through research projects. There are, however, certain other instruments for enhancing mobility. The Academy supports the mobility of researchers to and from Russia on the basis on an agreement between the Academy of Finland and the Russian Academy of Sciences. In addition to this agreement-based mobility, the Academy also provides funding for purposes of inviting Russian researchers to Finland.

ERA.Net RUS

Linking Russia to the ERA: Coordination of MS/AC S&T programmes towards and with Russia



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The Academy of Finland is participating in ERA.Net RUS (2009–2012), a four-year project funded under the EU Seventh Framework Programme. The aim of the project is to develop a sustainable model for funding cooperation for S&T programmes of Member States with Russia.

Research grants

Applications for general research grants can be submitted to the Academy of Finland for the purposes of carrying out research projects of a high scientific standard. The research projects may hire Finnish or foreign researchers who are at different stages of their research careers. A researcher hired for a project may work abroad for a fixed period.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION FINLAND - RUSSIA

CIMO (Centre for International Mobility) offers two types of scholarships for young researchers (Master-level degree postgraduates) to Finnish universities: individual scholarships, which young researchers apply for themselves, and host fellowships, which are applied for by the Finnish higher education departments wishing to host researchers and postgraduates. The eligibility conditions, application procedure, deadlines and application forms vary according to the programme.

The CIMO Fellowships programme is open to young researchers (after Master-level but not post-doctorate) from all countries and from all academic fields. The scholarship period may vary from 3 to 12 months. The monthly allowance is 900-1,200 Euro (in 2011). The scholarship is intended to cover living expenses in Finland for a single person. No additional allowance for housing is paid. Expenses due to international travel to and from Finland are not covered by CIMO.

The visiting researcher must already have established contacts with the Finnish host university (university department) which applies to CIMO for the grant. Applications should be submitted at least 5 months before the intended scholarship period.

CIMO also organises, together with Finnish universities and scientists, CIMO Winter schools, which are open to Russian and Ukrainian postgraduate students. Winter school is an annual, weeklong scientific seminar, the goal of which is to enhance the mobility of young researchers and postgraduate students between Finland and the participating countries. Those Winter School participants who will be invited to Finland after the Winter School by Finnish research teams will be offered a scholarship from the CIMO fellowship programme.

CIMO also offers scholarships to young researchers (postgraduates who have completed a Master or doctoral-level degree) representing the Uralic Peoples of Russia. The main objective of this programme is to promote international mobility in research and teaching in fields related to Finno-Ugric linguistics, ethnology and folklore. At the same time it strengthens the cultural and linguistic ties between the Uralic nations and Finland.



FINLAND

WHERE CAN I FIND MORE INFORMATION?

Finnish Ministry of Education and Culture

www.minedu.fi/OPM/Tiede/?lang=en

Academy of Finland

www.aka.fi

The Finnish Funding Agency for Technology and Innovation (TEKES)

www.tekes.fi/en

Technical Research Centre of Finland

VTT Representative Office in Russia

Ms. Elena Kniazeva

12 Dobrolyubova Prospect

St. Petersburg

www.vvt.fi

FinNode Russia

www.finnode.fi

Finnish Science & Technology Information Service

www.research.fi

Centre for International Mobility

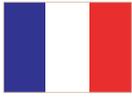
www.cimo.fi

Embassy of Finland to Russia

www.finland.org.ru

Finnish Ministry of Employment and the Economy

www.tem.fi



FRANCE

ORGANISATION OF RESEARCH IN FRANCE

The organisation of public research in France is structured around two main groups of bodies and institutions:

- Research bodies including public institutions of a scientific and technical character (EPST), the personnel of which are civil servants. Some examples are CNRS for basic science (employing 26,000 people in 1,200 research units, mainly joint laboratories with universities, with an annual budget of 3.1 billion Euro); INSERM for health; and INRA for agronomy. They also include public institutions of an industrial character (EPIC), the personnel of which are employees under private law, such as CEA for atomic energy and CNES for space. The French research system is characterized by these large organisations, of a general or specialized nature and highly visible internationally.
- Institutions of higher education have the exclusive right to award doctoral degrees. They include the country's 86 universities, the Collège de France, the Institutes of Political Studies, the elite Ecoles Normales supérieures, the Ecoles françaises d'archéologie à l'étranger. Nearly 3,000 teams or research laboratories are attached to them, including 1,500 shared by research bodies in the form of mixed units or federative research institutes.

Beside these public institutes, ~56% of all R&D human resources work in the private sector. Thus, private companies are responsible for ~60% of French GERD (Gross Domestic Expenditure on R&D). Total GERD amounted to 42.08 billion Euro in 2009 – about 2.21% of GDP.

The creation in 2005 of a National Agency for Research (ANR) confirms a worldwide trend: financing of R&D is now granted in primarily to large projects, and not institutions. In 2011, ANR will be able to grant 772 million Euro. The Ministry for Research and Higher Education supervises all these research institutions and agencies, but can share this supervision with one or several other ministries.

A reform of research policy was adopted in April 2006. Its main objectives are:

- To reinforce the strategic orientation of R&D, through the creation of a High Council for Science and Technology (HCST) with 20 scientific personalities;
- To introduce a consistent system of evaluation through a new independent Agency for Evaluation of Research and High Education (AERES);
- To increase cooperation between existing research units, and to reach excellence in 13 thematic poles which will receive international visibility (RRTA: thematic networks for advanced research);
- To develop the attractiveness of scientific careers;
- To develop links between public and private research, and support innovation through appropriate measures, in cooperation with the Ministry of Industry.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

French-Russian scientific cooperation, which dates back to 1966, is today based on inter-governmental Agreements (1992 for Science and Technology, 1996 for Space), and involves mainly the three biggest French institutes: CNRS for basic research, CEA for nuclear and applied research, and CNES for space research.

BASIC RESEARCH COOPERATION

Since 2001, scientific cooperation has seen new developments with the creation of joint structures, in close cooperation with CNRS: these structures (either virtual laboratory between two units, networks



between several partners or mixed international units) are platforms for the exchange of students and researchers and provide increased visibility to cooperation. An international laboratory between CNRS and the Independent University of Moscow in mathematics (Laboratoire Poncelet) was created in 2004. As of end 2010, a total of 13 virtual laboratories and 22 research networks existed between France and Russia, mainly in mathematics, physics and chemistry, but also in the humanities (3 research networks). Since the signature in 2006 of an Agreement between CNRS and Russian Foundation for Basic Research (RFBR), joint financing of projects has been provided through joint calls.

COOPERATION IN THE FIELD OF NUCLEAR STUDIES

The French Commissariat for Atomic Energy (CEA) has framework agreements with the Russian State Corporation (formerly Federal Agency) Rosatom and with the National Research Centre “Kurchatov Institute” in the field of nuclear studies which cover, amongst others, nuclear safety, future reactors, cycle of combustible. Together with CNRS it is also part of a joint laboratory in Dubna. And, of course, CEA is very much involved in the ITER project.

CEA also manages the French part of the G8 Global Partnership initiated in Canada in 2002 which aims to fight the spread of weapons and materials of mass destruction. In Russia, it works on submarine dismantlement and naval bases remediation, nuclear safety of nuclear power plants, chemical weapons dismantlement and bio-security, with some projects linked to research in biology.

SPACE COOPERATION

Space cooperation between France and Russia includes a program on future launchers, earth observation, telecommunications, human space flights projects and scientific cooperation (including in the medical field). The French National Centre of Space Research (CNES) has a representation in Moscow.

TECHNOLOGICAL COOPERATION

The joint French-Russian Committee for Science & Technology has promoted cooperation between French and Russian institutes and SMEs in the field of innovation since 2003. A range of infrastructures have been created to support the transfer of technologies between France and Russia:

- The Franco-Russian Technological Network (RFR) (www.rfr-net.org), a network of Innovation Centres working through a database of technological offers and requests;
- International Technology Transfer Centres in St. Petersburg (between the Aerospace University and the Franche-Comté University), in Tomsk (between the Scientific and Technological Centre of Lorraine and the Tomsk Polytechnic University) which reinforce local links between partners in the field of innovation;
- Intellectual property harmonisation: different research contract models have been elaborated jointly by French and Russian ministries responsible for research, so as to address what is often a major hurdle when beginning a cooperation;
- Co-funding of innovative projects is undertaken by OSÉO-Anvar (a branch of the French Innovation Agency) and by the Russian Foundation for Assistance to Small Innovative Enterprises (FASIE);

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION FRANCE - RUSSIA

Several bilateral tools exist to support cooperation. They can be divided into two main categories:

- Short-term support to initiate links between French and Russian teams, through calls for proposals launched mainly by Ministries and CNRS ;
- Long-term support for structured cooperation with specific long-term agreements between partners (International laboratory (UMI), virtual laboratories (LEA), research networks (GDRE) according to the scientific policy of research institutes, or political involvement of French regions).



FRANCE



Most of these tools should be proposed through the French partners.

FRENCH MINISTRY OF RESEARCH

The French Ministry for Research has developed three programmes to foster scientific cooperation with Central and Eastern Europe – including Russia and the Newly Independent States (NIS):

- Programme PARCECO supports travel expenses for French researchers to participate in summer schools taking place in a country of Eastern Europe and Central Asia (EECA);
- Programme ACCES financially supports Russian researchers (or residents of EECA) to participate in conferences taking place in France;
- Programme PECO-NEI funds education-research thematic networks, including at least 2 French institutes and 2 institutes from an EECA country, for 2-3 years. The calls are issued every three years.

FRENCH MINISTRY OF FOREIGN AFFAIRS

The French Ministry of Foreign Affairs supports French-Russian cooperation through three main channels:

- The programme ECONET is directed towards EECA countries: proposals should include at least 2 partners from EECA and 1 French laboratory. Applications are for a maximum of 2 years and cover travel expenses (max. 20,000 Euro a year). Proposals should be submitted in September. Information is available in French at www.egide.asso.fr/fr/programmes/econet/appel/
- The budget of the scientific department of the French Embassy in Moscow supports official structured cooperation (joint laboratories, research networks or technology transfer centres) in association with research institutes (CNRS, INRA, BRGM, IFREMER, etc.). The support may cover travel expenses and some grants. More information on existing structures is available in French and in Russian at www.ambafrance.ru
- The programme ARCUS, initiated in 2005, aims at developing cooperation between French regions and certain targeted countries, including Russia. Three French regions have already initiated cooperation with Russia:
 - Lorraine, on new materials and environment,
 - Alsace, on supramolecular chemistry and biotechnologies,
 - Bourgogne, on “green chemistry” (separation of effluents).

The duration of the programme is three years, with a typical budget of 500,000 Euro from the French side, co-financed by the region and the Ministry of Foreign Affairs. More information is available at www.ambafrance.ru

Centre National de la Recherche Scientifique (National Centre for Scientific Research - CNRS) and other research institutes

Each research institute has its own strategy for the development of international cooperation. In Russia, CNRS has an office that carries out specific tasks:

- The head of the CNRS office in Moscow is active to identify and support opportunities for the creation of joint structures, associated laboratories or networks;
- CNRS has an agreement with the Russian Foundation for Basic Research (RFBR) to co-finance projects at different stages of their development: about forty 3-year PICS (Projects for International Scientific Cooperation, for the development of links between teams) have been selected, after a joint assessment; 13 virtual laboratories and 22 research networks are also co-financed (the list of these structures if available on the website of the French Embassy, in French and in Russian). A call to fund about 8-10 French-Russian seminars takes place at the beginning of the year;
- CNRS has an agreement with the French consulates in Moscow and St. Petersburg to “certify” invitations received by fax for visas of Russian scientists.



Centre National d'Etudes spatiales (National Centre of Space Research - CNES) has an office in Moscow that follows Russian space policy, creates and maintains close links with governmental bodies including the Russian Space Agency, with institutes and industry. It monitors technological development in this field and helps to develop relations between French and Russian industry. The CNES office also has an agreement with the French consulate in Moscow to "certify" invitations received by fax for visas of Russian scientists in the field of Space studies.

Besides CNRS (basic research), CNES (space) and CEA (Commissariat à l'Énergie Atomique - Atomic Energy Commission), which have direct representations, other French institutes have developed links with Russia:

- IFREMER (Institut français de recherche pour l'exploitation de la mer) has developed strong cooperation in oceanography;
- INRA (Institut scientifique de recherche agronomique) develops projects in soil microbiology and protein research;
- BRGM (Bureau de recherches géologiques et minières) has created a joint laboratory with the Vernadsky Institute in Moscow to develop new methodologies based on GIS (Geological Information System) for sub-soil studies.

INVOLVEMENT OF THE FRENCH REGIONS IN SCIENTIFIC COOPERATION

French Regions are more and more involved in international R&D cooperation. The programme ARCUS can be used when cooperation has been ongoing for some time and has reached a certain "critical mass". Other grants enable new projects to start up. Grants for doctoral and post-doctoral studies are offered equally to French and foreign candidates (for instance, foreign candidates receive ~30% of all grants allocated by the Ile-de-France region). The procedure differs slightly depending on the region, but usually the proposal (application) is to be submitted by the French partner, either in response to an annual call or directly. Information and contacts are available on the Regions' websites. The City of Paris carries out a specific call for foreigner scientists (www.education.paris.fr) which usually ends in April.

The Ile-de France Region has a programme dedicated to senior highly qualified foreign research scientists: the International Chairs «Blaise Pascal» which enable foreign scientists to be hosted for 12 full months, possibly spread over 2 years, in one research institution in Paris/Ile-de-France. Applications are made in April (www.chaires-blaise-pascal.org), approx. 5 candidates are selected every year.



FRANCE



WHERE CAN I FIND MORE INFORMATION?

Ministry of Research, Department for International Cooperation

www.recherche.gouv.fr/technologie/actioninter/missioneurop.htm

Programmes of Ministry of Foreign Affairs

www.egide.asso.fr/fr/programmes/econet/appele

French Embassy in Moscow

www.ambafrance.ru

Centre National des Recherches Scientifiques (CNRS) office in Moscow

cnrsadm@orc.ru

Franco-Russian Technological Network (RFR) www.rfr-net.org

MAJOR RESEARCH INSTITUTIONS IN FRANCE

ADEME: Environment & Energy Research Agency (provides funds for research conducted by other institutes for the promotion of renewable energies, clean and economical technologies, waste reduction, and the prevention of air and soil pollution. Staff: about 850 persons.)

www.ademe.fr

ANDRA: French National Radioactive Waste Agency (Staff: 350 persons)

www.andra.fr

ANRS: National Agency for AIDS & Hepatitis Research (Staff: 43 persons)

www.anrs.fr

OSEO-Anvar: National Research Agency for valorization (provides funding and advice to small and medium size companies, laboratories and innovative entrepreneurs all over France)

www.oseo.fr

BRGM: French Geological Survey (in charge of mobilizing Earth Sciences to provide knowledge, relevant data and expertise to the State and territorial bodies. Staff: about 850)

www.brgm.fr

CEA: Commissariat for Atomic Energy (nuclear energy, industrial innovation, defence, basic research in the sciences of matter, biotechnologies. Staff: about 15,000)

www.cea.fr

CEMAGREF: Rural, Water and Forest Engineering Centre (Agricultural & environmental engineering. Staff: about 900)

www.cemagref.fr

CIRAD: International Agronomic R&D Cooperation Centre (Agronomic research applied to warm regions, tropical and subtropical countries. Staff: about 1,800)

www.cirad.fr

CNES: National Space Research Centre (participation in programmes of the European Space Agency (ESA), the Ariane programme, observation of the Earth (Spot). Staff: about 2,500)

www.cnes.fr

CNRG: National Consortium on Genomic Research (includes Genoscope, National Centre of Genotyping, and National network of regional genopole)

www.cnrg.fr

CNRS: National Scientific Research Centre (basic research in all areas of knowledge, from physics to human and social sciences. 26,080 persons work with the CNRS)

www.cnrs.fr

CSTB: Centre for Building Science & Technology (Staff: about 600)

www.cstb.fr

IFREMER: National Institute for Oceanic Research (Staff: about 1,400)



FRANCE

www.ifremer.fr

IFP: French Institute of Oil (applied research in the fields of energy, transport and environment. Staff: 1,700)

www.ifp.fr

INED: National Demographic Studies Institute (study of all aspects of populations. Staff of about 170)

www.ined.fr

INERIS: National Industrial Environment & Risks Institute (Staff: about 550)

www.ineris.fr

INRA: National Agronomic Research Institute (Agriculture, food security, environment. Staff: about 8,800)

www.inra.fr

INRETS: French National Institute for Transport and Safety (research and expertise on new technological developments to improve transports. Staff: about 450)

www.inrets.fr

INRIA: French National Institute for Research in Computer Science & Control (basic and applied research on NTIC: networks and systems, software, optimisation of complex systems. Staff: about 3,500)

www.inria.fr

INSERM: National Health and Medical Research Institute (basic and clinical research. Staff: about 6,600)

www.inserm.fr

INSTITUT CURIE (private non-profit foundation - Curie Radiation Studies and Therapy. Oncology. Staff: about 2,000)

www.curie.fr

INSTITUT PASTEUR (private non-profit foundation, for the fight against infectious diseases; public health services. Staff of 2,500 of all nationalities)

www.pasteur.fr

IPEV: Paul Emile Victor Institute (polar researches: Arctic and Antarctic. Staff: 50)

www.ipev.fr

IRD: Research Institute for Sustainable Development (research on sustainable development in the intertropical zone. Staff: 2,200)

www.ird.fr

IRSN: Institute for Radiation Protection and Nuclear Safety (staff: 1,500 experts and scientists)

www.irsn.org

LCPC: Central laboratory for Roads, Bridges, Public Works (civil and urban engineering. Staff: about 600)

www.lcpc.fr

ONERA: National Office for Aerospace Research (basic and applied research in all fields linked to aeronautic and spatial. Staff: about 2,000)

www.onera.fr



GERMANY

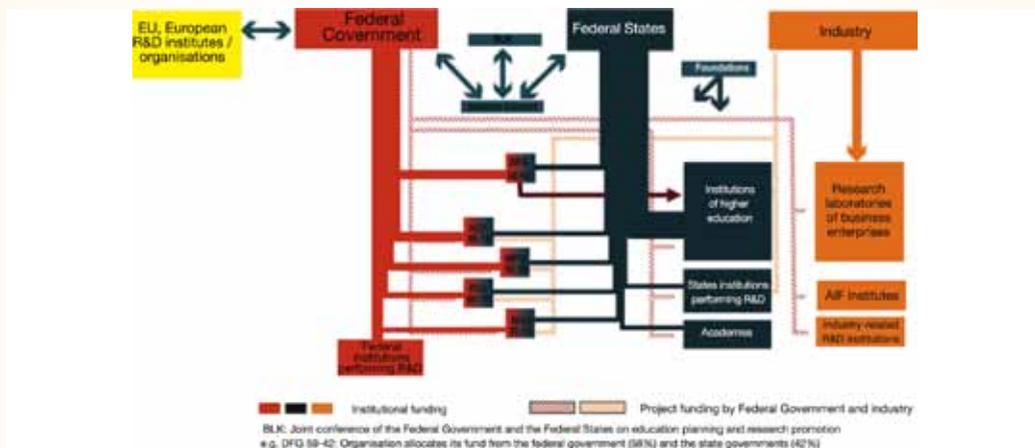
BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN GERMANY

Germany has a highly differentiated science and research system. The Federal Government (“Bund”) and the 16 Federal States (“Länder”) jointly provide research support and have shared responsibilities. At the federal level, the main responsibility lies with the BMBF (Federal Ministry of Education and Research); it coordinates the federal research and development (R&D) policy. The responsibilities for some fields of research are divided among various other ministries, primarily the BMU (Federal Ministry for the Environment, Nature Conservation & Nuclear Safety) and the BMWI (Federal Ministry of Economics and Technology) which conducts a range of innovation-oriented programmes. Research funds provided by the German federal ministries are administered by dedicated project management agencies that operate on behalf of the ministries. More than two-thirds of German research is funded from industrial and private sources.

Besides the research universities, publicly supported research is performed mainly by four science and research organisations: the Fraunhofer-Society (FhG), the Helmholtz Association of German Research Centres (HGF), the Leibniz Association (WGL), and the Max-Planck-Society (MPG). There are altogether around 260 institutions of these organisations. Altogether, there are more than 750 state-funded research institutions in Germany.

In addition, numerous organisations and foundations support research and scientists. The best known are: the Deutsche Forschungsgemeinschaft (German Research Foundation - DFG), the German Academic Exchange Service (DAAD), and the Alexander von Humboldt Foundation (AvH). Several private and public foundations also contribute to the promotion of science, by project funding and raising the qualification of young scientists.

Graphic overview of the structure of the German research and research funding system:



Today, the German Federal Government invests more in research and development (R&D) than ever before. Total expenditure (public and private) for R&D was more than 70 billion Euro, or about 2.53% of GDP, in 2007. More than two thirds of research funding are provided by industry. Nearly 28% originate from federal and state authorities, and the remaining 4% from foreign investment. Furthermore, Germany performs well on indicators of human resources



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in science and technology (HRST). The number of researchers has grown strongly in recent years, but its 7.5 researchers per thousand employment rate remain at around average level²⁴.

Germany's most important policy document, the federal government's 2006 High-Tech Strategy, has recently been updated to the High-Tech Strategy 2020. The revised strategy focuses on health and nutrition, climate and energy, security and communication in addition to mobility as main global and societal challenges. It also identifies key technologies for emerging lead markets. The strategy aims to streamline the R&D efforts of all political stakeholders and to focus them on clearly defined priority subjects, in particular by putting innovation policy at the centre of governmental activities. BMBF coordinates this initiative and will primarily invest in excellent research and emerging cutting-edge technologies.

In 2008 the Federal Government adopted the Strategy for the Internationalisation of Science and Research. A joint effort is to overcome the global challenges of the present and the future. These include climate change, questions of nutrition and food production, securing our future energy supply, combating poverty and infectious diseases as well as questions of security and migration.

By promoting top-class university research within the framework of the Initiative for Excellence, the Federal Government aims to establish internationally visible research beacons in Germany. It has been extended until 2017, with a 30% increase in funding volume.

The Higher Education Pact 2020 aims to equip the German higher education system for the challenges of the future. Between the years 2011 and 2020, for example, the number of first-semester students is expected to rise by 275,000. Additionally, international competition will make it necessary to further raise universities' research profile.

In 2005, the Federal Government, the federal states (Länder) and German research organisations committed themselves to the goal to improve the competitiveness of German research. In order to achieve these goals, the Joint Initiative for Research and Innovation was established. The Federal Government and the Länder initially decided to support German research and research funding organisations with at least 3% additional annual funding until 2010. The commitment made in summer 2009 to continue the programme also entailed a further raising of budgets by at least 5% in the years from 2011 to 2015.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Germany and Russia have a long history of cooperation in science, dating back to the time when the Russian Academy of Science was founded in the early 18th century. Currently, German-Russian relations in science and research are a stable and successful partnership.

Since 1986, the inter-governmental Agreement between Russia and Germany on Scientific and Technological Cooperation has been the basis for strong cooperation. This agreement, which came into force by July 1987, was renewed by the agreement on scientific and technological cooperation in 2009. Dedicated bilateral sectoral agreements in many fields of science and technology are evidence of a diverse and broad cooperative relationship: high-temperature-superconductivity, laser research and technology, innovative strategies and technologies for sustainable environmental protection and the efficient use of natural resources, biological research and biotechnology, marine and polar research, and information and telecommunication technology. Another recent cooperation has been commenced in the field of nanotechnology.

²⁴ Source: OECD SCIENCE, TECHNOLOGY AND INDUSTRY OUTLOOK 2010 (p. 178)



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Joint research institutions such as the German-Russian Otto-Schmidt-Laboratory for marine and polar research in St. Petersburg and the Moscow Laser Innovation Centre are representative of the sustainable progress of cooperation. Other examples are the German-Russian Terahertz-Centre in Regensburg or the German-Russian Centre of Multifunctional Nanostructured Materials in Hamburg. The creation of joint institutes also includes the development of research programmes and the constitution of scientific networks between German and Russian institutes. The projects and programmes which are implemented in the context of about 700 partnerships between higher education institutions result in thousands of scientists and students working and studying in Germany every year.

Scientific cooperation between Germany and Russia received a new impetus by a Strategic Partnership launched in 2005. This joint initiative, coordinated by the BMBF, aims at bilateral activities in science, education, the economy and public administration. It focuses on research and innovation, training and qualification of executives in business and administration, and training of civil service executives.

The so-called "St. Petersburg Dialogue", initiated in 2001, aims at the consolidation of relationships in all societal areas and thus also fosters scientific-technological cooperation in the framework of the Strategic Partnership.

Germany and Russia have used twenty five years of scientific-technological cooperation and six years of strategic partnership to enlarge their common knowledge base and to strengthen the scientific and technological bases of industry in both countries.

Annette Schavan, Federal Minister of Research and Education, and her Russian counterpart, Education and Science Minister Andrej Fursenko, announced on 15 July 2010 in Yekaterinburg that 2011 is to be the German-Russian Year of Science. Ministerial staff, research managers and scientists of both countries are to get to know each other more closely at conferences, public events, science and trade fairs, giving them a chance to initiate new projects.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION GERMANY – RUSSIA

As regards Russian participation in publicly supported research projects, it is important to note that in general the majority of opportunities for research funding are open for the participation of research teams and scientists from Russia. Interested Russian scientists may select their potential German partners from amongst the entire German research community (universities, institutes, etc.). The four largest German research organisations are also a major source for finding new research partners.

Germany has one of the best higher education systems in the world, with altogether 409 higher education institutions (out of which there are 240 public higher education institutions, 100 state-approved private and 40 state-approved ecclesiastic higher education institutions), including many centres of outstanding scientific research. The German Rectors' Conference (Hochschulrektorenkonferenz - HRK), a voluntary association of state and state-recognised universities and other higher education institutions in Germany, functions as an umbrella organisation. It is the political and public voice of higher education institutions in Germany.

The Helmholtz Association with 30,000 employees and an annual budget of approximately 3 billion Euro, is Germany's largest scientific organisation. It is a community of 17 scientific-technical and biological-medical research centres. These centres have been commissioned with pursuing long-term research goals on behalf of the state and society. The Association strives to gain insights and knowledge so that it can help to preserve and improve the foundations of human life. It does so by identifying and working on the grand challenges faced today by modern societies, science and industry. Helmholtz Centres perform



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top-class research in strategic programmes in six core fields: Energy, Earth and Environment, Health, Key Technologies, Structure of Matter, Aeronautics, Space and Transport.²⁵

On the occasion of the opening of the HGF Moscow Office in 2005, HGF and the Russian Academy of Science signed an agreement to stimulate new strategic partnerships.

The agreement between the Helmholtz Association and the Russian Foundation for Basic Research (RFBR) on the joint support of Helmholtz-Russia Joint Research Groups is an additional instrument for strategic cooperation with Russia and for the support of young scientists. The HGF and the RFBR will invest approximately 6 million Euro in this project during the next 5 years.

More than 4,000 scientists and scholars conduct projects at the 80 research institutes of the Max Planck Society (MPG). The institutes perform top-quality basic research at the frontiers of knowledge and provide competitive research conditions for excellent scientists from all over the world. The main research fields are (1) Biology and Medicine, (2) Chemistry, Physics and Technology, (3) and Human Sciences. Seventeen Max Planck researchers have been awarded a Nobel Prize since 1948. In 2009, Max Planck Institutes had about 107 cooperation projects with Russia. In the same year, more than 400 junior and visiting scientists from Russia worked at Max Planck Institutes in Germany.

The Fraunhofer-Society (FhG) consists of more than 80 research units, including 60 Fraunhofer Institutes with 1.65 billion Euro annual research budget. The majority of the staff (more than 18, 000) are qualified scientists and engineers. FhG carries out applied research of direct value to private and public enterprises and of wider benefit to society. Two thirds of the research revenue is derived from contracts with industry and from publicly financed research projects. One third is contributed by the German federal and Länder governments in the form of institutional funding. Fraunhofer research ranges from next generation internet, augmented reality and virtual factories through to mechatronics and energy technologies.

The research tasks at the 87 institutes of the Leibniz Association (WGL) span knowledge-oriented basic research and applied research and build a bridge between them. Numerous cooperation agreements exist with industry and the public sector. The Leibniz Association also cooperates closely with universities. The members of the Leibniz Association have organized themselves into five Sections which represent the members' scientific profile and specialism's. These sections are: a) Humanities and Education, b) Economics and Social Sciences, Spatial Sciences, c) Life Sciences, d) Mathematics, Natural Sciences, and Engineering, e) Environmental Research.

German ministerial project funding is characterised by the fact that the preparation of funding, the selection of projects and the monitoring of their implementation, as well as all consultation services for researchers, are provided by dedicated project management agencies (Projekträger). These agencies advise German applicants and their Russian partners about the rules for participation of Russian scientists in German programmes. Some of the most important organisations are represented in a number of cities in Russia, primarily in Moscow (see "Where can I find more information?"). On behalf of the federal ministries the Projekträger contribute to the strategic development of the bilateral cooperation. Their main target in the field of science and technology is to establish a joint funding procedure with a similar project management agency in the partner country.

One project management agency of BMBF is Internationales Büro (International Bureau – IB). IB has been commissioned by BMBF to strengthen the international ties of German universities, research institutes and enterprises with the goal of building up competencies and fostering competitive advantages for industry and

²⁵ Source: <http://www.helmholtz.de/en/>



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the research community in Germany in the areas of research and innovation. On behalf of BMBF, IB funds bilateral German-Russian S&T cooperation projects on the basis of the 1987/2009 agreement of scientific and technological cooperation. Every year, IB allocates BMBF funding for approx. 50 projects with Russian partners.

One project management agency of the BMWI is the Arbeitsgemeinschaft industrieller Forschungsvereinigungen «Otto von Guericke» (German Federation of Industrial Research Associations «Otto von Guericke» - AiF). It promotes applied research and development for the benefit of small and medium-sized enterprises. AiF promotes industrial cooperative research of small and medium-sized enterprises in the pre-competitive stage for the benefit of entire industrial sectors; it is engaged in program management for public R&D-support measures for the benefit of individual companies or Universities of Applied Sciences; it coordinates the ERA-NET [CORNET II](#) (Collective Research Networking). AiF has been engaged in collaboration with Russian partners in the past. Currently, there is no such cooperation.

In addition to the participation in publicly funded projects in Germany, many other opportunities exist for foreign research teams and scientists to become involved in the German work and research system. Many German organisations, in particular foundations, support foreign scientists by awarding scholarships, fellowships and prizes. The key funding organisations for German-Russian science and research cooperation are the German Research Foundation (DFG), the German Academic Exchange Service (DAAD), and the Alexander-von-Humboldt Foundation (AvH). Organisations such as the Konrad-Adenauer-Stiftung (Konrad Adenauer Foundation), Friedrich-Ebert-Stiftung (Friedrich Ebert Foundation), Deutsche Bundesstiftung Umwelt, Foundation for German-Russian Youth Exchange, Volkswagen-Foundation and many others operate special programmes to support research cooperation between East and West.

The DFG - Deutsche Forschungsgemeinschaft (German Research Foundation) is the central self-governing organisation for science and research in Germany. It serves all branches of science and the humanities. Its membership consists of German research universities, non-university research institutions, scientific associations and the Academies of Science and the Humanities.

As a major European funding agency the chief task of the DFG is to select the best research projects by scientists and academics at universities and research institutions on a competitive basis and to finance these projects.

The DFG promotes co-operation with international partners in all of its funding programmes and with a multitude of instruments. The process of European integration led the DFG to focus particular attention on scientific and research cooperation in Europe. The DFG is active in research policy and research funding to encourage bi- and multilateral collaboration and help shape the European Research Area.

Russia is a priority country in the DFG's international activities. The DFG has maintained an intensive scientific dialogue with Russia for decades and, since 2003, has supported the development of bilateral co-operation through its own representative office in Moscow. Between 2007 and 2009 the DFG has supported more than 400 funding proposals with participation of Russian scientists. Main partners of the DFG in Russia are the Russian Academy of Sciences (RAS), the Russian Foundation for Basic Research (RFBR), the Russian Foundation for Humanities (RFH).

The German Academic Exchange Service (DAAD) is one of the world's largest and most respected intermediary organisations, mainly known for supporting cross-border academic exchanges of students, post-graduates and professors. DAAD promotes the international relations of Germany's higher education institutions by funding the exchange of students and scholars and by running international programmes and projects. Its programmes are usually open to all disciplines and countries; both Germans and foreigners may benefit from them. Russia is one of the most important partner countries of the DAAD. Since it was founded in 1925, more than 1.5 million



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scholars in Germany and abroad have received DAAD funding. Its budget is derived mainly from the federal funding for various ministries, primarily the German Federal Foreign Office, but also from the European Union and a number of enterprises, organisations and foreign governments. It maintains contact with and provides advice to its main partner countries on every continent via a network of 14 regional offices and 50 information centres. DAAD has one office in Moscow and information centres in St. Petersburg and Novosibirsk.

The Alexander von Humboldt Foundation (AvH) is a non-profit foundation established by the Federal Republic of Germany for the promotion of international research cooperation. It enables highly qualified foreign academics to spend extended research periods in Germany and promotes the resulting academic contacts. AvH maintains an active network of scholars world-wide. From 1953 to 2009, AvH has supported more than 950 scientists and scholars and 163 laureates from Russia and the former Soviet Union.

In addition to the research support at the federal level, the Governments of the German Federal States (“Länder”) are responsible for funding research and teaching at the public universities in their respective state and for contributing to the financing of institutes which are co-funded by the federal government. Numerous programmes and initiatives also exist at the Federal States’ level in which Russian researchers and teams are able to participate.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION AT EUROPEAN CENTRES BASED IN GERMANY: XFEL AND FAIR

German Electron Synchrotron (DESY), with its specialist focus on particle physics, and the Society for Heavy Ion Research (GSI) in Darmstadt offer excellent conditions for high-energy researchers. The technology for the construction of the European XFEL is based largely on the preliminary work of the German Electron Synchrotron DESY. The international convention establishing the European XFEL as a new international research centre was signed at Hamburg Town Hall on 30 November 2009. Hamburg and Schleswig-Holstein had already begun civil engineering work on the XFEL accelerator tunnel and the research campus in January 2009. The entire facility is expected to be commissioned in 2014.

Since it was founded in 1969, the GSI has supplied numerous important contributions to understanding fundamental issues in the field of physics. In spring 2003, the Federal Ministry of Education and Research therefore decided to build a new accelerator centre in cooperation with GSI and international partners - FAIR (Facility for Antiproton and Ion Research). An international convention establishing FAIR as a new research centre was signed at Schloss Biebrich in Wiesbaden on 4 October 2010. At the same time, the international FAIR GmbH was founded, which will be in charge of constructing and operating the facility. The many participating research institutes in Germany and abroad are already conducting preparatory research and development activities. The construction work is to start in winter 2011/2012; the facility is to be fully operational by 2018.

WHERE CAN I FIND MORE INFORMATION?

Embassy of the Federal Republic of Germany in Moscow

(Deutsche Botschaft Moskau)

ul. Mosfilmovskaya 56,

119285 Moscow, Russia

Tel. +7 495 937 9500

Fax +7 495 938 2354

www.moskau.diplo.de

Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung (BMBF))

Bonn Office

Heinemannstr. 2, D-53175 Bonn, Germany



GERMANY



Tel. + 49 228 99 57 0

Fax +49 228 99 57 8 3601

information@bmbf.bund.de; www.bmbf.de/en

International Bureau of the BMBF at the DLR (Internationales Büro des BMBF beim DLR (IB))

Heinrich-Konen-Str.1,

D-53227 Bonn, Germany

Tel. +49 228 3821 453

Fax +49 228 3821 444

ib@dlr.de; www.internationales-buero.de

German Research Foundation (Deutsche Forschungsgemeinschaft (DFG))

DFG-Moscow Office

Kasacij Pereulok 5/2

119017 Moscow, Russia

Tel. +7 (495) 9562690

Fax +7 (495) 9562706

russia@dfg.de; www.dfg.de/russia/

German Academic Exchange Service (Deutscher Akademischer Austauschdienst (DAAD))

Moscow Branch Office

Leninskij prospekt 95a,

119313 Moscow, Russia

Tel. +7 495 132 24 29, 132 23 11

Fax +7 495 132 49 88

daad@daad.ru; www.daad.ru, www.daad.de

Alexander von Humboldt Foundation (AvH)

Jean-Paul-Str. 12,

D-53173 Bonn, Germany

Tel.: +49 228 833 0

Fax: +49 228 833 199

info@avh.de; www.humboldt-foundation.de/web/home.html

Max-Planck-Society

(MPG Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V. (MPG))

Hofgartenstraße 8, D-80539 Munich, Germany

Tel. +49 89 2108 0

Fax +49 89 2108 1111

post@gv.mpg.de; www.mpg.de/english/portal/index.html

Deutsches Historisches Institut Moskau DHI

Nachimovskij Prospekt 51/21,

117418 Moscow, Russia

Tel. +7 499 744 45 95 / 49 02 / 45 62 / 47 81

Fax +7 499 120 5213

dhi@dhi-moskau.org; www.dhi-moskau.org

Helmholtz Association

Moscow Office

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Malaya Pirogovskaya 5

119435 Moscow

Russian Federation

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moscow@helmholtz.de; www.helmholtz.ru

Federal «Research and Innovation» Funding Advisory Service

c/o Project Management Jülich (PtJ)

Forschungszentrum Jülich GmbH

Zimmerstrasse 26-27

10969 Berlin

Tel. +49 30 20199 – 463 / -436 / -518 / -419 / -558 / - 417

foerderinfo@bmbf.bund.de; www.foerderinfo.bund.de/en/index.php

Leibniz Association

(Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz e.V. (WGL))

Eduard-Pfähler-Straße 55, D-53113 Bonn, Germany

Tel. +49 228 3 08 15 0

Fax +49 228 3 08 15 2 55

info@leibniz-gemeinschaft.de; www.leibniz-gemeinschaft.de/

Project Management Jülich (PtJ)

Forschungszentrum Jülich GmbH

Zimmerstrasse 26-27

10969 Berlin

Tel. 2461 61-4622

www.ptj.de

AiF - German Federation of Industrial Research Associations

AiF e.V.

Bayenthalguertel 23

50968 Cologne

Germany

Tel. +49 221 37680-0

Fax +49 221 37680-27

info@aif.de; www.aif.de

Hochschulrektorenkonferenz (HRK)

Ahrstraße 39

53175 Bonn

Tel. +49 228 887-0

Fax +49 228 887-110

www.hrk.de



GREECE

BASIC INFORMATION ABOUT THE STRUCTURE OF SCIENCE IN GREECE

Most publicly supported research takes place in universities under the Ministry of Education, Lifelong Learning and Religious Affairs and its institutes.

SUMMARY REVIEW OF SCIENCE & TECHNOLOGY COOPERATION WITH RUSSIA

I. Bilateral cooperation

Greece has signed several agreements with Russia on science and technology cooperation. The most important is the Agreement on Economic, Industrial, Scientific and Technology Cooperation (1993), which established meetings of Joint Ministerial Committees every two years. Additionally, three Protocols have been signed between Greece and Russia. The latest was concluded in 2004 and approved 17 projects (see below):

- Joint Action Plan (2004) for 2004-2006, which amongst others includes bilateral cooperation in science and technology.
- Programme of Cooperation on Culture and Science (2005) for 2005-2007, which includes a reference to scholarships and the exchange of scientists and academics.
- Agreement on Academic Cooperation (2004) between the National Kapodistrian University and the State University of Petrozavodsk of the Republic of Karelia.

II. Cooperation in the European context

Greek-Russian scientific cooperation has also been taking place in the context of European science programmes, such as the EU Framework Programmes for Research & Technological Development, Eureka, INTAS, RIs, ERA.Net RUS and others.

Most important science & research activities with Russia

The National Documentation Centre is supervised by the General Secretariat for Research & Technology of the Ministry of Education, Lifelong Learning and Religious Affairs and has been operating since 1980 at the National Hellenic Research Foundation. In the context of the EU Framework Programmes for Research, it has developed a number of activities in Eastern Europe & Central Asia (EECA), which aim at raising awareness of the EU Framework Programmes and at increasing EECA participation in projects funded by the European Union, thus promoting and expanding the European Research Area.

Specifically, the National Documentation Centre acts as:

- Coordinator of the project “Opening up New and Emerging Science and Technology in NIS countries” (NIS-NEST);
- Partner in the project “Expanding ERA Over Russia” (RusERA-EXE);
- Partner in the project “Ideal-IST- Your Global Partner Search & Support Network for Your ICT Projects” (Ideal-IST).

Links to the websites of these projects are indicated below (see “Where can I find more information”).

Finally, the National Documentation Centre acts as Greek FP7 National Contact Point (NCP) in the following FP7 thematic priorities:

- Specific Programme “Cooperation”: Information & Communication Technology; Energy; Socio-economic Sciences & Humanities;



- Specific Programme “Ideas”;
- Specific Programme “Capacities”: Research Infrastructures; Regions of Knowledge; Research Potential.

As NCP in these thematic priorities, the National Documentation Centre is part of the pan-European NCP networks in each of these areas and cooperates with the corresponding NCPs in Russia and other Eastern European countries.

In accordance with the main purposes and axes of the “2nd BSEC Action Plan on cooperation in science and technology (2010-2014)” the Hellenic Republic, acting as the present country coordinator of the Working Group of cooperation in Science & Technology, is proposing specific initiatives/actions for the upcoming two-year period (2011-2012) establishing close cooperation with the Russian Federation in the following policy domains:

1. Human Resources
2. Capacity building
3. Research infrastructure
4. Innovation
5. Historical Relations and Cultural Ties
6. Synergies and support to multilateral horizontal projects

Significant initiatives are being implemented right now aiming at enhancing cooperation among the countries of the wider Black Sea region with the Russian Federation and the EU Member States (Greece being one of them) in the field of S&T, such as the EU FP7 funded “Linking Russia to ERA” (ERA.Net RUS) and “Networking on Science and Technology in the Black Sea region” (BS-ERANET, ending in 2011). Greece acknowledging the context for sustainable S&T cooperation of mutual interest provided by these projects has contributed more than 1 million euro in their joint calls.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION GREECE- RUSSIA

The Ministry of Education, Lifelong Learning and Religious Affairs

Following the Lisbon Strategy’s goal to open education and training to the world, higher education institutions in Greece have established programmes with other countries (including Russia) for the joint development of innovative activities and the mobility of students, academics and researchers.

At bilateral level, the Ministry supervises projects approved by the Greek-Russian Protocol. Based on the last one in 2004, seventeen joint projects have been agreed: three on space research, three on cultural heritage, one on oceanography, two on bio-materials, and eight on physics and laser technologies. These projects offered opportunities for the exchange of members of scientific groups.

A Protocol has been signed between the General Secretariat for Research & Technology of the Greek Ministry of Education, Lifelong Learning and Religious Affairs and the Russian Academy of Science on cooperation between Greek research institutes and universities and institutes of the Russian Academy of Science in the sectors mentioned above. The General Secretariat for Research & Technology issues calls for proposals, is responsible for the evaluation of the submitted proposals and coordinates meetings for the final selection of the projects. Participating academics and members of research groups freely choose the research centre or university of their preference in consultation with their partners on the other side.

Furthermore, future close cooperation between research centres from both countries is envisaged – it will focus on the fields of biotechnology, nanotechnology and seismology.



GREECE



WHERE CAN I FIND MORE INFORMATION?

General information:

National Hellenic Research Foundation

www.eie.gr

General Secretariat for Research & Technology

www.gsrt.gr

Ministry of Education, Lifelong Learning & Religious Affairs

www.minedu.gov.gr

National Documentation Centre

www.ekt.gr

Specific information:

Projects of the National Documentation Centre (EKT)

www.ekt.gr/about/projects.htm

www.ekt.gr/fp7/

www.ekt.gr/econtentplus

www.ekt.gr/ncpfp6/fp6/index.html

NIS-NEST Project

www.nisnest.gr

RUSERA- EXE

www.rusera-exe.ru

Ideal-Ist

www.ideal-ist.net

National Documentation Centre (EKT) - National Contact Point for FP7

www.ekt.gr/fp7/

National Documentation Centre (EKT) projects funded by the EU

www.ekt.gr/en/about/projects.htm

NEST-IDEA project

<http://nest-idea.kpk.gov.pl/whatis.html>

ADMIRE-P, SITE and RECISt projects

www.singleimage.co.uk/russia-in-ist/index.php?option=com_content&task=view&id=19&Itemid=28

RUSERA project

www.rusera.tpu.ru

ERA.Net RUS

<http://www.eranet-rus.eu>

BSEC

<http://www.bsec-organization.org/Pages/homepage.aspx>



HUNGARY

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN HUNGARY

Hungary has a long tradition of scientific research. Most publicly supported research takes place in universities and institutes of the Hungarian Academy of Sciences, Hungary's main organisation dedicated to scientific research in the areas of human, natural, economic and engineering sciences. Public support for science is provided by the Ministry of National Resources, the Ministry of National Development, the Ministry of National Economy and the regional governments. In addition, the National Innovation Office, Hungary's semi-public science funding agency, disburses grants on the basis of regular calls for proposals. Industrial research takes place outside the purview of the public sector.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Hungary and Russia have a long history of cooperation in science, dating back to the early 19th century. Scientific cooperation received a new impetus after the conclusion of an Agreement on Scientific Co-operation between Hungary and the Russian Federation in 1993. Based on this Agreement, calls for research proposals have been conducted jointly by the National Office for Research and Technology (as predecessor in title of the National Innovation Office) and the Ministry of Education and Science (Russia). Hungary and Russia signed an Agreement for cooperation in nanotechnology in 2006.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION HUNGARY- RUSSIA

In general, Hungarian researchers and research organisations are entitled to include partners from other countries (including Russia) in research projects for which they apply for support from Hungarian national funding sources. In most cases, however, Hungarian national funding may be used only to support the activities of Hungarian researchers and organisations, but the details should be checked in each individual case.

The Ministry of National Development offers support funds for Hungarian researchers & research organisations to participate in international projects and for research visits of Hungarian scientists abroad (including to Russia). The Ministry also offers a limited number of bursaries to support short-term visits (up to six months) of foreign scientists in Hungary for research and for teaching courses at Hungarian universities and institutes.

The National Innovation Office (NIO) conducts regular calls for research proposals, including with an international component.

The Hungarian Academy of Sciences (HAS) operates a conference support programme to support Hungarian institutes in the organisation of scientific meetings, seminars, and workshops, including those with international participation.

Hungarian National Contact Points offer a broad range of support & information services to the Hungarian scientific community. They may also be contacted for tailor-made partner searches and scientific «match-making» (see «Where can I find more information?» below).

A number of Hungarian foundations and trusts support scientific research as well as research & lecturing visits of Hungarian citizens abroad and research & lecturing visits of foreign nationals to Hungary. Opportunities for international cooperation in projects supported by these organisations should be checked at source (see «Where can I find more information?» below).



HUNGARY



Many Hungarian universities and research institutes have their own international cooperation offices and may be contacted directly.

WHERE CAN I FIND MORE INFORMATION?

Hungarian Ministry of National Development

1440 Budapest, Pf.1.

Tel.: +(36-1) 795-6766 or 1700

Fax: +(36-1) 795-06-97

www.nfm.gov.hu

Hungarian Academy of Sciences (HAS)

Department for International Co-operation

H-1051 Budapest, Nádor u. 7

Tel.: +(36-1) 411-6111

Fax: +(36-1) 411-6121

www.mta.hu

National Innovation Office (NIO)

H-1117 Budapest, Neumann J. u. 1/C.

Tel.: (+36-1) 371-1735

Fax: (+36-1) 266-0801

www.nih.gov.hu

Hungarian National Contact Points

Names and contact details can be found here:

<http://www.nih.gov.hu/english/fp7-national-contact/hungarian-ncp-members-080519>

Hungarian Scientific Research Fund (NSRF)

H-1093 Budapest, Czuczor u. 10.

Tel.: (+36-1) 219-8700

Fax: (+36-1) 219-8756

www.otka.hu

Hungarian Science and Technology Foundation (TETALAP)

1027 Budapest, Bem József u. 2.

Tel.: (+36-1) 214-7714

Fax: (+36-1) 214-7712

www.tetalap.hu



IRELAND

BASIC INFORMATION ABOUT THE STRUCTURE OF SCIENCE IN IRELAND

In July 2003, Science Foundation Ireland (SFI) was established on a statutory basis under the Industrial Development Act 2003. The Agreed Programme for Government, published in June 2002, provided for establishing SFI as a separate legal entity. SFI had been set up in 2000 as a sub-board of Forfás (national policy and advisory board for enterprise, trade, science, technology and innovation) to administer Ireland's Technology Foresight Fund. SFI provides awards to support scientists and engineers working in biotechnology and information & communications technology development.

SFI is a key organisation in the implementation of the Irish National Development Plan 2007-2013 (NDP) and the Strategy for Science, Technology and Innovation 2006-2013 (SSTI, www.entemp.ie/publications/science/2006/sciencestrategy.pdf). A sum of 8.2 billion Euro has been allocated for scientific research under the NDP and SSTI, of which SFI has responsibility to invest 1.4 billion Euro. SFI will continue to invest in academic researchers and research teams who are most likely to generate new knowledge, leading edge technologies and competitive enterprises in the fields underpinning two broad areas:

- Biotechnology,
- Information and communications technology.

In 2008 SFI's remit was extended to include sustainable energy and energy-efficient technologies.

In addition, the Research Frontiers Programme supports the very best research in a broad range of disciplines in science, mathematics and engineering. SFI makes grants based on the merit review of distinguished scientists. SFI also advances co-operative efforts among education, government, and industry that support its fields of emphasis and promotes Ireland's achievements around the world.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Science cooperation has been included in the three-year programme on bilateral cooperation in culture, science and education in 2008-2010, part of the Ireland-Russia agreement on cooperation in culture (1991) and approved in January 2008.

Science cooperation of Ireland with Russia is also implemented through various links and partnerships established and maintained by universities. For instance, the Dublin Institute of Technology (www.dit.ie) undertakes joint research on advanced materials with the S.I. Vavilov State Optical Institute, St. Petersburg, funded by DIT under the International Collaboration Award Scheme. Trinity College, University of Dublin (the Microelectronics Technology Laboratory) implements research activities in microelectronic materials and nanotechnology, including collaboration with the Ioffe Physico-Technical Institute, St.-Petersburg, the Physics Department of Lomonosov State University, the Vavilov State Optical Institute, St.-Petersburg, and the Institute of Radio Engineering and Electronics of the Russian Academy of Sciences. The University of Limerick cooperates with the Diplomatic Academy of the Ministry for Foreign Affairs of the Russian Federation.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION IRELAND - RUSSIA

SFI provides grants for researchers from around the world who wish to relocate to Ireland and those already based in Ireland, for outstanding research visitors, for conferences and symposia, and for collaboration with industry. SFI chooses award recipients in the fields of biotechnology, ICT and sustainable energy and energy-efficient



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technologies through merit review by distinguished scientists. In addition, the Research Frontiers Programme supports the very best research in a broad range of disciplines in Science, Mathematics and Engineering. SFI has a flexible grants and awards portfolio and several times a year issues calls for proposals from scientists and engineers. SFI also continues to help SFI-funded researchers build partnerships with industry. The Summary List of SFI Award Programmes is available at <http://www.sfi.ie/funding/funding-calls/open-calls/>

Information and Communications Technology Directorate

SFI believes that the advancement of ICT will depend upon researchers able to push the bounds of knowledge, including bridging traditional disciplines. SFI has therefore established an open and ambitious funding scheme to fund proposals that link highly sophisticated research with a vision for the ICT and Biotechnology of tomorrow. We want proposals charged not only with substance and expertise but also with passion and creativity. In particular, we are interested in research programmes that might carry the evolution of ICT forward in the following areas:

- Software and applications, including communications, security, reliability, user-interfaces, and simulation and modelling;
- Components and devices, including photonics, wireless electronics, or their integration; novel architectures; and nanoscale assembly;
- Networks, including high-speed, broadband, wireless, or mobile transmission; voice, data, or video technology; digital signal processing; network management; switching; and next generation internet;
- Systems, including distributed or parallel systems, and engineering for system reliability, predictability and security.

Biosciences and Bioengineering Directorate

The Biosciences and Bioengineering directorate supports research in the biological and other sciences underpinning biotechnology including bioengineering. No sub-specialities are highlighted to avoid restricting the most creative potential investigator initiated proposals. Excellence of the proposal coupled with the greatest perceived potential for seizing opportunities as they arise during the course of the work, will be the criteria for successful selection.

Encouragement of an entrepreneurial science culture is another key feature of the directorate, as is dissemination of information on biological and biotechnological advances to the wider, non-scientific community.

Frontiers Engineering and Science Directorate

The main programme in the Frontiers Engineering and Science (FES) Directorate is the Research Frontiers Programme (RFP). Its goal is to support the very best research in a broad range of disciplines in science, mathematics and engineering and the competition is driven by the scientific merit of the proposals. The RFP programme provides support for post-doctoral fellows and especially post-graduate students. It also supports a wide range of research in fields such as mathematics, physics and chemistry.

In addition to RFP, the FES directorate manages two initiatives. The Mathematics Initiative was launched in 2005 and is intended to encourage mathematical research that has a potential impact on enterprise, industry, science, engineering and mathematical education.

WHERE CAN I FIND MORE INFORMATION?

Science Foundation Ireland

www.sfi.ie

Enterprise Ireland

Enterprise Ireland is the Irish state development whose core mission is to accelerate the development of



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world-class Irish companies to achieve strong positions in global markets resulting in increased national and regional prosperity. The main goals of Enterprise Ireland are to increase export sales; invest in research and innovation; compete through productivity; and to start up/scale up indigenous Irish companies.

www.enterprise-ireland.com or www.enterprise-ireland.ru (in Russian)

Forfás

Forfás is Ireland's national policy and advisory board for enterprise, trade, science, technology and innovation. It operates under the auspices of the Department of Enterprise, Trade and Employment.

www.forfas.ie

Department of Enterprise, Trade and Innovation

(Information about import license, work permissions, industry related issues, etc.)

<http://www.deti.ie/>

Tel.: +353 1 631-2121

Irish Patents office

(Information about registration & application of patents and property rights in Ireland)

www.patentsoffice.ie

Tel.: +353 56 772-0111

Dublin Institute of Technology

www.dit.ie



ITALY

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN ITALY

Italy has a long tradition of scientific research. Most publicly supported research takes place in universities and in institutes of the public organisations dedicated to scientific research in the different areas of fundamental and applied research, the most important of them being the Consiglio Nazionale delle Ricerche (CNR), the Ente Nazionale per le Energia e l'Ambiente (ENEA), the Istituto Nazionale di Fisica Nucleare (INFN), the Istituto Nazionale di AstroFisica (INAF), the Istituto Superiore di Sanità (ISS). Public support to science is provided by the Ministry of Education, University & Research, the Ministry of Industrial Development, the Ministry of Health, the Ministry of Environment and other Ministries, and the regional governments. In addition Italian universities and public science funding agencies disburse grants on the basis of regular calls for proposals. Industrial research takes place outside the purview of the public sector.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Italy and Russia have a long history of cooperation in science, dating back to the early 19th century. The bilateral general agreement between Italy and the USSR was renewed with the bilateral general agreement between Italy and the Russian Federation signed in 1995. The bilateral agreement is implemented by biannual executive protocols for co-funded calls for exchange of scientific visitors between the two countries. A large part of the cooperation between Italy and Russia is based on direct contacts between researchers and research organisations from the two countries (such as the agreement between the Consiglio Nazionale delle Ricerche (CNR) and the Russian Academy of Sciences (RAS), the Ente Nazionale per l'Energia e l'Ambiente (ENEA) and the Russian Ministry of Industry and Energy, the Istituto Nazionale di Fisica Nucleare (INFN) and the RAS, INFN and the Joint Institute of Nuclear Research (JINR) in Dubna (Russia), and a number of agreements between Universities or University's departments with Russian scientific institutions, or takes place in the context of multilateral programmes such as the Centre Européenne pour la Recherche Nucléaire (CERN), the EU Framework Programmes and the JINR. A new instrument for scientific cooperation has been added in 2006 with the signature of the agreement between CNR and the Russian Foundation for Basic Research (RFBR). A number of agreements have been signed by regional governments and other local institutions with regional authorities and local institutions in Russia.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION ITALY - RUSSIA

In general, Italian researchers and research organisations are entitled to include partners from other countries (including Russia) in research projects for which they apply for support from Italian national funding sources. In most cases, however, national funding may be used only to support the activities of Italian researchers and organisations, but the details should be checked in each individual case.

Ministry of Foreign Affairs (MAE): Supports funds for research visits of Russian scientists to Italy, either by funding bursaries (including Russia) by an annual funding call, or through the bilateral projects included in the biannual protocol of implementation of the bilateral research agreement of 1995.

Ministry of Education, University & Research: Supports funds for Italian researchers & research organisations to participate in international projects and for research visits of Italian scientists abroad (including in Russia). The Ministry also offers a limited number of bursaries to support short-term visits



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(up to six months) of foreign scientists in Italy for research and for teaching courses at Italian universities and institutes.

National Council for Research (Consiglio Nazionale delle Ricerche, CNR): Regular calls for research proposals, including with an international component. Joint calls with the Russian Academy of Sciences (RAS) are conducted each two years.

The Short Term Mobility (STM) Program enables Italian scholars to carry out research activities in cooperation with foreign Universities and Research Institutions of clear international standing.

It also enables highly qualified foreign researchers, belonging to foreign Universities and Research Institutions of clear international standing, to be invited to carry out research in cooperation with CNR Institutes.

CNR does therefore finance short - term stays of 21 days of Italian researchers and 10 days of foreign researchers engaged in international research projects of mutual interest.

Italian National Agency for New Technologies, Energy & Environment (Ente Nazionale per l'Energia e l'Ambiente, ENEA): Regular calls for fellowships for foreign young researchers. It has collaborations with RosAtom agency, with institutes of Russian Academy of Medical Sciences, with the National Research Centre «Kurchatov Institute» and other Russian Institutions.

National Institute of Nuclear Physics (Istituto Nazionale di Fisica Nucleare, INFN): It has many collaborations with several Russian institutions of the RAS, as well with the International Laboratories of the JINR in Dubna, and several universities (Moscow State University, Moscow State Engineering Physics Institute) in different fields of physics studies. Some of these collaborations are also included in the above mentioned biannual protocol of implementation of the bilateral research agreement of 1995 of the Ministry of Foreign Affairs. It has also a programme of support for scientific research as well as research & lecturing visits of Italian citizens abroad and research & lecturing visits of foreign nationals to Italy. This program proceeds on direct collaboration among research teams.

National Institute for Astrophysics (Istituto Nazionale di Astrofisica, INAF): It has long dating important collaborations with institutes of the Russian Academy of Sciences and the Moscow Lomonosov State University, mainly in the fields of space research and astrophysics of particles.

National Institute for Geophysics and Volcanology (Istituto Nazionale di Geofisica e Vulcanologia, INGV) has collaboration with the Institute of Space Physics Research in Kamchatka for the study of the terrestrial magnetic field at poles.

A number of Italian foundations and trusts support scientific research as well as research & lecturing visits of Italian citizens abroad and research & lecturing visits of foreign nationals to Italy, such as: Scuola Normale Superiore (SNS) in Pisa, International Centre for Theoretical Physics (ICTP) in Trieste, Eni-corporate University in Milan, Ansaldo Nucleare S.p.A. in Genova, etc. Opportunities for international cooperation in projects supported by these organisations should be checked at source (see «Where can I find more information?» below).

Many Italian universities and research institutes have their own international cooperation offices, which may be contacted directly.



ITALY



WHERE CAN I FIND MORE INFORMATION?

Italian Ministry of Education, University & Research

www.miur.it

Italian National Agency for New Technologies, Energy and the Environment (ENEA)

www.enea.it

National Council for Research (CNR)

www.cnr.it

Italian Ministry of Foreign Affairs

www.esteri.it

National Institute of Nuclear Physics (INFN)

www.ac.infn.it

National Institute for Astrophysics (INAF)

www.inaf.it

National Institute for Geophysics and Volcanology (INGV)

<http://www.ingv.it/eng/>

Scuola Normale Superiore (SNS)

www.sns.it/en/

ENI, Corporate University

www.eni.com

International Centre for Theoretical Physics (ICTP)

www.ictp.it

Ansaldo Nucleare S.p.A

www.ansaldonucleare.it



LATVIA

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN LATVIA

Latvia has a long tradition in scientific research. Traditionally well developed fields are wood chemistry, material research, physics, biology, organic synthesis etc. The critical mass of research is located in 12 state research institutions and 45 institutes, affiliated with 6 state universities. Public support for science as well as development of research policy is provided by the Ministry of Education and Science. The Latvian Science Council is responsible for funding fundamental and applied research based on competition between proposals. In addition, support to innovation and private-sector industry oriented research is provided by the Ministry of Economics in cooperation with the Investment and Development Agency of Latvia.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Due to the coexistence in a common state during the Soviet period, Latvia and Russia have a long history of collaboration in science. Thanks to numerous orders and contracts with the Russian industrial and military sector, many research establishments were created in Latvia at that time. An example is the nuclear research reactor in Salaspils. In parallel, close collaboration in basic research was developed. Some examples are the St. Petersburg (formerly - Leningrad) State institute for optics ("GOI") has had collaboration agreements with the Latvian Institute of Solid State Physics (for research of laser glass and silicate glass), with the Laboratory of Spectroscopy Problems at the University of Latvia (for the development of new laser media), and others. The Institute of Astronomy at the University of Latvia has had close collaboration with the Sternberg's Institute of Astronomy at the Moscow State University as well as with the Central Astronomical Observatory at Pulkovo, Russia.

Since Latvia's independence, scientific collaboration with Russia has been somewhat less intense, partly due to the lack of funding. The governments of Latvia and Russia have been making efforts to conclude an agreement on cooperation in education and research. Existing collaboration is based mainly on direct contacts between researchers and institutes, often established in former times and having been sustained over many years of working together. Various legal frameworks for the collaboration between Latvian and Russian researchers have been used, such as INTAS, NATO "Science for Peace", Baltic Sea Region INTERREG, Nordic framework "Nordic, Baltic, Russian Network".

Several bilateral cooperation agreements between research and higher education institutions in both countries have been concluded (University of Agriculture – Russian Academy of Agriculture; Latvian State Institute of Physical Energetics – Nuclear Research Centre in Dubna; Riga Technical University - Technical University of St. Petersburg, etc.). University of Latvia, Institute of Electronics and Computer Science, Institute of Mathematics and Computer Science of University of Latvia, Latvian Institute of Organic Synthesis, Institute of Physics of University of Latvia and other research institutions also cooperate with Russia in different science fields.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION LATVIA-RUSSIA

Interest in developing research collaboration further is high in both countries, especially at the level of researchers and research institutes. Thanks to well established personal contacts, Latvian researchers and research teams often include partners from Russia in the preparation of research proposals for application to the EU Framework Programme for Research & Technological Development, as well as other programmes.

A separate cooperation agreement has been concluded between the Latvian Academy of Sciences and the Russian Academy of Sciences. Amongst others, short-term visits of researchers are foreseen in the framework of this agreement.



LATVIA



WHERE CAN I FIND MORE INFORMATION?

Ministry of Education and Science of the Republic of Latvia

Department of Science, Technology and Innovation

Valnu str. 2, Riga, Latvia, LV-1050

Tel.: +371 67 047 896

Fax: +371 67 047 996

E-mail: info@izm.gov.lv; www.izm.gov.lv

Latvian Academy of Sciences

Akademijas laukums 1, Riga, Latvia, LV-1050

Tel.: +371 67 225 361

Fax: +371 67 821 153

E-mail: lza@lza.lv; www.lza.lv

EU 7th Framework Programme

Latvian National Contact Point

Merkela str, 11, Riga, Latvia, LV-1050

Tel.: +371 67 227 151

Fax: +371 67 702 489

E-mail: nkp@sza.gov.lv; www.sza.gov.lv

Latvian Science Council

Akademijas laukums 1, Riga, Latvia, LV-1050

Tel.: +371 67 225 164

Fax: +371 67 223 211

E-mail: lzp@lzp.gov.lv; www.lzp.lv

EUREKA and EUROSTARS in Latvia contact

Latvian Academy of Sciences Centre of European Programs

Akademijas laukums 1, Riga, Latvia, LV-1050

Tel.: +371 67 543 307

Fax.: +371 67 227 790

E-mail: beverte@edi.lv; www.lza.lv

EURAXESS Latvia

Dzerbenes str. 27, Riga, Latvia, LV-1006

Tel.: +371 67 553 591

Fax: +371 67 550 635

E-mail: info@euraxess.lv; www.euraxess.lv



LITHUANIA

BASIC INFORMATION ABOUT THE R&D STRUCTURE IN LITHUANIA

The Lithuanian R&D system consists of: 14 state and 8 private universities; 11 state research institutes or research centres. In Lithuania, there are about 18,000 researchers, 6,400 of them having research degrees, 10.7% of researchers work in the sectors of business and industry.

The organisational structure of the main state authorities, bodies and institutions involved in science & technology policy consists of:

The Ministry of Education and Science, in coordination with Research Council of Lithuania, sets priorities for research and technology development.

The Research Council of Lithuania (RCL) is a state budget institution that acts as an expert in science policy and as an advisory body to the Parliament of Lithuania (Seimas) and the Government on strategic issues of research and higher education. Lithuanian R&D funding system is being reformed after a new law on Education and Science was adopted by the Parliament on 30 April 2009. RCL is a core body of these reforms and is entrusted to implement the grant-based research funding. The role of RCL is to use funding mechanisms to bring Lithuanian research closer to international standards. RCL seeks for the research system that would efficiently contribute to the developments of national economy, international co-operation, higher education, and social development. RCL administers a competition-based research funding programme.

The Lithuanian Academy of Sciences (LMA) is a budgetary institution, which brings together the most distinguished Lithuanian scientists and foreign scientists whose academic activities are related to Lithuania. Lithuanian Academy of Sciences sets up scientific research and expert groups, commissions, committees, temporary bodies; concludes co-operation agreements with scientific and higher education institutions and organisations in Lithuania and abroad; encourages young scientists and students to engage in scientific research work, grants scholarships to excellent students, sends young scientists on sabbaticals or work at scientific centres abroad. LMA serves as a consultant to the Parliament and the Government on strategic issues of research and higher education.

The State Studies Foundation (SSF) implements state policy in the field of science and studies through the administration of monetary resources. The SSF is a state budgetary institution, which administers financial support for higher education (HE) students. While implementing higher education policies, ensuring accessibility and quality of higher education, and managing the financial support for students, the SSF administers state loans and state-supported loans and grants to HE students, including special (additional) grants to students of the third cycle – doctoral candidates.

The Agency for Science, Innovation and Technology, established under the Ministry of Science and Education and the Ministry of Economy, is responsible for the administration and coordination of the EU Framework Programmes for Research & Technological Development, EURATOM, EUREKA, EUROSTARS, and other programmes and activities in Lithuania related to international science, research and technology development. It implements assigned programmes and measures promoting innovation, networking and development, and encouraging cooperation between business and science. The Agency also participates in science, technology and innovation policy formulation, plays an active role in making proposals to the Lithuanian legislative branch to facilitate and strengthen Lithuania's participation in international R&D programmes. The Agency works to ensure cooperation between academic and industrial communities by promoting participation in EU research and technology development projects as well as by promoting science, research and innovation activities to the society.



LITHUANIA



Higher Education Sector & Research Institutes

In Lithuania, 2/3 of research and experimental development is carried out at universities, in order to ensure a high quality level of university studies.

State research institutes established to carry out long-term high-level research are important for the Lithuanian economy, culture, development of industry and international cooperation. To reinvigorate national research, the network of research institutes was reformed by identifying the strongest and most promising areas of research and making necessary institutional changes. To strengthen fundamental research, 17 research institutes were integrated into universities. They provide the research basis for university education and doctoral studies. In addition to academic research, the sector of applied science is being rebuilt as well, using the models of best international practice. National applied research resources are being consolidated into high technology hubs; 5 integrated research centres were established uniting the human and material resources of 14 research institutes.

SUMMARY REVIEW OF R&D COOPERATION WITH RUSSIA

Lithuania and Russia have in principle agreed, but have not yet signed an inter-governmental agreement on cooperation in culture, science, education and youth policy. In practice, cooperation in R&D is usually based on institutional agreements between Lithuanian and Russian universities or research institutes. At present, there are more than 20 institutional agreements with Russian partners, and Lithuanian universities and research institutes have many R&D projects with Russian institutions. Their cooperation includes literature, history, health, veterinary studies, hygiene, biotechnology, geology, geography, semiconductor physics, ecology, energy research.

WHERE I CAN FIND MORE INFORMATION?

Ministry of Education and Science of the Republic of Lithuania

Tel: +3705 219-1125 / 219-1152

Fax: +3705 261-2077 / 219-0100

smmmin@smm.lt; www.smm.lt

Contacts:

Albertas Žalys, Director, Department of Higher Education, Science & Technology Albertas.zalys@smm.lt

Jūratė Devižienė, Deputy Head, Division of International Cooperation jurate.deviziene@smm.lt

Ruta Jacinavičienė, Division of International Cooperation ruta.jacinaviciene@smm.lt

Agency for Science, Innovation and Technology <http://www.tpa.lt/ENG/index.htm>

Research Council of Lithuania <http://www.lmt.lt/EN/ABOUT/index.php>

State Studies Foundation <https://www.vsf.lt/en>

Lithuanian Academy of Sciences <http://lma.lt/index.php?lang=en>

Lithuanian Institutions of Education and Science <http://www.aikos.smm.lt/aikos/institutions.htm>



LUXEMBOURG

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN LUXEMBOURG

The implementation of an effective research and development (R&D) and innovation policy is a priority for the Luxembourg government, which has devoted itself to increasing R&D related expenses to 2.6% of the Gross Domestic Product (GDP), conforming to the objectives laid out by the “Europe 2020” strategy.

The policy of the Luxembourg government relating to research, development and innovation follows concrete objectives:

Research and innovation for economic growth

R&D and innovation are considered to be at the centre of growth and competitiveness in the Luxembourg economy. The government places particular importance on increasing collaboration between public research and research carried out in the private sector. In order to strengthen and consolidate long term economic competitiveness, the governmental actions are based on the “knowledge triangle” concept, which aims at strengthening actors’ potential in generating knowledge through research and disseminating the acquired knowledge through higher education as well as applying it through innovation. Its implementation therefore requires close coordination between higher education, research and innovation.

Giving an international dimension to research in Luxembourg

With the objective of adding an international dimension to Luxembourg’s research, the government is encouraging scientific collaborations and researcher mobility. It also aims to strengthen the participation in European research programmes as well as scientific and international technology cooperation initiatives amongst Luxembourg actors.

Innovation and private research at the centre of economic competitiveness

Concerning innovation and private research, the government aims to maintain and reinforce competitiveness of Luxembourg companies by encouraging them to develop their technological know-how, create new economical activities and generate additional added value. The technology and innovation policy is intended to encourage companies to undertake R&D and innovation efforts.

Public research, a successful key sector

Concerning public research, the government is heading a policy intended on developing and consolidating scientific and technological capacities, in collaboration with the private sector. The governmental action is based on a multi-annual programming strategy supported by agreements between the government and public research actors. It covers research with both business and social purposes. The activities implemented by the National Research Fund (FNR) and Luxinnovation, the National Agency for Innovation and Research, are part of this policy.

Several key actors actively contribute to forming and defining the R&D and innovation landscape in Luxembourg. These actors take on different functions and roles.

Governance bodies

Several governance bodies are in charge of defining and implementing policies relating to R&D and innovation in Luxembourg. Three ministries are actively involved: the Ministry of the Economy and Foreign Trade, the Ministry of Small and Medium-Sized Businesses and Tourism and The Ministry for Higher Education and Research.

The National Research Fund (FNR) is in charge of supporting and promoting public research in Luxembourg, in order to enhance the competitiveness and visibility of public research on the international level.



LUXEMBOURG



Luxinnovation, the National Agency for Innovation and Research in Luxembourg, offers advice and personalised support to all actors of the sector. The Agency is part of the main European networks in the R&D and innovation field and advises the government on policies related to the sector.

Public research actors

A number of public research organisations pursue research activities in Luxembourg. The three Public Research Centres (CRP Santé, CRP Gabriel Lippmann and CRP Henri Tudor) undertake research in various sectors. The University of Luxembourg, structured into 3 faculties, focuses on several research priorities and on international cooperation. The CEPS/INSTEAD carries out research in the socio-economic field in Luxembourg. The Virtual Resource Centre for Knowledge about Europe uses information and telecommunication technologies in order to publicise the history of European construction.

The Research Centre of the National Museum of Natural History undertakes research on a number of different subjects relating to natural heritage, with the goal of contributing to its preservation. The Integrated Biobank of Luxembourg (IBBL) is an independent bio-banking and biotechnology foundation created to act as an international centre of excellence for biobanking and biospecimens research. In addition, several other public research organisations carry out research activities in Luxembourg.

Chambers and professional federations

The Chambers and professional federations bring together companies located in Luxembourg. The objectives are to promote the R&D and innovation-related activities as well as to uphold the interests of their members.

The Chamber of Commerce gathers all enterprises established in Luxembourg and is the spokesperson for general economic interest. The Chamber of Trades represents and defends skilled crafts in Luxembourg. The Fedil - Business Federation Luxembourg - gathers enterprises of the industrial, construction and services sectors. The Fédération des Artisans brings together tradesmen in Luxembourg. The Luxembourg Trade Confederation (clc) regroups professional federations of the commercial, transport and services sectors.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

So far, science and research cooperation between Russia and Luxembourg has been organised on a project basis. However, the wish for an increased cooperation has been expressed and first contacts have been established, notably between the National Research Fund Luxembourg and the Russian Foundation for Basic Research.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION LUXEMBOURG-RUSSIA

In addition to the cooperation opportunities offered by the EU's Seventh Framework Programme for Research & Technological Development (FP7), the National Research Fund of Luxembourg (FNR) has developed the following tools to promote international cooperation and mobility:

INTER Programme: Promotion of International Cooperation

Duration: 2006-2014

Budget 2011-2013: EUR 12,000,000

Players involved in Luxembourg public research and international experts recognise the need for international cooperation, particularly with a view to giving research in Luxembourg a higher profile in other countries and to achieving a critical mass within research that cannot be sought if the research context is limited to Luxembourg.



As a result, the INTER programme was created to promote international scientific cooperation, to create synergies between research centres within and outside Luxembourg, to achieve a critical mass in certain fields, to take a better approach to the resolution of certain transnational issues, and to make research in Luxembourg more visible and more competitive.

In order to do this, the INTER programme does not involve participation in individual projects at international level, but solely participation in international programmes that will be developed jointly with other research funds or councils outside Luxembourg, or in programmes already in place at international level in which the Fund may decide to participate.

Since the start of the INTER programme in 2006, 56 calls for proposals have been launched and the FNR has already allocated over EUR 9 million.

ATTRACT Programme: Opportunities for Outstanding Young Researchers in Luxembourg

Duration: 2006-2013

The ATTRACT Programme aims to build on the excellence, dynamism and creativity of research in Luxembourg by attracting young researchers with a high level of ability in science or technology and proven experience in a professional research context.

The programme is designed for researchers not yet established in Luxembourg; it offers them the opportunity to set up an independent research team within a public-sector research institution in Luxembourg that is willing to host them. Research proposals should be submitted jointly by the candidate and the host institution.

Projects submitted should be innovative and of high scientific quality and candidates must be able to show that they have gained a minimum of two and a maximum of eight years' professional experience since successful completion of doctoral studies. Projects selected under the ATTRACT programme have a lifespan of five years and the financial contribution by the FNR will be up to EUR 1,500,000.

AFR Grant Scheme

Since 1 October 2008, the FNR has been awarding the AFR Grants (Aides à la Formation- Recherche) to support researchers in their doctoral and postdoctoral training.

The AFR grant scheme has no thematic limitations and is open to all researchers, regardless of their nationality, who are desirous to engage into research training in Luxembourg or abroad. However, the interest of the project in the context of Luxembourg R&D will be evaluated in the selection process.

The initial duration for PhD grants is limited to 3 years with a prolongation possibility of at maximum 1 year. Postdoctoral training is financed up to 2 years. The main novelty of the AFR scheme is the promotion of work contracts between AFR beneficiaries and their host institutions. The beneficiaries are entitled to full access of social security coverage, including health and pension insurances, during the whole duration of their research training. For further information on the AFR and upcoming calls, please visit the AFR website www.afr.lu.

Mobility Fellowship: Accompanying Measure AM2c - Mobility of Researchers

The measure AM2c allows foreign researchers to come to Luxembourg and researchers from Luxembourg to go abroad for a period of support from 1 month up to 1 year. Exchanges of researchers between co-operating Luxembourg and foreign organisations are strongly encouraged. Eligible are researchers from public research institutions or public bodies with a research mission in Luxembourg. There is no distinction or limitation in the age of the applicants or the countries involved. The stay must be in connection with a research project in



LUXEMBOURG



collaboration with a Luxembourg research institution or public body and a research institution from abroad. Up to EUR 3,000 per month for expenses will be provided by the FNR.

European Research Consortium in Informatics and Mathematics (ERCIM) grants

ERCIM is a consortium bringing together research institutes of 20 European countries in the field of information technology and applied mathematics.

ERCIM grants are intended to attract young researchers of post-doctoral level from anywhere in the world to work on a research problem at two research centres in the ERCIM network.

Twice a year the FNR issues calls for the award of two fellowships in order to host a researcher for a period of nine months in an institute in Luxembourg and, for a further period of nine months, in another ERCIM institute abroad, or 12 months spent in one institute. For further information, please visit <http://fellowship.ercim.eu/>.

WHERE CAN I FIND MORE INFORMATION?

Ministry of Culture, Higher Education and Research

18-20, montée de la Pétrusse

L-2912 Luxembourg

Tel.: +352 247-86619

recherche@mcesr.etat.lu; www.recherche.lu

Ministry of the Economy and Foreign Trade

19-21, boulevard Royal

L-2449 Luxembourg

Tel.: +352 2478 - 2478. Fax: +352 46 04 48

info@eco.public.lu; www.eco.public.lu

National Research Fund Luxembourg

6, rue Antoine de Saint-Exupéry

B.P. 1777 L-1017 Luxembourg

Tel.: +352 26 19 25 1. Fax: +352 26 19 25 35

info@fnr.lu; www.fnr.lu

Ministry of Middle Class, Tourism and Housing

Forum Royal

19-21, boulevard Royal

L-2449 Luxembourg

Tel.: +352 247-84715. Fax: +352 247-84740

info@mcm.public.lu; www.mcm.public.lu

University of Luxembourg

162A, avenue de la Faiënerie

L-1511 Luxembourg

Tel.: +352 46 66 44 6000

www.uni.lu

Luxinnovation GIE

7, rue Alcide de Gaspéri B.P. 1372

L-1013 Luxembourg

Tel.: +352 43 62 63 1. Fax: +352 43 81 20

info@innovation.public.lu; www.luxinnovation.lu



Public Research Centre Gabriel Lippmann

41, rue du Brill
L-4422 Belvaux
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contact@lippmann.lu; www.lippmann.lu

Public Research Centre Henri Tudor

29, avenue John F. Kennedy
L-1855 Luxembourg
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info@tudor.lu; www.tudor.lu

Public Research Centre Santé

1A-B, rue Thomas Edison
L-1445 Strassen, Luxembourg
Tel.: + 352 26 970-1. Fax: + 352 26 970-719
aurelia.derischebourg@crp-sante.lu; www.crp-sante.lu

CEPS/INSTEAD

3, avenue de la Fonte
L-4364 Esch-sur-Alzette, Luxembourg
Tel.: +352 58 58 55 1. Fax: +352 58 58 55 700
communication@ceps.lu; www.ceps.lu

Centre Hospitalier de Luxembourg

4, rue Barblé
L-1210 Luxembourg
Tel.: +352 44 11 11. Fax: +352 45 87 62
siteinternet@chl.lu; www.chl.lu

National Health Laboratory

42, rue du Laboratoire
B.P. 1102
L-1011 Luxembourg
Tel.: +352 49 11 91 1. Fax: +352 49 11 91 320
www.lns.lu

Virtual Resource Centre for Knowledge about Europe

Château de Sanem
L-4992 Sanem
Tel.: +352 59 59 20 1. Fax: +352 59 59 20 555
cvce@cvce.lu; www.cvce.lu

National Museum of Natural History

25, rue Münster
L-2160 Luxembourg
Tel: +352 46 22 40-1. Fax: +352 46 22 40-309
musee-info@mnhn.lu; www.mnhn.lu

The Luxembourg Portal for Innovation and Research

www.innovation.public.lu



MALTA

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN MALTA

Research and innovation policy development and implementation remain a centralised activity within the competence of the Office of the Prime Minister and relevant ministries, including the Ministry of Finance, Economy & Investment (enterprise policy and business promotion) and Ministry for Infrastructure, Transport & Communication (ICT initiatives).

The Malta Council for Science and Technology (MCST) within the Office of the Prime Minister retains a strategic coordinating role in planning and implementing research and technology policy measures. It liaises closely with public agencies in key ministries such as Malta Enterprise within the Ministry of Finance, Economy and Investment that implements innovation measures for enterprise.

Research and innovation are considered pivotal in attaining the government's vision for 2015 of "sustaining a growing knowledge-based competitive economy, through supporting entrepreneurship and mobilising investment in research, technological development and innovation in key niche sectors" (A Better Quality of Life: 2006-2010 Pre-Budget Document).

The National Strategic Plan for Research and Innovation 2007-2010 provided a broad framework on which research policy and initiatives are based. It was drafted following an extensive consultation exercise with key stakeholders in the private and public sectors and academia and at the time of drafting, it received strong political support and backing from the Office of the Prime Minister. It called for improved coordination among relevant ministries and public agencies in the implementation of research policies.

The Strategic R&I Plan's recommendations have inspired the drafting of the 'research objectives' of Malta's National Strategic Reference Framework (NSRF) 2007-2013 and the measures of the National Reform Programmes (NRP); this has allowed for the creation of improved synergies among policy initiatives and ensured more effective responses to impending challenges.

The reform of the Higher Education Sector remains a central priority on the political agenda. The National Commission for Higher Education (NCHE) was established within the Ministry for Education, Employment & Family to address this reform process that has at its core providing the necessary skills in a timely manner to support industrial development and growth.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

The main areas of cooperation in science and research involving partners from Russia and Malta relate to the European Union's Framework Programme for Research and Technological Development, which provides research funding. In the 6th Framework Programme Russian and Maltese partners cooperated in 13 joint projects in the areas of sustainable development, social sciences, aeronautics and information technologies.



MALTA

In FP7 there are currently 7 projects with participation of organisations from Malta and Russia:

Name of Project	Area	MT Partner	RU Partner
SEADATANET	FP7- INFRASTRUCTURES	UNIVERSITY OF MALTA	P.P. SHIRSHOV INSTITUTE OF OCEANOLOGY, RUSSIAN ACADEMY OF SCIENCES ALL RUSSIAN RESEARCH INSTITUTE OF HYDROMETEOROLOGICAL INFORMATION - WORLD DATA CENTRE ROSHYDROMET
EURORIS-NET	FP7- INFRASTRUCTURES	MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY	NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY «MISIS»
EUCARD	FP7- INFRASTRUCTURES	UNIVERSITY OF MALTA	BUDKER INSTITUTE OF NUCLEAR PHYSICS OF SB RAS RUSSIAN RESEARCH CENTRE KURCHATOV INSTITUTE
NMP TEAM	FP7-NMP	MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY	A.V. SHUBNIKOV INSTITUTE OF CRYSTALLOGRAPHY RUSSIAN ACADEMY OF SCIENCES
MYOCEAN	FP7-SPACE	UNIVERSITY OF MALTA	SCIENTIFIC FOUNDATION NANSEN INTERNATIONAL ENVIRONMENTAL AND REMOTE SENSING CENTRE
NET4SOCIETY	FP7-SSH	MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY	CENTRE FOR SCIENCE RESEARCH AND STATISTICS- MINISTRY OF EDUCATION AND SCIENCE OF RUSSIAN FEDERATION AND RUSSIAN ACADEMY OF SCIENCE
ALICIA	FP7-TRANSPORT	UNIVERSITY OF MALTA	FEDERAL STATE UNITARY ENTERPRISE THE CENTRAL AEROHYDRODYNAMIC INSTITUTE NAMED AFTER PROF. N.E. ZHUKOVSKY

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION MALTA - RUSSIA

The main funding opportunities currently open for science and research cooperation between Russia and Malta relate to the EU programmes, namely the Seventh Framework Programme (FP7) and the Competitiveness and Innovation Programme (CIP).

WHERE CAN I FIND MORE INFORMATION?

Malta Council for Science and Technology

<http://www.mcst.gov.mt>

University of Malta

www.um.edu.mt



THE NETHERLANDS

BASIC INFORMATION ABOUT THE STRUCTURE OF SCIENCE IN THE NETHERLANDS

The Ministry of Education, Culture and Science (Ministerie van Onderwijs, Cultuur en Wetenschap - OCW) coordinates science policy for the entire national government. The aim of Dutch science policy is to create a research climate that fosters world-class scientific achievements and promotes the welfare and well-being of society at large. In order to achieve that goal, Dutch science policy focuses on:

- The acquisition of additional scope and resources for fundamental research;
- Strategies to promote innovation;
- Strengthening the self-regulating powers of the scientific community;
- Improved career opportunities for young researchers, particularly women.

The public science and research community in the Netherlands encompasses 14 universities, the Royal Netherlands Academy of Arts and Sciences (KNAW) and its 18 institutes, the Netherlands Organisation for Scientific Research (NWO) and its 9 institutes, 5 Large Technological Institutes, 6 Leading Technological Institutes, the Netherlands Organisation for Applied Research (TNO) and its institutes, the agricultural research institutes of the DLO Foundation, a number of state-owned research and advisory centres and several other institutes in the fields of health and social sciences.

The Netherlands Organisation for Scientific Research (Nederlandse Organisatie voor Wetenschappelijk Onderzoek - NWO) stimulates and funds research in every conceivable scientific discipline and facilitates innovations. It also strives to cultivate enthusiasm for scientific research and its results and to communicate this to a broad public. NWO has the following statutory mission:

- NWO is responsible for enhancing the quality and innovative nature of scientific research, and for initiating and stimulating new developments in scientific research;
- NWO mainly fulfils its task by allocating resources;
- NWO facilitates, for the benefit of society, the dissemination of knowledge from the results of research that it has initiated and stimulated;
- NWO mainly focuses on university research in performing its tasks.

EXAMPLES OF SCIENCE & RESEARCH COOPERATION THE NETHERLANDS - RUSSIA

Scientific cooperation between Russian and Dutch academics exists in many fields, in education and research, on national and European level. Some examples of the joint Dutch-Russian cooperation activities are:

- Between 1992 and 2007 the Netherlands and Russia had a joint governmental cooperation programme, administered by NWO and the Russian Foundation for Basic Research, and aimed at stimulating scientific collaboration between the two countries. In these fifteen years, the programme has financed over 350 collaborative projects in various scientific fields. Discussions are ongoing about a new Memorandum of Understanding.
- TNO, the Netherlands Organisation for Applied Research (www.tno.nl) has a structural framework agreement with the Russian Academy of Sciences, under which more than 30 joint projects have been financed. Priority areas include the development of new materials such as nano-composites and polymers, membrane separation technologies and industrial safety.
- The Russian Federation has awarded an individual research grant of 3.3 million Euro to Peter Slood, professor of Computational Science at the University of Amsterdam (UvA), as part of the Leading Scientists programme. Professor Slood will use the grant to set up a PhD programme and research laboratory in the field of Urgent Computing at St. Petersburg State University.



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- Netherlands Institute in St. Petersburg: the Netherlands Institute, established in 1997, is a representative of the Dutch universities in the North-West of Russia. It aims at promoting information about higher educational opportunities in the Netherlands amongst Russian students and increasing the number of people interested in research and cultural cooperation between Russia and the Netherlands. The Netherlands Institute also supports Dutch language and literature and Russian language and literature studies in Russia and the Netherlands respectively.
- The Netherlands Education Support Office in Russia (Neso) has been established by the Netherlands organisation for international cooperation in higher education (Nuffic). It is financed by the Netherlands Ministry of Education, Culture and Sciences to represent the Dutch higher education sector in Russia. It provides free-of-charge information and consultation to Russian students. Besides, Neso supports universities of the two countries in their efforts to cooperate.

WHERE CAN I FIND MORE INFORMATION?

Ministry of Education, Culture and Science of the Netherlands

<http://english.minocw.nl>

Ministry of Economic Affairs, Agriculture and Innovation

<http://english.minlnv.nl>

The Netherlands Organisation for Scientific Research (NWO)

www.nwo.nl

www.nwo.nl/samenwerkingrusland

The Royal Netherlands Academy of Arts and Sciences (KNAW)

www.knaw.nl

Association of Universities in the Netherlands (VSNU)

www.vsnu.nl/english

NL Agency (Agency for innovation and sustainable development)

www.senternovem.nl/english/

EG-Liaison (Centre of expertise promoting participation in EU research projects)

www.egl.nl

TNO (Knowledge for business)

www.tno.nl

National Library of the Netherlands (KB)

www.kb.nl

Netherlands Institute in St. Petersburg

<http://www.nispb.ru>

Neso Russia

<http://www.nesorussia.org/>



POLAND

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN POLAND

The government of Poland attaches utmost importance to research & development policy, which is overseen by the Minister of Science and Higher Education who mainly decides on the distribution of funds to be allocated to support the development of science and research. The allocation of funds is supported by two Agencies (National Centre for Research and Development, National Science Centre), which are subordinated to the Minister. The Science Policy Committee and Evaluation Committee act as an advisory body to the Minister. Other ministries are responsible for research and development (R&D) within their sectoral competences. Apart from government administrative bodies, local self-governing authorities and public partners take part in the development and implementation of state scientific policy at national and regional levels.

In practice, R&D activities are implemented in Poland by 1157 organisations including (data for 2008):

- Higher education institutions (governmental and nongovernmental) – 195;
- Research institutes of the Polish Academy of Sciences (PAS) – 75;
- R&D institutes – 135;
- Enterprises possessing own laboratories, design bureaus, research centres etc. – 640.

Compared with the past, it appears that the number of R&D institutes decreased from 208 in 1995 to 135 in 2008, while the number of R&D enterprises increased from 296 in 1995 to 640 in 2008. However, the number of nongovernmental education institutions involved in R&D remains low.

The insignificant amount of the budgetary funds spent on R&D in 1991-2005 was substantially increased in 2006-2010. This increase was mainly due to the fulfilment by Poland of its commitments with regard to its accession to the EU. These commitments were set out in the Lisbon Strategy, which, in particular, stipulates for the share of funding allocated to R&D to account for at least 3% of EU member states' GDP. In 2009, the funding spent on R&D in Poland accounted for 0.675% of country's GDP, i.e. \$127.773 per capita (PPP).

Most of the funding allocated to R&D in Poland is of state origin. In 2008, budgetary expenditures in this sector accounted for 56.1%, while extra-budgetary expenditures of economic entities accounted for 26.6%, with the rest covered by the funds of the Polish Academy of Sciences' research institutes and other institutes involved in R&D (5.6%), as well as by foreign sources (5.4%).

In 2008, 38.2% of funding (without account for investments) allocated for R&D was spent on research in the area of basic research, 22.4% on applied research and 39.4% on experimental development. In view of the plans to enhance the impact of research on the country's economy, an objective has been set that two-thirds of the overall R&D funding should be spent on development-oriented research.

The distribution of R&D funding in 2008 was as follows ²⁶:

- 52.22% - spending on technical sciences;
- 22.69% - spending on natural sciences;
- 9.37% - spending on medical sciences;
- 8.60% - spending on social sciences and humanities;
- 7.13% - spending on agricultural sciences.

²⁶ According to statistical data for the year 2008.



POLAND

With regard to state R&D funding, one should note that till 2007 in Poland decisions on allocation/distribution of financial resources was primarily taken by the Minister responsible for scientific issues, so the decision-making process in the S&T area was completely centralized. At present, there are three state implementing agencies in Poland (National Centre for Research and Development, National Science Centre – newly established, Polish Agency for Enterprise Development), which are involved in distributing budgetary funds for research purposes, projects or R&D activities implemented by various institutions.

Moreover, Poland benefits from the European structural funds, which strengthen the existing link between R&D and the country's economy. Thus, in 2004-2006, 94.90 million Euro was allocated and more than 2.6 billion Euro will be spent in 2007-2013 for that purpose from the European Regional Development Fund (ERDF).

In 2008, a total of 74,600 people (full-time equivalents (FTE)) were employed in the R&D sector. Researchers were the largest group (61,800 FTE), accounting for 83% of the overall number employed in that sector. Over 58% of researchers were employed at higher education institutions, 19% at the institutes dealing with R&D issues, 8% at research institutes of the Polish Academy of Sciences, and less than 12% at enterprises. The strictly vertical organisation, which had been dominating research until recently is gradually eroding. Researchers employed at the institutes of the Polish Academy of Sciences often devote a substantial part of their time to work at higher education institutions, while researchers from polytechnic institutes often work for industry. Multifunctional personnel employment phenomenon, which is noticeable in the R&D sector, is due to the increasing commitments of researchers vis-à-vis the higher education area (since 1990 the number of students has increased fivefold), as well as to relatively low wages in the public sector. In the past few years the total number of researchers in Poland increased from 58,000 in 2003 to 74,600 in 2008.

In order to promote and to popularise research in Poland the government provides support to initiatives such as festivals and science days, competitions for children and youth, etc. The Ministry of Science and Higher Education has been funding the web-portal of the Polish Press Agency «Science in Poland», a source of free information about research in Poland. The Ministry also contributes to the funding of the Copernicus Science Centre, the Poland's first institution operating as a high-tech museum and popularising research. The Centre started its activity in 2010.

International S&T cooperation

In the context of multilateral cooperation, special focus is put on Poland's collaboration with the European Union. This cooperation was pushed to a new level at the end of 1990s, with Poland having joined, on 04 August 1999, the EU's Framework Programmes for Research, Technological Development & Demonstration Activity (5th, 6th and 7th Framework Programmes). Under the EU Fifth Framework Programme, 1,323 research projects were implemented with the participation of Polish research teams, while under the Sixth Framework Programme, the number of Polish research teams amounted to 1,703, making Poland the tenth amongst the EU member states in terms of participation.

In addition to the EU Framework Programmes, Polish research teams actively take part in other multilateral initiatives such as:

- ERA-NETS ²⁷;
- NATO science program;
- EUREKA initiative (since the early 1990s; since 1995 as full member);
- COST – European Cooperation in the field of Scientific & Technical Research (since 1991);
- The European Organisation for Nuclear Research (CERN) and the German Electronic Synchrotron (DESY) (since 1991);

²⁷ The ERA-NET scheme was set up for the cooperation and coordination of research activities carried out at national or regional level in the EU Member States and Associated States through the networking and the mutual opening of national and regional research programmes in order to contribute to the creation of the European Research Area.



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- The European Space Agency (ESA; collective membership since December 2006);
- The European Synchrotron Radiation Facility (ESRF; collective membership since April 2007);
- The International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union (NIS) (INTAS; since 2002).

Poland also takes part in the activities of the European Molecular Biology Laboratory (since 1999), the European Science Foundation, the International Visegrad Fund, and the United Nations Organisation for Education, Science and Culture (UNESCO, since 1964). Finally, Poland has concluded many bilateral S&T cooperation agreements.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Polish – Russian bilateral S&T cooperation has deep historical roots. At present, it proceeds on the basis of the Agreement between the Government of the Republic of Poland and the Government of the Russian Federation for Cooperation in the field of Science and Technology signed on 25 August 1993 in Warsaw. An Implementation Programme, supplementary to the Agreement and foreseeing specific projects, is signed every two years. At present, 20 higher education institutions, 11 research institutes of the Polish Academy of Sciences and nine R&D institutes take part in these projects from the Polish side. Cooperation projects are approved by the joint Polish – Russian S&T cooperation committee consisting of representatives of the scientific and academic communities as well as of experts from sectors concerned.

The research agenda is quite broad. In the past few years, special focus was put on technology projects in the fields of aeronautics, mining & oil refining, laser & nanotechnologies as well as medical research.

The Polish side is interested in promoting cooperation of Polish R&D institutes and aircraft enterprises with Russian aircraft entities. This cooperation may be channelled into modernising Polish aircraft technology through setting up joint ventures for the manufacture and delivery of components based on the existing agreements and contracts concluded between enterprises and research organisations. Cooperation between Polish and Russian companies operating in the area of optic electronics, laser technology, nanotechnologies & new composite materials is also considered to be promising.

In accordance with the outlined provisions, specific long-term initiatives are implemented. For instance, at the Polish Aviation Institute (<http://www.ilot.edu.pl>), joint Polish – Russian projects for the development of up-to-date engines with a blade piston, new non-wearing lubricant-free compressors for medical and technical needs, high-tech aircraft chassis on the basis of air cushion, new technologies for products lyophilisation and measurement as well as many others are being implemented.

New construction materials are currently being developed at the Casting Institute in Krakow (<http://www.iod.krakow.pl>) jointly with researchers from the Russian R&D Institute of Aviation & Space Technologies, the Moscow Institute of Steel & Alloys and the Military Technical Academy.

The Institute of Precision Equipment and the Military Technical Academy carry out joint research projects. The Institute also cooperates with the Russian R&D Institute of Aviation & Space Technologies and the Moscow Institute of Steel & Alloys on laser and plasma strengthening technologies for multi-layer composite coating with monometric structure.

The Oil & Gas Institute in Krakow (<http://www.ingn.krakow.pl>) currently implements, jointly with the Russian Academy of Mining & Metallurgy, the Military Technical Academy and the Russian State Institute of Geology, research for the possible application of gravimeter in order to assess available mineral deposits in the East of Poland.



POLAND

Poland and Russia have been cooperating in nuclear research for over 50 years. Cooperation in the field of nuclear research is implemented through the Joint Nuclear Research Institute (JNRI) in Dubna. Since that time, more than 500 Polish experts have attended the Institute for joint research, having each spent at least half a year there. At present, 20 Polish researchers permanently work at the Institute, while every year 80 Polish experts pay short-term stay visits to the Institute, participating in conferences and other scientific events.

Today, the Dubna Institute cooperates with 40 Polish research institutes and is involved in the implementation of 30 research projects in the areas of their scientific competence (e.g. theoretical physics, physics of elementary particles). Amongst the Dubna Institute's most active partners in Poland are the Nuclear Physics Institute of the Polish Academy of Sciences (Krakow), the Institute of Nuclear Problems (Szewc, near Warsaw), the Jagellon University (Krakow), the Warsaw University, the Physical Department of the Warsaw Polytechnic Institute, the Wrocław University, and the Lodz University.

In December 2007, the 50th anniversary of the cooperation Agreement between the Polish and the Russian Academies of Sciences was celebrated. The Agreement underpins the joint implementation of research projects, exchange of researchers and training. The Intercosmos programme is one example of joint Polish-Russian research activities.

Most Polish higher education institutes have concluded cooperation agreements with their Russian counterparts on the exchange of students and researchers. Some of them, particularly technical universities, implement joint research projects with Russian higher education institutes.

Finally, under the respective agreement with Russia, the Polish government annually allocates funding for more than ten student scholarships to young Russian researchers who are invited to Poland for one- or two-year professional training. The scholarships are awarded to those students who pass tests at the Embassy of the Republic of Poland in Russia.

WHERE CAN I FIND MORE INFORMATION?

Polish Ministry of Science & Higher Education (Ministerstwo Nauki i Szkolnictwa Wyższego)

<http://www.mnisw.gov.pl>

Polish Ministry of Economy (Ministerstwo Gospodarki)

<http://www.mg.gov.pl>

Polish Academy of Sciences (Polska Akademia Nauk)

<http://www.pan.pl>

Central Council for Higher Education (Rada Główna Szkolnictwa Wyższego)

<http://www.rgsw.edu.pl>

National Centre for Research and Development

www.ncbir.gov.pl

National Science Centre

www.ncn.gov.pl

Polish Agency for Enterprise Development

www.parp.gov.pl

Web links on science and research

<http://www.nauka.gov.pl>; <http://www.nauka-polska.pl>



PORTUGAL

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN PORTUGAL

The Ministry of Science, Technology and Higher Education (MCTES) is responsible for defining, implementing and evaluating the national policy in the fields of science and technology in Portugal. The Ministry's primary activities within this framework are carried out by the Foundation for Science and Technology (FCT). The budget allocated to FCT increased continuously from 2005 to 2011, with a total value approaching 500 million Euro in 2011.

Research in Portugal is conducted by various actors such as Associate Laboratories which are research institutions of internationally recognised merit; Research Units, with most of them associated to public universities; and State Laboratories. There are also various Foundations providing financial and strategic support to innovative projects and scholarships in the field of science and technology. By 2010, the network of scientific institutions included 510 research centres and 25 Associate Laboratories with an overall level of institutional funding of about 85 million Euro in 2010.

The evolution of the Portuguese scientific & technological (S&T) system is characterised by a significant growth of the human resources allocated to research. The number of researchers in Portugal has reached in 2009 about 8.2 per thousand workforce (i.e. about 46,000 full time equivalent researchers, with nearly ¼ in the business sector). It is thus nowadays above the OECD average.

The number of doctorate graduates has increased by over 50% in the last 5 years and almost doubled in the last decade, with more than 1,600 new PhDs graduated in 2010. The percentage of international students pursuing a PhD in Portugal has also increased considerably in the last ten years. In 2008-2009, foreign PhD students in Portuguese universities represented 13% of the total number of PhD students enrolled at Portuguese universities.

Portugal's gross domestic expenditure on R&D (GERD) exceeded 2,791 million Euros in 2009, i.e. 1.71% of GDP. In 2008, the national figures for R&D were 1.55% of GDP, compared to 0.81% in 2005, and only 0.4% in the late 80's. The increase of public investment in R&D in recent years is matched by a steep rise in companies' investment in R&D, which represented 0.80% of GDP in 2009, while in 2005 it was 0.31% and less than 0.20% until some ten years ago. In fact, the number of enterprises in all business sectors that are active in R&D reached 1,989 in 2009, an increase from approximately 930 in 2005. Business expenditure on R&D (BERD) has almost tripled since 2005 (at current prices), to 1,303 million Euro in 2009.

THE INTERNATIONALISATION OF SCIENCE & TECHNOLOGY IN PORTUGAL

In 2006, the Portuguese Government, through the Portuguese Science and Technology Foundation, initiated an innovative program of strategic international partnerships in science, technology and higher education by bringing together several Portuguese and leading American universities, including the Massachusetts Institute of Technology (MIT), Carnegie Mellon University, Harvard Medical School and the University of Texas at Austin. These partnerships facilitated the creation of broad and effective thematic networks aimed at advancing science, technology and higher education in Portugal to internationally competitive levels. Current programmes include frontier research in: regenerative medicine, making use of stem cells and tissue engineering; information technologies, exploiting new concepts for smart grids, next generation networks, and interactive digital media; and sustainable energy and transportation systems, including forms of electric mobility. The advance training programmes with the leading American Universities are open to applications to Portuguese and foreign nationals. For further information: www.mitportugal.org; www.cmuportugal.org; www.utaustinportugal.org; www.hmsportugal.org.

The Portuguese Government also signed a cooperation agreement with the Fraunhofer Gesellschaft for the establishment in Portugal of the first Fraunhofer Institute in Europe outside Germany through the Fraunhofer



PORTUGAL

Portugal Research Association. This is an ambitious project focusing on emerging information and communication technologies, such as “Ambient Assisted Living”, to be complemented by the establishment of R&D consortia and co-operative projects involving several Portuguese institutions and Fraunhofer institutes in Germany. For further information on the Fraunhofer Portugal Research Association: www.fraunhofer.pt

Furthermore, Portugal is a member of international scientific organisations, namely the European Laboratory for Particle Physics (CERN), the European Space Agency, the European Southern Observatory, the European Molecular Biology Laboratory, the European Synchrotron Radiation Facility and the Joint European Torus, among others.

RECENT CREATION AND INSTALLATION OF NEW SCIENTIFIC INSTITUTIONS IN PORTUGAL

Created by an international treaty between Portugal and Spain in 2006, the International Iberian Nanotechnology Laboratory (INL) is currently at the final stage of installation in Braga (Northern Portugal). INL is the first research laboratory set up under international law in the Iberian Peninsula and it is the first such institution worldwide explicitly focused in nanotechnology. INL will be open to the membership of other countries of Europe and other regions of the world. It is expected to achieve a reputation as an international institution of excellence in application areas of food and water quality, environmental monitoring and nanomedicine, conceived for about 200 researchers from all over the world, a total of 400 people, and an annual investment and operational budget of around 30 million Euro that is being funded equally by both countries. For further information on the INL: <http://www.inl.int/>

Recently it was also inaugurated, in Lisbon, the Champalimaud Centre for the Unknown, a state-of-the-art research facility by the Champalimaud Foundation. The Centre focuses on biomedical science and seeks to extend research in the fields of oncology and neuroscience, as well as to advance the field of ophthalmology. Through a detailed programme of research and clinical support, the Foundation strives to make significant scientific progress, particularly in the fields of cancer research and neuroscience. For further information on the Champalimaud Centre for the Unknown: www.fchampalimaud.org

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Science and research cooperation between the Russian Federation and Portugal has taken various forms and has intensified in the last years. The Portuguese Republic and the Russian Federation signed a Cultural and Scientific Cooperation Agreement that entered into force on 15 July 1995. Since the entry into force of the Agreement there has been a regular exchange of Portuguese and Russian researchers.

Under the EU's 7th Framework Programme for Research & Technological Development (FP7, 2007-2013), Portugal and Russia cooperated in 22 projects. In these, Portugal had 22 participants and Russia 28. Cooperation between the two countries has taken place in almost all thematic priorities of FP7, but the two main areas of cooperation between Russia and Portugal are Transport and Research Infrastructures.

Between 2007 and 2010 FCT awarded 70 fellowships to Russian researchers. Furthermore, 28 Russian researchers have been hired to the Portuguese scientific and technological system through the “Ciência 2007” and “Ciência 2008”, funded by FCT. This initiative has promoted the integration of post-doctoral researchers in junior research positions.

Finally, within the framework of the FCT annual Call for Funding for Research and Development Projects in all Scientific Domains FCT funded 6 projects in 2008 and 2009, which included Russian partner institutions in the areas of chemistry, physics, space science and biological sciences.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION PORTUGAL-RUSSIA

In 2010, a new Cooperation Programme was signed within the framework of the Cultural Agreement between



PORTUGAL



Portugal and Russia and it foresees the continuation of the mobility of researchers between the two countries.

FCT also finances through public calls a variety of fellowships and grants which are open to foreign researchers. For further information: <http://alfa.fct.mctes.pt/apoios/bolsas/index.phtml.en>

Examples of Fellowships and Grants offered by FCT open to foreign researchers:

Doctoral Degree Grants: Doctoral degree grants target holders of a university degree who are accepted as doctoral students in a Portuguese or foreign university. Grants have duration of one year and are renewable for up to 4 years.

Post-doctoral grants (BPD): Post-doctoral grants are intended for individuals who have already completed a doctoral degree, preferably within the last five years, for the purpose of carrying out advanced research in Portuguese or foreign scientific institutions of recognized merit. The evaluation of BPD favours the mobility of doctoral degree holders who have been granted their degree abroad and wish to pursue postdoctoral work in Portugal.

Sabbatical Leave Grants: Sabbatical leave grants are designed for holders of doctoral degrees on sabbatical leave for the purpose of carrying out research at foreign universities. Grants can have the duration of three months to a maximum of one year.

Invited Scientist Grants: Designed for university professors or researchers with scientific curricula of notable merit for the purpose of carrying out activities in Portuguese science and technology institutions. Grants can vary from 3 months to 3 years.

Welcome II Programme: The Welcome II Programme targets the recruitment of European researchers to join Portuguese research institutions after work outside of Europe. Grants have the duration of three years and focus on: Fellow A – Researchers holding a PhD and Fellow B - Researchers with 5 or more years of research experience after obtaining their PhD degree.

The Innovation Agency (AdI) is a state-owned agency which promotes innovation and technological development by supporting and deepening relations between research and industry. AdI is a member of the EUREKA network since 1985 and acts as a National Project Coordinator for the network. This initiative provides opportunities for technological cooperation to companies, technological centres, research institutes and universities from the member countries. For further information: <http://www.adi.pt/uk/International.htm>

WHERE CAN I FIND MORE INFORMATION?

For research positions & fellowships in Portugal as well as provision of advice and support on mobility to the country, please visit the **EURAXESS Portugal portal** at: <http://www.euraxess.pt/>

Ministry of Science, Technology & Higher Education www.mctes.pt

Portuguese Foundation for Science and Technology www.fct.mctes.pt

GPEARI – Planning, Strategy, Evaluation and International Relations Office www.estatisticas.gpearl.mctes.pt/

Directorate General on Higher Education www.dges.mctes.pt

UMIC – Knowledge Society Agency www.unic.pt

Innovation Agency www.adi.pt

Council of Associate Laboratories www.labs-associados.org

Council of the Rectors of Portuguese Universities www.crup.pt

Coordinating Council for Polytechnic Institutions www.ccisp.pt

NARIC - National Academic Recognition Information Centres www.naricportugal.pt/NARIC

Instituto Camões www.instituto-camoes.pt

Instituto Gulbenkian da Ciência www.igc.gulbenkian.pt



ROMANIA

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN ROMANIA

The National Authority for Scientific Research (ANCS) was established in 2005 as the specialised Government body in the field of science and technology (S&T). Its mission includes formulating, applying, coordinating, monitoring and evaluating scientific research, technology development, and innovation (RD&I) policies in accordance with the Government strategy and programme.

The National Authority for Scientific Research undertakes the tasks and fulfils the responsibilities of the Ministry of Education, Research, Youth and Sports (MECTS) in the following areas:

- Scientific research and technology development;
- Technology transfer and innovation;
- International S&T collaboration;
- R&D institutions, human resources and infrastructures;
- Support for RD&I activities;
- Support for diffusion and dissemination of R&D results.

In the context of Romania's accession to the European Union (EU), ANCS is tasked to ensure the harmonization of the national RD&I policies to EU standards, in order to connect the Romanian RD&I system to the European Research Area (ERA). In this respect the Romanian Government sets science and technology as strategic drivers of the economic development.

THE ROMANIAN RESEARCH AREA

The changes of both R&D system and innovation environment are guided towards the structuring and consolidating of a corresponding Romanian Research Area (RRC) fully integrated in ERA. Accordingly, ANCS promotes the improvement of the structure and operation of the public RD&I organisations (national institutes, universities) both in terms of quantity (number of researchers) and quality (operational structure, international visibility, partnership).

The main agency for the implementation and funding of national R&D and innovation programmes is the Executive Unit for Financing Research, Development and Innovation in Higher Education (UEFISCDI). UEFISCDI ensures the management of the R&D programmes coordinated by ANCS and funded from national and international sources. Particularly, UEFISCDI ensures the management of research programmes addressing the development of scientific careers and increasing the research capacity of universities.

The programmatic documents that state the principles and the key objectives for the current time period are the National Strategy for R&D and Innovation 2007-2013 and the National Plan for R&D and Innovation 2007-2013.

THE NATIONAL STRATEGY FOR R&D AND INNOVATION 2007-2013

The Strategy document for 2007-2013 includes the following key elements for the development of the RD&I system in Romania:

- Promoting the creation and development of S&T knowledge for obtaining high-level, internationally competitive S&T results;
- Increasing the competitiveness of the Romanian economy, by promoting the diffusion and transfer of S&T knowledge and the innovation processes with strong economic impact;
- Increasing the quality of life, through the development of S&T solutions with high benefits for society.



ROMANIA



Implementing the Strategy: the National Plan for R&D and Innovation 2007-2013

The objective of the National Plan is to ensure the conditions that allow the national RD&I system to fulfil its strategic role, to develop science and technology so as to increase economic competitiveness, to improve the quality of life, and to develop and enhance the reservoir of potentially applicable S&T knowledge. The National Plan includes six programmes, with the following objectives:

Programme	Objective
Programme 1. Human resources	Increasing the number of researchers and improving their professional performances
Programme 2. Capacities	The development of RD&I infrastructures and their better connection and use at national and international level
Programme 3. Ideas	The generation of high level S&T results, contributing to a higher international visibility and recognition for Romanian research
Programme 4. Partnerships in priority RD&I fields	Promotion of S&T partnerships leading to innovative technologies, products and services, for solving complex problems in key application areas
Programme 5. Innovation	Promotion of industry-led research, technological development and innovation, based on the absorption of research results, for improving economic competitiveness and the quality of life
Programme 6. Promoting the institutional performance	Promoting the continuity and stability of R&D institutions, through the development of their own strategies, in accordance with the National RD&I Strategy

Complementary R&D programmes are:

- Core R&D programmes of the national R&D institutions, aimed at sustaining long-term strategic objectives, specific to the sectors in which these institutions are performing.
- Sectoral Operational Programme for “Increasing the Economic Competitiveness” Priority Axis 2 – “Increasing the economic competitiveness through research and innovation” (SOP-IEC), to increase productivity of Romanian enterprises and reduce productivity gaps with respect to EU 27 by the following channels:
 - increasing research capacity by developing research infrastructures and attracting young people and highly qualified specialists;
 - strengthening the knowledge supply from universities and R&D institutes;
 - stimulating technology transfers based on the cooperation between R&D institutions and enterprises;
 - stimulating innovation demand from enterprises.
- The programmes focused on basic research of the Romanian Academy.

ROMANIA – RUSSIA S&T COOPERATION: PRESENT AND FUTURE

The main basis for cooperation is the Agreement on Scientific and Technical Cooperation between the Romanian Ministry of Education, Research and Youth (MECT) and the Russian Ministry of Science and Technology signed in March 1995 in Bucharest.

Other frameworks of cooperation are:

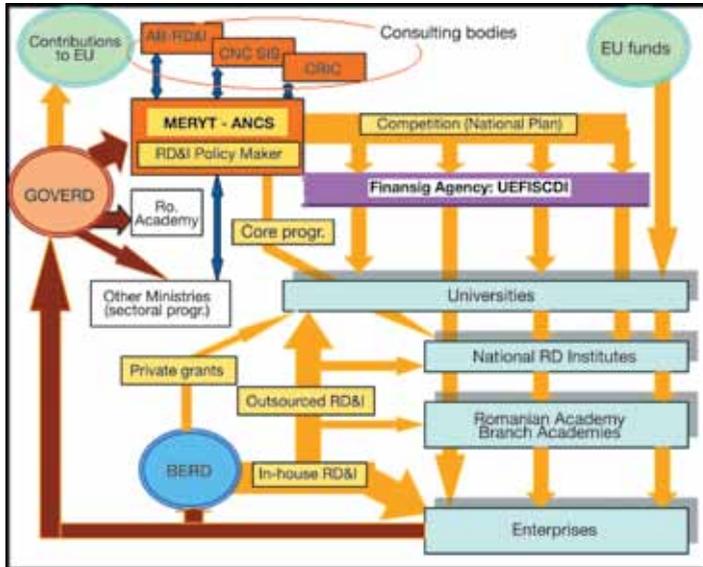
- Since 1998, the Black Sea Economic Cooperation (BSEC) organisation.
- The Protocol of the 9th Session of the Romanian-Russian Inter-governmental Commission on Scientific, Technologic & Economic Cooperation, signed in November 2007, which provides in the near future the conclusion of a bilateral Program on S&T cooperation.

Other common actions and opportunities of cooperation in RD&I between Romania and the Russian Federation include:

- Preparing joint projects proposals under the EU 7th Framework Programme for Research & Technological Development;



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The scheme of the Romanian RD&I system is presented in Figure 1.

- Participation in common COST actions;
- Cooperation in common calls of ERA-NET projects;
- Cooperation in the frame of international organisations such as UNESCO, ICGBE;
- Cooperation in the BSEC Working Group on Science & Technology.

It must also be noted that Russian researchers have opportunities to develop their scientific career at Romanian RD&I institutions (www.eracareers.ro).

WHERE CAN I FIND MORE INFORMATION?

The Romanian Ministry of Education, Research, Youth and Sports / The National Authority for Scientific Research

www.ancs.ro

The Executive Unit for Financing Higher Education Research, Development and Innovation (UEFISCDI)

www.uefiscdi.ro

The Romanian Academy

www.acad.ro

Scientific career in Romanian RD&I institutions

www.eracareers.ro



SLOVAK REPUBLIC

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN THE SLOVAK REPUBLIC

The Slovak Republic has a long tradition of science and research. The first steps in scientific research were taken during the Austro-Hungarian Monarchy, later in Czecho-Slovakia, and since 1993 in the independent Slovak Republic. Since the late 1990s, there has been increased interest of foreign investors and multinational companies in Slovakia, many of whom have started to support scientific research at Slovak universities directly. They have invested in new equipment and teaching methods and have brought new know-how, with the goal to educate future scientists, researchers, and employees for their companies.

MINISTRY OF EDUCATION

The Ministry of Education of the Slovak Republic is responsible for science in Slovakia. Its structure includes a Division for Science and Technology. In particular, the Ministry of Education supports research activities at Slovak universities in five different areas:

- management and development of scientific and technical infrastructure at high schools and at universities;
- basic research through the internal grant agency;
- research for education through the internal grant agency;
- applied research;
- international scientific and technical cooperation.

The Governmental Council of the Slovak Republic for Science and Technology is an advisory board of the Slovak Government which prepares and implements state science and technological policies in connection with the economic, social and cultural development of the Slovak Republic.

The main tasks of the Ministry of Education in the area of international scientific and technical cooperation are the coordination and evaluation of bilateral and multilateral scientific and technical cooperation activities. The focus is on involving the Slovak Republic in S&T programmes and projects in the framework of the European Research Area and in initiatives such as COST and EUREKA. Other tasks are the coordination and fulfilment of obligations which arise from international agreements and from the Slovak Republic's membership in international organisations and institutions, as well as the preparation of bilateral agreements and international S&T cooperation activities.

The Slovak Research and Development Agency (Agentúra na podporu výskumu a vývoja - APVV) is the only R&D research and development grant agency in the Slovak Republic. It was established in July 2005 and is a successor of a previous agency which had been operating since 2001. APVV is the only instrument for the distribution of public funds for research and development on a competitive basis in Slovakia. APVV is responsible for R&D promotion in all research areas, including international research cooperation.

In addition to the Agency's Executive Director, the Agency's Presidium (13 members, including two foreign experts) is appointed by the Slovak Government and is responsible for setting priorities, the budget and other important internal policy issues. Expert panels, appointed for a four-year period by the Minister of Education (based on proposals from the Slovak research and industrial communities), manage the selection of projects submitted to the Agency. Each expert panel has at least one foreign member.

Project evaluation is based on a combination of peer review and selection by the panel. All grant applications are evaluated by three independent reviewers, at least one of whom is from abroad. The Agency is the only body in



Slovakia with access to the expert database of the European Commission's Directorate-General for Research. Following the review of the project proposals by the experts, an additional evaluation is done by members of the panel who summarize the recommendations of the outside reviewers and compile a final assessment of each project. Finally, the panel selects projects to be funded, according to the available budget and the total score of each proposal. At present, the Agency has six expert panels (natural sciences; technical sciences, agricultural & forestry sciences, medical sciences, social sciences & humanities, and a panel for international research cooperation).

THE SLOVAK ACADEMY OF SCIENCES (SAV)

International scientific cooperation is implemented in coordination with the main goals of the Slovak Republic's state policy in international relations and is oriented towards top foreign institutions. The following are amongst the basic instruments for integration into the European Research Area (ERA):

- active participation in the creation of ERA in cooperation with domestic and foreign partners;
- support for scientific mobility (SAV and organisations of SAV);
- SAV contributes to fulfilling the objectives set by bilateral and multilateral agreements signed between the Slovak Republic and countries;
- participation in the programmes of CERN, COST, ESF, NATO (Slovak membership and participation in ESF is covered exclusively by SAV);
- membership of SAV in non-governmental international scientific organisations such as the International Council for Science (ICSU), the European Federation of National Academies of Sciences and Humanities (ALLEA), the Interacademy Panel on International Issues (IAP), the International Association of Mathematical Physics (IAMP), the European Academies Science Advisory Council (EASAC), the American Society of Association Executives (ASAE);
- effort to integrate the Slovak Republic in international governmental scientific groupings and laboratories such as the European Synchrotron Radiation Facility (ESRF), the European Space Agency (ESA);
- participation in international scientific events abroad and organisation of international scientific conferences in the Slovak Republic.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION SLOVAKIA-RUSSIA

GOVERNMENTAL AGREEMENT

The Government of the Slovak Republic and the Government of the Russian Federation concluded a bilateral Agreement on Cooperation in Culture, Education and Science in 1995.

DEPARTMENT AGREEMENT

The Ministry of Education of the Slovak Republic and the Ministry of Education and Science of the Russian Federation concluded an Agreement on Cooperation in the area of Education in 2006.

INTER-UNIVERSITY, ACADEMY AND OTHER AGREEMENTS

Several Slovak Universities have signed bilateral cooperation agreements with Russian universities, including with Izhevsk State Technical University, Moscow Institute for Energy, National University of Science and Technology «MISIS», International Laser Centre of Moscow State University, Omsk State Railways University, St. Petersburg State University, Ufa State Aviation Technical University, Ufa Science Centre of the Russian Academy of Sciences (Institute of social and economic research).

The Slovak Academy of Science (SAV) and the Russian Academy of Sciences (RAS) have concluded a bilateral Agreement on Inter-academic Cooperation, on the basis of which several cooperative projects are being implemented and research exchanges are being organised.

The Slovak Republic is an active member of the Joint Nuclear Research Institute at Dubna, Russia.



SLOVAK REPUBLIC



OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION WITH RUSSIA

The Slovak Government has declared a budgetary increase for education, science and research. The remuneration of Slovak scientists and researchers is below the EU average. It is therefore important to connect state institutes with private multinational companies which invest and do business in Slovakia. European and international science programmes are another important source of funding.

Slovak-Russian cooperation in science, research and education has a long tradition and great potential. Apart from the activities mentioned above, significant opportunities for cooperation exist in such areas as nuclear physics (peaceful use of the atom), medicine (Russian physicians and mid-level staff may obtain certificates according to the European law), oncology (production of radiopharmaceutical medicines in cyclotron accelerator in Bratislava), European certification of Russian and CIS products in Slovak certification institutes.

WHERE CAN I FIND MORE INFORMATION?

Ministry of Education of the Slovak Republic

www.minedu.sk

The information portal of the Ministry of Education of Slovak Republic for R&D and Innovation

www.veda-technika.sk

Slovak Academy of Science

www.sav.sk

Comenius University in Bratislava

www.uniba.sk

Pavol Jozef Šafárik University in Košice

www.upjs.sk

Slovak University of Technology in Bratislava (STU)

www.stuba.sk

www.stu.sk

International Laser Centre, Bratislava

www.ilc.sk

IT Association Slovakia (ITAS)

www.itas.sk

ScienceDirect Info

www.sciencedirect.com



SLOVENIA

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN SLOVENIA

Slovenia has a long tradition of scientific research and academic excellence. The main strengths of Slovenian research and development are a relatively high share of GDP invested in R&D, relatively high quality of scientific research with well established international cooperation, and relatively young and fairly numerous researchers with negligible brain drain. A well established network of bilateral cooperation agreements, successful participation in the EU Framework Programmes for Research & Technological Development, and participation in the scientific programmes of multilateral organisations assure Slovenian science to remain integrated in global scientific trends and activities.

Most research takes place in universities and in research institutes as well as within research units of companies. Financial support to scientific research is provided by

I. Government sector:

- the Ministry of Higher Education, Science and Technology through the following programme priorities: defining strategic and developmental goals of R&D in Slovenia, harmonising higher education with the Bologna guidelines, promoting a favourable environment for innovation through financial support for companies in the field of technological development, coordinating the implementation of the programme in the area of information society, establishing broadband networks to link up the educational, cultural, research and development areas, implementing key development activities in the metrology system of the Republic of Slovenia;
- the Slovenian Research Agency, which performs professional, development and executive tasks relating to the National Research and Development Programme at every level, as well as other work to promote research and development activities;
- Slovenian Technology Agency, which carries out expert development and executive tasks to advance technological development and innovation in accordance with the adopted National Research and Development Programme and other national programmes supporting enterprises and competitiveness;
- other Ministries.

Slovenia's main development document relating to R&D is the **National Research and Development Programme (NRDP) 2006-2010**, which is a synthesis of the most general objectives and policies on R&D from national strategic documents. The NRDP focuses on all key segments pertaining to the wider domain of research policy – from providing excellent science in public research institutes and universities to integrating the public research sphere with the business sector, providing corporate incentives for strengthening investment in R&D and creating a favourable environment for entrepreneurship and innovations.

The Slovenian Academy of Sciences and Arts (SASA) with its present structure was founded in 1938; nonetheless it has a reputable tradition with its predecessor, the *Academia Operosorum*, having established in 1693. Today, the SASA is the supreme national institution of sciences and arts, uniting scientists and artists who were elected to this institution for their particular achievements in the area of science and art.

II. Private non-profit sector (Foundations):

- Slovenian Science Foundation, whose mission is to support researchers and students for their development into experienced and excellent researchers, integrated into European and global research projects and programmes. For this purpose, the Slovenian Science Foundation has developed a flexible mechanism called “second chance” to enable young and ambitious researchers and students to realize their goals regardless of state budget support.
- Ad Futura, one of its main goals being to facilitate the international mobility of students and researchers through the provision of relevant information and to generate interest for cooperation

III. Business Sector:

Large companies account for seventy percent of all industrial R&D expenditure. In order to support both SMEs



SLOVENIA



and large companies in their R&D endeavour in Slovenia tax allowances were introduced in 2006 with the aim to streamline the R&D expenditure by not offering only the form of subsidies obtained through calls for proposals.

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

Slovenia and Russia have signed a number of bilateral documents representing the legal basis for scientific and technological cooperation:

- Agreement on Cooperation in the fields of Culture, Science and Education between the Government of the Republic of Slovenia and the Government of the Russian Federation (1996);
- Agreement on Scientific and Technological Cooperation between the Ministry of Science and Technology of the Republic of Slovenia and the Ministry of Science and Technology Policy of the Russian Federation (1995);
- Agreement on Scientific and Technological Cooperation between the Ministry of Science and Technology of the Republic of Slovenia and the State Committee for Higher Education of the Russian Federation (1995);
- Agreement on Cooperation in the Development of Satellite Communications for Connecting National Academic and Research Networks of the Republic of Slovenia and the Russian Federation (1993).

To date, however, bilateral cooperation has mostly built on direct contacts between researchers and research organisations from the two countries or has taken place in the context of multilateral programmes. Since 2003, Slovenia has unilaterally funded joint Slovenian-Russian research projects (approx. 15 each year). In 2007, it was agreed that a Slovenian-Russian working group for scientific and technological cooperation prepare a plan for bilateral cooperation in the areas of information & communication technologies, nano-systems and new materials, living systems (medicine, biotechnology), sustainable use of natural resources, energy and security (new sources of energy).

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION SLOVENIA – RUSSIA

On a bilateral level Slovenia has developed scientific and technological cooperation with 81 countries and has thus proved to be a reliable cooperation partner. Priorities areas for Slovenia's bilateral international cooperation are the EU member countries, neighbouring countries, Western Balkan countries, leading non-European S&T countries and regionally important countries.

The bilateral agreements between Slovenia and Russia provide a firm legal basis for successful cooperation in science and technology.

In general, Slovenian researchers and research organisations are entitled to include partners from other countries (including from Russia) in research projects for which they apply for support from the Slovenia national funding sources. In principle bilateral scientific and technological cooperation consists of joint research projects in the framework of which the mobility of project partners is co-funded by each side, not excluding other forms of cooperation.

The Slovenian Research Agency in cooperation with the Ministry of Higher Education, Science & Technology conducts regular calls for research proposals. Slovenia expects the Russian side to nominate a funding organization and to financially support joint research projects and other joint activities. The opportunities within European projects and programmes also merit special attention.



SLOVENIA

WHERE CAN I FIND MORE INFORMATION?

Ministry of Higher Education, Science and Technology

Office of International Cooperation and European Affairs

Address: Kotnikova 38, 1000 Ljubljana

Tel.: +386 1 478 4676

Fax: +386 1 478 4719

www.mvzt.gov.si

Slovenian Research Agency

Department for International Cooperation

Bleiweisova cesta 30, SI-1000 Ljubljana

Tel.: +386 1 400 5910,

Fax: 400 5957

www.arrs.gov.si

Slovenian Technology Agency

Dunajska cesta 22, 1511 Ljubljana

Tel.: + 386 590 89500

Fax: + 386 590 89531

www.tia.si

Slovenian Science Foundation

Štefanova ulica 15, SI-1000 Ljubljana

Tel.: +386 1 426 35 90,

Fax: +386 1 426 35 91

www.szf.si

Slovenian Academy of Sciences and Arts

Novi trg 3, SI-1000 Ljubljana

Tel.: +386 1 47 06 100

Fax: + 386 1 42 53 423

www.sazu.si

Slovene Human Resources and Scholarship Fund

Dunajska 22, SI-1000 Ljubljana

Tel.: +386 (0)1 434 10 81

Fax: +386 (0)1 434 58 99

www.sklad-kadri.si

CMEPIUS – Centre of the Republic of Slovenia for Mobility and European Educational and Training Programmes

Ob železnici 16, SI-1000 Ljubljana

Tel.: +386 1 620 9450

Fax: +386 1 620 9451

www.cmepius.si

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www.sycp.si



SPAIN

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN SPAIN

GENERAL PRESENTATION

The Government of Spain has, since 2004, been driving a transition towards a knowledge-based economy with greater diversification and innovation in all sectors. The creation of the Ministry of Science and Innovation represented an additional and permanent boost to this commitment.

In order to achieve this transition, it keeps developing a well-prepared scientific, technological and business community and widespread social and political awareness of the need to make knowledge the backbone of social and economic development in the country. The aim for the country is to be capable of facing, in better stead, the economic, social and environmental challenges of an ever-changing world, with citizens more inclined to scientific endeavours and entrepreneurship, with stronger and more dynamic research institutions and a more innovative business sector.

The Ministry of Science and Innovation develops effective policies to serve science, technology and business, but also generates the necessary trust in both agents and the general public, reinforcing the aim of becoming a reference country in science, research, development and innovation. The MSI hallmarks are: cooperation, internationalisation, entrepreneurial spirit and efficiency.

In the time period 2004-2008 Spain had positioned itself on the 9th place in the world ranking in scientific production, with 2.5% of the global production. (British Royal Society report)

LEGAL FRAMEWORK

The Science, Technology and Innovation Law

Law 13/1986 for the Promotion and General Coordination of Scientific and Technical Research is the general framework around which the general lines for the promotion and overall coordination of scientific and technical research are established, in compliance with article 149.1.15 CE.

On 19 May 2010 the Bill for the new Science, Technology and Innovation Law was presented for parliamentary approval. If this new law is passed it will replace the currently prevailing Scientific and Technological Research Law of 1986.

Throughout the different stages of its drafting, the Science, Technology and Innovation Bill of Law has benefited from the contributions of different Autonomous Communities, universities, social players, experts, researchers and citizens, through different methods made available for this purpose.

The bill of law aims to establish a general framework for promoting and coordinating scientific and technical research in order to contribute to sustainable economic development and social welfare by generating and disseminating knowledge and innovation. The objectives it aims to achieve include:

- To design an attractive professional career path for researchers.
- To establish a stable, flexible and efficient RD&I system.
- To contribute to the development of a knowledge-based society.

National Science and Technology Strategy (ENCYT)

The National Science and Technology Strategy (ENCYT) is a positioning document drawn up with the participation of the Spanish science and technology system players. It covers the main principles and



SPAIN

general objectives governing both nationwide and regional science and technology policies, for the period 2007-2015.

The initiative for this strategy arose as a result of the experience of different National Plans developed to date and the results of the INGENIO 2010 initiative which has been a significant impulse for science and technology in Spain.

The basic principles governing this Strategy are:

- To place RD&I at the service of the general public, of social wellbeing and of sustainable development, fully integrating women into the workplace and guaranteeing equal opportunities.
- To make RD&I a factor in the improvement of corporate competitiveness.
- To acknowledge and promote R&D as an essential element for the generation of new knowledge.

These principles strive towards accomplishing the following goals:

- Situating Spain in the vanguard of knowledge.
- Promoting a highly competitive business fabric.
- Integrating the regional areas into the S&T system.
- Strengthening the international dimension of the S&T system.
- Availing of an environment that is favourable to RD&I investment.
- Availing of the right conditions for science and technology dissemination.

NATIONAL RESEARCH, DEVELOPMENT & INNOVATION PLAN 2008-2011

The National Scientific Research, Development and Technological Innovation Plan (National RD&I plan) 2008-2011 is the Spanish Science, Technology and Enterprise system's programming instrument to achieve the country's goals and priorities of the research, development, and technological innovation policy in the medium term, as defined in the Science Act and in the National Science and Technology Strategy (ENCYT).

Pursuant to Royal Decree 1042/2009, dated 29 June, which establishes the basic organic structure of the Ministry of Science and Innovation, this department is responsible, through the General Directorate for the Research and Management of the National RD&I plan, for the preparation, monitoring and assessment of the National RD&I plan, as well as writing its Activity Log and the annual Work Programme, for its ulterior approval by the Government's Delegate Committee for Science and Technology Policies.

Building the European Research Area poses new challenges for integration and coordination, not just as regards developing mechanisms for the creation of networks under national programmes, but also in relation to the initiation of evaluation processes that facilitate comparison of national research, development & innovation policies.

This National Research, Development & Innovation Plan is the public sector's response to the economic, social and cultural demands regarding S&T matters. Defining research programmes, preparing proposals for managing government-funded activities, developing business competitiveness support measures, organising international and interregional cooperation programmes, and developing appropriate policies for training and recruiting research, development & innovation specialists, has required involvement of all actors in the system.

THE MINISTRY FOR SCIENCE AND INNOVATION

The Ministry for Science and Innovation (MSI) is the State department in charge of designing and implementing the Government policy on scientific research, technological development and innovation in all sectors. It is also in charge of coordinating the State research public bodies. The MSI is also in charge of designing, managing, following up and evaluating the national programmes and strategic actions of the National Plan for Scientific Research, Development and Technological Innovation.



SPAIN



The MSI main directing bodies are:

- Secretariat of State for Research
- General Secretariat for Innovation
- Under secretariat for Science and Innovation

Public bodies and organisations:

1. Public Research Bodies:

- Spain National Research Council / Consejo Superior de Investigaciones Científicas (CSIC) [<http://www.csic.es>]
- Centre for Energy, Environment and Technological Research / Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT) [<http://www.ciemat.es>]
- Health Institute Carlos III / Instituto de Salud Carlos III (ISCIII) [<http://www.isciii.es>]
- National Institute of Agriculture and Food Research Institute / Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA) [<http://www.inia.es>]
- Oceanography Spanish Institute / Instituto Español de Oceanografía (IEO) [<http://www.ieo.es>]
- Spanish Geology and Mining Institute / Instituto Geológico y Minero de España (IGME) [<http://www.igme.es>]
- Canary Islands Astrophysical Institute / Instituto de Astrofísica de Canarias (IAC) [<http://www.iac.es>]

2. Centre for Industrial Technological Development / Centro para el Desarrollo Tecnológico Industrial (CDTI) [<http://www.cdti.es>]

3. Spanish Foundation for Science and Technology / Fundación Española para la Ciencia y la Tecnología (FECYT) [<http://www.fecyt.es>]

4. Spanish Genome Foundation/ Fundación Genoma España [<http://www.gen-es.org>]

5. National Museum for Science and Technology/ Museo Nacional de Ciencia y Tecnología [<http://www.micinn.es/mnct/>]

S&T COOPERATION: BILATERAL RELATIONS BETWEEN SPAIN AND RUSSIA

The Agreement on Science & Technology Cooperation between the Kingdom of Spain and the Russian Federation (05 November 2001) is a general cooperation agreement whose main purpose is to foster collaborative research and technological cooperation in the fields of common interest. It has two attached documents: one related to intellectual property rights and one related to the management of the technological plan. A Joint Commission is established by article 5 of the general agreement. The First Joint Commission met in Madrid on April 26th 2011.

In addition, the Programme of Cultural and Educational Cooperation between Spain and Russia for the years 2004-2007 refers to technological and scientific university cooperation.

The Memorandum on Cooperation between Spain's National Research Council and the Russian Academy of Sciences (RAS), signed on 16 April 2002, aimed to promote collaborative research. It mainly focused on scientists' exchange of free stays varying from one week up to one month. Every year, 10-15 Spanish researchers were hosted by Russian institutes of the RAS and reciprocally 20-25 Russian specialists moved to Spain. Their scientific fields covered all disciplines from experimental sciences to the humanities, from basic research to technological development. The development of joint projects was remarkable; during the last tender of the Russian Foundation for Basic Research, more than half of the projects were presented jointly by researchers of CSIC and the Russian Academy of Sciences.

This collaboration finished by the end of 2010, when Spain's National Research Council, following a reform of the centre, put an end to the agreement, the new policy of the Council being to develop open, general, accessible and multidisciplinary cooperation programmes with no geographical bounds.



SPAIN

The Spanish Ministry for Science and Innovation takes part in several projects of ERA.Net RUS with the Russian Academy of Sciences and the Russian Foundation for Basic Research (and other member States) in the fields of environment and innovative technological processes.

As regards bilateral cooperation in space for peaceful purposes, the agreement between the Government of the Kingdom of Spain and the Government of the Russian Federation on Cooperation in the Exploration and the Peaceful Use of Space, signed on 09 February 2006, pursues commercial activities related to the launching of spacecrafts; encourages joint scientific cooperation and research; and promotes mutual exchanges of relevant expertise, technologies, and equipment.

According to this agreement, the Centre for Technological and Industrial Development, a governmental agency responsible for the development of the Spanish space industry, and the Russian Federal Space Agency Roscosmos are empowered to implement it through joint projects, collaborative research and exchange of information. Priorities have been space launchers and space exploration, space medicine and biology, space communications and satellite navigation.

The Spain's National Research Council, with the Astrophysical Institute of Andalucía and Roscosmos plan to install in 2011 a robotic telescope which will be part of the network BOOTES (Burst Observer and Optical Transient Exploring System)

Spain takes part, together with Russia (Lavochkin Association and Russian Research Space Institute, IKI) and Finland (Finnish Meteorological Institute), through National Institute of Aerospace Technology Esteban Terradas (Instituto nacional de Tecnología Aeroespacial, INTA), and Complutense University of Madrid, in the mission FOBOS-MetNet, which aims to explore the atmosphere on Mars during at least one Martian year. The space sound will be launched in 2013. Spain also works in MEIGA (Mars Environmental Instrumentation for Ground and Atmosphere). Spain takes part in the programme "MARS 500, through the Earth-Emotional Activities Related to Health Using Virtual reality", carried out under the leadership of the Russian Federation Institute of Bio-Medical Problems of the Russian Academy of Sciences. Four Spanish Universities and CIBEROBN (Biomedical Network Research Centre – Obesity CIBER) are involved in this project.

Spain (through Complutense University of Madrid and Ministry of Science and Innovation) takes part in the mission WSO-UV, under the leadership of Roscosmos, and together with Germany, Ukraine and China. The aim is to create an observatory for ultraviolet observation.

Spain (through Valencia University, and together with South Korea, Denmark, Taiwan and USA) takes also part in the international joint project UFFO, which is a part of the Russian Mission LOMONOSOV (the structural and thermal model made in Spain was delivered to LOMONOSOV on 01 December 2010) . LOMONOSOV will be launched in November 2011.

Cooperation in the field of nuclear energy is managed, on the Spanish side, by two state-owned entities: the Centre of Research and Technology for Energy and Environment (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas - Ciemat), which is the main public research organisation in energy research, and the National Nuclear Security Council (Consejo de Seguridad Nuclear – CSN).

Both Ciemat and CSN cooperate regularly with Russian counterparts, especially in the fields of nuclear energy, both fission and fusion, and energy generation security. In nuclear fission, Ciemat has concentrated on nuclear safety and technologies for radioactive waste treatment (i.e. partitioning and transmutation) with regular collaboration with departments and laboratories from Russia. Ciemat's Nuclear Fusion Laboratory has been subcontracting research with Russian institutes, mostly the Russian National Research Centre - Kurchatov Institute (TJ-II) and the Ioffe Physical



SPAIN



Technical Institute of the Russian Academy of Sciences (St. Petersburg). It has carried out experiments with Tokamak TJ-I and Stellarators TJ-IU and TJ-II. The ITER European Domestic Agency "Fusion for Energy" is located in Barcelona.

The Polytechnical University of Madrid (High Technical School of Industrial Engineering) collaborates with the Lebedev Institute in the fields of high density plasma and laser-based inertial fusion for energy generation.

Another field of priority interest in the bilateral cooperation is high-energy physics, particularly accelerators and plasma physics. There have been collaborative activities with the Budker Institute of Nuclear Physics SB RAS (Novosibirsk), the Institute of Theoretical and Experimental Physics (Moscow), and the Institute of High Energy Physics (Protvino). Five Russian scientists are staff members of ALBA Synchrotron Light Facility in Cerdanyola del Vallès near Barcelona and fifteen members of Budker Institute have temporarily travelled to Spain to cooperate with ALBA in the project.

Finally, Ciemat actively takes part in activities of the ISTC (International Science & Technology Centre, Moscow) and supports three ongoing EU Contact Experts Groups (CEG) on nuclear energy. A joint CIEMAT/ISTC seminar on renewable energies (October 2010) put an end to this cooperation, as ISTC in a process of concluding their mission in Russia.

Another area of cooperation is earth science. Spain and Russia closely collaborated in different projects for geological research in the Urals range, under the leadership of CSIC Jaume Almera Institute. More than 50 Russian scientists took part in the ESF Uralides project, and in several EU and INTAS projects. The research is still carried out, jointly by the Granada University and research centres in Yekaterinburg and Saint Petersburg.

CSIC and several universities collaborate with Russian institutions in the SESAME project within the EU 6th Framework Programme, and the INTAS-financed project Digital Cartography of Lake Baikal involves scientists of the Barcelona University.

Russia and Spain have collaborated in the design and building of a Free Electron European laser (DESY and XFEL).

Collaboration in the field of the polar research has developed intensively in recent years. It is based on technological, university and project-to-project cooperation. Projects have to date mainly focused on the joint participation in expeditions of Spanish and Russian scientific bases, both in the Antarctic and the Arctic (Bellingshausen, Vernadsky, Svalbard, Barentsburg and King Juan Carlos), and the use of the polar research vessels. Russian (Institute of the Earth's Crust of Irkutsk, Shirshov Institute, Lomonosov Moscow State University) and Spanish scientists collaborate in the working groups of CAFF (Conservation for Arctic Flora and Fauna) and AMAP (Assessment Programme of the Arctic Council). Spanish-Russian cooperation is remarkable in the EU multilateral projects HERMES and HERMIONE, and in the Europolar Era-Net project SVALGLAC.

There is also cooperation in information and communication technologies. On annual basis, a Spanish-Russian Forum on Information and Communication Technologies is organised in Russia or Spain alternately. The IV Forum is to take place in October 2011.

2011 - Year of Spain in Russia and of Russia in Spain. Main activities of the programme, with the objective of leading to a qualitative and quantitative increase in the relations on science, technology and innovation, include: Russian participation in the Nanotechnology Fair in Spain (Imaginenano – NanoSpain 2011); Outer Space Week; exhibition in Spain on the main Russian scientific and technological achievements; Russian-Spanish Business Innovation Forum, scientific conferences, II Workshop on Autonomous Robotic Observatories (Siberia), Interdisciplinary Congress on Plasma; Seminar "Mars and Society"; Workshop on renewable energies; opening of the Scientific Operations Centre of the Ultraviolet Outerspace Observatory WSO-UV, Spain.



SPAIN

WHERE CAN I FIND MORE INFORMATION?

National Nuclear Security Council (Consejo de Seguridad Nuclear)

www.csn.es

National Research Council (Consejo Superior de Investigaciones Científicas)

www.csic.es

Centre of Research and Technology for Energy and Environment (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas)

www.ciemat.es

Ministry of Science and Innovation (Ministerio de Ciencia e Innovación)

www.micinn.es

Ministry of Foreign Affairs and Cooperation

www.maec.es

Ministry of Industry, Tourism & Commerce (Ministerio de Industria Turismo y Comercio)

www.mityc.es

Centre for Technological & Industrial Development (Centro para el Desarrollo Tecnológico Industrial)

www.cdti.es

National Institute for Aerospace Technologies (Instituto Nacional de Técnica Aeroespacial)

www.inta.es

Centre for Hydrodynamic Research (Canal de Experiencias Hidrodinámicas de El Pardo)

www.cehipar.es

Spanish Institute for Oceanography (Instituto Español de Oceanografía)

www.ieo.es

National Institute for Agricultural & Food Research (Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria)

www.inia.es

Institute of Astrophysics of the Canary Islands (Instituto de Astrofísica de Canarias)

www.iac.es

National Energy Commission (Comisión Nacional de Energía)

www.cne.es

Spanish Polar Committee (Comité Polar Español)

www.mec.es/ciencia/comPolar

Royal Navy Observatory, San Fernando.

http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia_observatorio/

Scholarships (Becas)

www.mec.es/ciencia/becas; www.becasmae.es

Spanish Embassy in Moscow (Embajada de España en Moscú)

www.maec.es/Embajadas/moscu/es/home



SWEDEN

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN SWEDEN

In Sweden, the Riksdag (Parliament) and Government have overall responsibility for higher education and research, which means that they make decisions on aims, guidelines and the allocation of resources. Education and research fall under the scope of the Ministry of Education and Research. The Government's policy regarding research and development covers two policy areas: business and industry on the one hand, and research on the other. The Ministry of Enterprise, Energy and Communications and the Ministry of Education and Research therefore co-operate closely concerning R&D. The Swedish National Agency for Higher Education is the central government agency responsible for matters concerning higher education, but universities and other higher education institutions in Sweden are autonomous agencies, directly responsible to the Government.

The objective for Swedish research policy is to be a leading research nation, where research of a high scientific standard is conducted by high quality education and lifelong learning for growth and justice. Research and development have had a high priority in Sweden in recent decades. On average, Swedish R&D expenditure totals about 4% of GDP (equal to approx 12 billion EUR). The business sector accounts for 74% of R&D expenditure, the higher education sector - 21%, other public sector institutions and the private non-profit sector - the remaining 5%. Companies largely fund their own research, but receive some contributions from the central government and from abroad.

The development of basic research in Sweden is financed and promoted by the Swedish Research Council. Public-sector funding of R&D takes place both through grants paid directly to higher education institutions and through support from research councils and sectoral research agencies. In addition, there are a number of public research foundations: altogether, these provide research funding in excess of 180 million EUR annually. The Swedish Parliament grants R&D funds within all the ministries' spheres of responsibility. The bulk of government-financed research takes place at Swedish universities and other higher education institutions, and only to a limited extent at research institutes not tasked with educating students, which sets Sweden apart in an international comparison.

The male-female breakdown of students entering research programs is basically balanced, with 49 percent women and 51 percent men (2009).

SUMMARY REVIEW OF SCIENCE & RESEARCH COOPERATION WITH RUSSIA

In Sweden today, there are 13 state-owned universities and 23 other state-owned higher education institutions (university colleges and professional schools). In addition, there are three private universities and a number of smaller higher education institutions owned by other organisations. Their primary tasks are to provide undergraduate and postgraduate education and to interact with the surrounding community. Swedish universities have a broad international co-operation in the field of science and research. Most of the universities and institutions of higher education have international co-operation agreements, including with Russia.

Within Sweden's international co-operation with Russia, a number of projects in the field of education and research have been carried out. One example is the ongoing co-operation on economic research between the Stockholm School of Economics and the Centre for Economic & Financial Research (CEFIR) at New Economic School in Russia.



SWEDEN

The aim of Swedish international co-operation in the field of education and research is to promote mutual understanding of the countries' respective cultures. This is done by helping to strengthen research and educational capacity in Russia and by creating efficient, long-term networks that unite educational institutions in Sweden and Russia, primarily in North West Russia and the Moscow region. This support, which is largely managed by the Swedish Institute (SI - www.si.se), goes to educational initiatives of various kind.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION SWEDEN – RUSSIA

Sweden actively promotes sustainable relationships and mutual learning processes, which in turn evolve from interpersonal meetings, education and cultural experiences. We strive to build up and develop good, lasting relationships, exchanges and networks with people and institutions in other countries. This is done through public fund providers, private funds, foundations and fundraising organisations. Examples for available funding for science and research co-operation are:

THE VISBY PROGRAMME

Funding for projects and networks at an academic level between Sweden, Belarus, Estonia, Latvia, Lithuania, Poland, Russia and Ukraine. Support is intended to stimulate greater long-term co-operation between universities/university colleges and institutions/enterprises. Individual scholarships are intended for students and researchers at advanced university level.

NORDPLUS

The Nordplus Framework Programme offers financial support to a variety of educational cooperation between partners in the area of lifelong learning from the eight participating countries in the Baltic and Nordic regions. Participants from the participating countries (Denmark - including Greenland and Faeroe Islands, Estonia, Finland - including Åland, Iceland, Latvia, Lithuania, Norway and Sweden) are eligible for financial support from Nordplus. Participants from other countries may take part in programme activities, but are not eligible for financial support from the programme. Whether you are a pupil, a student or a teacher, this programme gives you the opportunity to get acquainted with the cultures of other Nordic countries, including their way of life, values, and languages.

STINT

The Swedish Foundation for International Cooperation in Research and Higher Education (STINT) provides grants and scholarships to contribute to the widening of the networks of Swedish academia. The mandate of STINT is to support the internationalisation of Swedish research and higher education and covers all academic fields and disciplines.

WHERE CAN I FIND MORE INFORMATION?

Ministry of Education and Research

www.sweden.gov.se

The International Programme Office for Education and Training

A Swedish government agency that comes under the Education and Culture Department supporting schools, universities, companies, organisations and individuals in order to help them participate in international cooperation initiatives.

www.programkontoret.se

Mobility Centre Sweden

A portal with on-line information and practical assistance for researchers moving to and from Sweden. On this site you can read further about Swedish research, research opportunities, available jobs, responsibilities of Parliament and Government, and see lists of research institutes and universities.



SWEDEN



www.researchinsweden.se

The Swedish Research Council

The Swedish Research Council provides support for basic research in all academic disciplines. It presents the main research funding bodies in Sweden and valid calls for applications and participates in many international organisations and programmes.

www.vr.se

Forskning.se

A nationwide website providing information on research and research findings in Sweden.

www.forskning.se

Nordplus

Nordplus is the Nordic Council of Ministers' most important programme in the area of lifelong learning. Within the Nordplus programmes, students and teachers in schools and higher education can apply for funding for different types of exchange activities.

www.nordplusonline.org

The Visby Programme

The Visby Programme's main objective is to strengthen co-operation and network building between Sweden and Belarus, Estonia, Latvia, Lithuania, Poland, Russia and Ukraine in the field of education. The Visby Programme supports institutional co-operation and individual exchanges at all educational levels above compulsory school.

www.si.se

STINT - The Swedish Foundation for International Cooperation in Research and Higher Education

www.stint.se

SWEDEN.SE - The official gateway to Sweden.

www.sweden.se

Nordic council/Nordic Council of Ministers

Official co-operation in the Nordic region.

www.norden.org

What is it like to study in Sweden?

For information about how to apply for scholarships for students/researchers coming to Swedish Universities, please see

www.studyinsweden.se

Studera.nu

Studera.nu is the official website for applying to higher education in Sweden managed by the Swedish National Agency for Higher Education in cooperation with the National Admissions Office to Higher Education.

<https://www.studera.nu/studera/1374.html>



UNITED KINGDOM

BASIC INFORMATION ABOUT THE GOVERNANCE OF SCIENCE IN UNITED KINGDOM

DEPARTMENT FOR BUSINESS INNOVATION AND SKILLS (BIS)

BIS (<http://www.bis.gov.uk>) is the UK Government Department which leads on the Growth agenda. It aims to build a dynamic and competitive UK economy by: creating the conditions for business success; promoting innovation, enterprise and science; and giving everyone the skills and opportunities to succeed. It is achieving this by fostering world-class universities and promoting an open global economy.

TECHNOLOGY STRATEGY BOARD (TSB)

The TSB is the UK's national innovation agency (www.innovateuk.org). It was established as a Non Departmental Public Body in 2007, with a new staff with mainly business backgrounds. It is based in Swindon, 1.5 hours from London and employs around 140 people. It is funded by the Department for Business Innovation and Skills and also has aligned funding from the UK's Research Councils and formerly Regional Development Agencies.

The TSB has a number of programmes to support innovation in the UK, including Knowledge Transfer Partnerships (KTPs), Innovation Platforms, Knowledge Transfer Networks, Collaborative R&D (CR&D) and SBRI:

- **KTPs**
 - A programme that helps to fund and place highly qualified graduates into businesses to work on a specific problem or task.
 - The graduate brings in cutting edge knowledge and creates links between business and academia, as well as receiving training in business skills.
 - Funded by the TSB and the business involved.
- **Innovation Platforms**
 - An Innovation Platform brings together a societal challenge with a market opportunity.
 - The TSB works with Government agencies, charities, industry associations and other groups to identify future societal needs and to work out how to address them.
 - Businesses are then supported to develop innovative solutions, for which in some years there will be a large market.
 - Examples include Assisted Living IP which aims to keep the UK's ageing population in their own homes for longer by creating innovative solutions to healthcare, monitoring, accessibility and other needs.
 - Other IPs cover Low Carbon Vehicles, Stratified Medicine, Low Impact Buildings, Sustainable Agriculture and Food, Detection and Identification of Infectious Agents.
- **CR&D**
 - Competitive funds to support innovative R&D projects which involve business to business or business to research collaborations.
 - Competitions are in fields of strategic importance (see broad list of focus areas below).
- **Grant for R&D**
 - Funding available for single companies.
 - Supports strategically important science, engineering and technology in any sector.
 - Includes support for Proof of Market, Proof of Concept, and Prototype Development.
 - The scheme replaces the scheme previously run by the Regional Development Agencies.
- **Knowledge Transfer Networks (KTNs)**
 - A type of national 'cluster' or network in a specific field.
 - Brings together business, academia, research, finance and technology areas to stimulate innovation through knowledge transfer.



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- Each KTN has its own management and funded activities and events and links in with a connector based at the TSB itself.
- Funded by Government, industry and academia.
- SBRI
 - Pre-procurement programme uses procurement to drive innovation.
 - The TSB works with Government Departments to identify future procurement needs and then supports SMEs to meet these needs by running funding competitions in particular areas. Companies receive contracts for product development.
- Technology and Innovation Centres (TICs)
 - A new scheme to fund centres of excellence which focus on a specific technology.
 - A detailed strategy and plan for implementation was released in April 2011.
- Micro and Nanotechnology Centres
 - A regionally-dispersed network of centres, funded by the TSB, RDAs and the Devolved Governments of Scotland and Wales.
- International
 - The TSB is involved in and funds a number of international projects and programmes including Artemis and Ambient Assisted Living.
 - A member of Eureka Eurostars.
 - Responsible for the UK's FP7 NCP service.
 - Involved in TAFTIE and the European Commission funded International Partnering Forum.

The TSB has around £1 billion funding over 3 years. Funding of businesses is competitive and usually based around specific technology areas or social needs. Most projects must be around 3 to 5 years from market (except in pharmaceuticals and in the new Grant for R&D scheme). Most funding is matched by the business.

Focus areas for funding include:

- Advanced Materials
- Biosciences
- Built Environment
- Creative Industries
- Electronics, Photonics and Electrical Systems
- Emerging Technologies and Industries
- Energy Generation and Supply
- Environmental Sustainability
- High Value Manufacturing
- High Value Services
- ICT
- Medicines and Healthcare
- Nanotechnology
- Transport

The previous (and first) strategy 'Connect and Catalyse' is to be replaced with a new strategy published in May 2011.

Government Office for Science (GO-Science) <http://www.bis.gov.uk/go-science>

The Government Office for Science is the home of science and engineering across government and exists to support the Government Chief Scientific Adviser, Professor John Beddington. The key role of the GCSA and GO-Science is to ensure that all levels of government, including the Prime Minister and Cabinet, receive the best scientific advice possible, and to enable the many science-using departments across government to create policies that are supported by strong evidence and robust arguments.



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Research Councils UK (RCUK) www.rcuk.ac.uk

RCUK is the strategic partnership of the UK's seven Research Councils. They invest annually around £3 billion in research. The focus of RCUK is on excellence with impact. They nurture the highest quality research, as judged by international peer review providing the UK with a competitive advantage. Global research requires that they sustain a diversity of funding approaches, fostering international collaborations, and providing access to the best facilities and infrastructure, and locating skilled researchers in stimulating environments. RCUK strive to ensure that research achieves impact – the demonstrable contribution to society and the economy made by knowledge and skilled people – by creating conditions for researchers and businesses to engage and collaborate with the public, business, government and charitable organisations.

BiS funds the following seven Research Councils, which allocate public funds to support research projects and teams:

- **Arts and Humanities Research Council (AHRC)** <http://www.ahrc.ac.uk/Pages/default.aspx>

The Arts and Humanities Research Council (AHRC) supports world-class research that furthers understanding of human culture and creativity - from ancient history and heritage science to modern dance and digital content. Research into these subjects helps to interpret experiences, probe identities, interrogate cultural assumptions and understand historical, social, economic and political context. It adds to the economic success of the UK, through its contributions to the knowledge economy and innovation agenda. The research it funds can lead to improvements in social and intellectual capital, community identity, learning skills, technological evolution and the quality of life of the nation.

- **Biotechnology & Biological Science Research Council (BBSRC)** <http://www.bbsrc.ac.uk/>

The goal of BBSRC is to promote and support, by any means, high-quality basic, strategic and applied research and related postgraduate training relating to the understanding and exploitation of biological systems.

BBSRC aims to advance knowledge and technology (including the promotion and support of the exploitation of research outcomes), and provide trained scientists and engineers, which meet the needs of users and beneficiaries (including the agriculture, bioprocessing, chemical, food, healthcare, pharmaceutical and other biotechnological related industries), thereby contributing to the economic competitiveness of the United Kingdom and the quality of life.

- **Engineering & Physical Sciences Research Council (EPSRC)** <http://www.epsrc.ac.uk/>

EPSRC is the main UK government agency for funding research and training in engineering and the physical sciences, investing more than £850 million a year in a broad range of subjects – from mathematics to materials science, and from information technology to structural engineering. EPSRC manage their portfolio through programmes. Research base programmes focus on investigator-led research and training. Business innovation programmes deliver the priority research themes and maximise the economic and social impact of the research and training EPSRC funds.

- **Economic & Social Research Council (ESRC)** <http://www.esrcsocietytoday.ac.uk/>

The ESRC is the UK's largest organisation for funding research on economic and social issues. It supports independent, high quality research which has an impact on business, the public sector and the third sector. The ESRC's total budget for 2010/11 is £218 million. At any one time it supports over 4,000 researchers and postgraduate students in academic institutions and independent research institutes.

- **Medical Research Council (MRC)** <http://www.mrc.ac.uk/>

The Medical Research Council is a publicly-funded organisation dedicated to improving human health. It supports research across the entire spectrum of medical sciences, in universities and hospitals, in its own units, centres and institutes in the UK, and in its units in Africa.



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The MRC's mission is to:

- Encourage and support research to improve human health;
- Produce skilled researchers;
- Advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness of the UK;
- Promote dialogue with the public about medical research.

- **Natural Environment Research Council (NERC)** www.nerc.ac.uk

The Natural Environment Research Council (NERC) funds independent environmental research in the United Kingdom. The priorities it develops with its researchers and stakeholders provide a focus for the marine, polar, atmospheric, earth, terrestrial and freshwater science communities. The research is often multidisciplinary and in collaboration with other national and international partners.

NERC runs a fleet of research ships and scientific aircraft. It has bases in some of the world's most hostile environments and invests in satellite technology to monitor environmental change on a global scale. NERC has research and collaborative centres that maintain and develop UK national capability across the disciplines that make up environmental science. It funds centres and universities to carry out research, train and support a world-class community of environmental scientists.

NERC International Plan is at <http://www.nerc.ac.uk/research/international/documents/international-plan.pdf>

- **Science and Technology Facilities Council (STFC)** www.scitech.ac.uk/Home.aspx

STFC is one of the world's largest multidisciplinary research organisations. The Council operates world-class, large scale research facilities and provides strategic advice to the UK government on their development. It also manages several international research projects in support of a broad cross-section of the UK research community.

The Council directs, co-ordinates and funds research, education and training directly through grants particularly in astronomy, particle physics, space science and nuclear physics. The Council is also the major stakeholder in the Diamond Light Source (a synchrotron). In November 2007 Diamond Light Source Ltd, and two Russian science institutes – the Kurchatov Institute and the Shubnikov Institute of Crystallography, strengthened their links by signing a wide-ranging Memorandum of Understanding on collaborative research.

- **Department of Energy and Climate Change (DECC)** www.decc.gov.uk

The Department of Energy and Climate Change is responsible for all aspects of UK energy policy, and for tackling global climate change on behalf of the UK. DECC is working internationally to tackle the global challenge of climate change. As the UK imports more energy, it also wants to ensure that supplies are secure, reliable and from a wide range of sources. For the UK international Strategy on climate change visit http://www.decc.gov.uk/en/content/cms/what_we_do/change_energy/tackling_clima/int_climate/int_climate.aspx

- **Department for Environment Food and Rural Affairs (DEFRA)** www.defra.gov.uk

The Department covers – it makes policy and legislation, and works with others to deliver its policies in - areas such as:

- the natural environment, biodiversity, plants and animals
- sustainable development and the green economy
- food, farming and fisheries
- animal health and welfare
- environmental protection and pollution control
- rural communities and issues.



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Although DEFRA only works directly in England, it also works closely with the devolved administrations in Wales, Scotland and Northern Ireland, and it generally leads on negotiations in the EU and internationally.

SCIENCE & RESEARCH COOPERATION WITH RUSSIA

A new **Science & Innovation Section** was set up in the British Embassy in 2010 - focused upon creating new and enhancing existing world-class science and innovation collaborations between UK and Russia. It also works to ensure that UK Ministers and leading research organisations in the UK are informed about science and technology developments in Russia and works to raise awareness amongst key Russian stakeholders of the UK's offer as a place to carry out world-class research and development.

The section is part of the UK's **Science and Innovation Network (SIN)** co-owned by the Foreign and Commonwealth Office and the Department for Business, Innovation and Skills. They have two mechanisms to enhance mobility for top scientists: **Science Café & Expert Innovation Roundtables**.

In 2011, the Science & Innovation section organised with Russian Ministry of Education and Science for the renewal of the UK-Russia Joint Committee on Scientific and Technical Cooperation on February 22nd 2011 in Moscow: <http://ukinrussia.fco.gov.uk/en/about-us/working-with-russia/004-embassy-departments/015-science-innovation/002-joint-committee>.

The Committee was set up under Article 9 of the **UK-Russian Agreement on Scientific and Technical Cooperation** of 28 May 1996.

A **Joint Statement on education, science, innovation co-operation** was signed by Minister for Universities and Science, David Willetts and Minister for Education and Science, Andrei Fursenko on 21 February 2011 – in which enhanced collaboration on nuclear and particle physics, space, energy efficiency, nanotechnology, life sciences, climate and Arctic science was agreed <http://ukinrussia.fco.gov.uk/resources/en/pdf/21121586/2011-joint-statement>.

A **UK Russia Year of Space 2011** was launched by Minister Willetts on 22 February 2011 with a raft of research collaborations and educational activities and experiments taking place during 2011. <http://ukinrussia.fco.gov.uk/en/about-us/working-with-russia/004-embassy-departments/015-science-innovation/003-year-space>

The **British Council** in Moscow also plays an important role in facilitating UK-Russian collaborations in education and science through its **Internationalising Higher Education programme** which is building on the success of the earlier BRIDGE programme (58 UK-Russia partnerships). Internationalising Higher Education involves higher education policy dialogue on a global scale, and will contribute to a deeper knowledge partnership between the UK and Russia through enhanced information flows, support for links between universities and industry, increased student mobility and English language support for the internationalising higher education agenda.

OPPORTUNITIES FOR SCIENCE & RESEARCH COOPERATION UK – RUSSIA

The Department for International Development (DFID) www.dfid.gov.uk

DFID's Central Research Department (CRD) commissions research aiming at ensuring tangible outcomes on the livelihoods of the poor. DFID funds research only if there are clear opportunities and mechanisms for the research to have a significant impact on poverty.



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DFID's Research Funding Framework identifies four priorities:

- sustainable agriculture;
- killer diseases;
- where states do not work for the poor;
- climate change.

Information on both DFID current research programmes and completed research can be found at www.research4development.info/index.asp. When DFID issues calls for research proposals directly funded by CRD they are advertised at www.dfid.gov.uk/research/research-calls.asp and in relevant professional journals. DFID cannot consider unsolicited requests for research funding.

Foreign and Commonwealth Office (FCO) www.fco.gov.uk

FCO has identified the promotion of a low carbon, high growth global economy amongst its four strategic policy goals. This includes creating the conditions for a rapid shift of investment towards sustainable low carbon technologies and the development of sound scientific and economic evidence for early action on climate change. Activities of the Global & Economic Issues Directorate and the Science & Innovation Network at diplomatic missions overseas include the promotion of new science and technology co-operation, financed by the Strategic Programme Fund (formerly the Global Opportunities Fund) www.fco.gov.uk/en/about-the-fco/what-we-do/funding-programmes/strat-progr-fund

FCO **Scholarships and Fellowships** encourage those who have the potential to become tomorrow's leaders, opinion formers and decision-makers to study in the UK. The programme comprises Chevening Scholarships and Fellowships. www.fco.gov.uk/en/about-the-fco/what-we-do/funding-programmes/scholarships/

Royal Society www.royalsociety.org

The Royal Society supports many top young scientists, engineers and technologists. The Society is the national academy of sciences of the UK. It influences science policy, debates scientific issues with the public and much more. It is an independent, charitable body, which derives its authoritative status from its 1400 Fellows and Foreign Members. Following the break-up of the Soviet Union, the Society signed an exchange agreement with the Russian Academy of Sciences in May 1992 (renewed May 2004), replacing an agreement concluded in 1956 with the old USSR Academy of Sciences. The Royal Society accepts nominations for overseas exchange grants from the Russian Academy and directly from Russian scientists giving the opportunity to scientists of non-affiliated institutes to carry out research in UK laboratories or universities. In 2007, the Royal Society signed an agreement with the Russian Foundation for Basic Research to jointly fund up to ten International Joint Projects annually.

<http://royalsociety.org/grants/schemes/international-exchanges/>

The Royal Society of Edinburgh (RSE) www.royalsoced.org.uk/rse.htm

RSE initiates and supports activities, which enhance Scotland's involvement in global collaboration. The object of the **International Exchange Programme**, funded by the **Scottish Executive**, is to enable scholars and researchers to come to Scotland or to visit overseas from their Scottish academic base for a short period of time with a view to establishing ongoing collaboration.

www.royalsoced.org.uk/international/exchanges/index.htm

The Wellcome Trust www.wellcome.ac.uk/funding

The Wellcome Trust funds innovative biomedical research, in the UK and internationally, spending around £650 million each year to foster and promote research with the aim of improving human and animal health. The Wellcome Trust also supports public debate about biomedical research and its impact on health and wellbeing.



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Russian investigators are eligible to apply for Wellcome Trust funding as coapplicants with principle applicant scientists based in the UK or the Republic of Ireland in order to conduct collaborative research. More information about Wellcome Trust funding for researchers outside of the UK is available at: www.wellcome.ac.uk/Funding/Biomedical-science/International-funding/index.htm

British Council (BC) – Science www.britishcouncil.org

BC is the UK's organisation for promoting international cultural relations. It promotes greater international awareness of the UK's role in scientific creativity and innovation, increased scientific collaboration through the exchange of ideas, knowledge and information and demonstrable and sustained relationships and networks between young people involved and interested in science, engineering and technology http://www.britishcouncil.org/new/folder_what-we-do/science/.

The BC partnership programmes promote links between British and higher education research institutions and laboratories in other countries working with local partners through offices outside of the UK.

WHERE CAN I FIND MORE INFORMATION?

Science & Innovation Section website of British Embassy Moscow

<http://ukinrussia.fco.gov.uk/en/about-us/working-with-russia/004-embassy-departments/015-science-innovation/>

The Researcher's Mobility Portal (UK)

A resource to help researchers coming to the UK. The BC also has a special feature on women in science, engineering and technology.

www.britishcouncil.org/eumobility

www.britishcouncil.org/science-women.htm

SISTER

Support for International Science, Technology & Engineering Research

www.britishcouncil.org/sister/contact.htm

The Newton International Fellowship

A scheme supporting the very best early stage post-doctoral researchers from all over the world, and offering support for two years at UK research institutions. It is run by the British Academy, the Royal Academy of Engineering and the Royal Society. The Fellowships cover a broad range of natural and social sciences, engineering and the humanities

www.newtonfellowships.org



BILAT-RUS: ENHANCING THE BILATERAL S&T PARTNERSHIP WITH THE RUSSIAN FEDERATION

BILAT-RUS is a European Union (EU) project focused on enhancing the bilateral S&T Partnership between the Russian Federation and the EU Member States, Candidate Countries and other Associated Countries. The project aims at contributing to the sustainable implementation of the Common Space on Research, Education and Culture between the EU and Russia and at further strengthening the participation of Russia in the EU programmes – most prominently the 7th Framework Programme for Research and Technological Development (FP7).

Funded by the European Commission with an amount of approx. 0.5 million Euro, BILAT-RUS unites nine prominent institutions from four countries, five partners from EU Member States Countries, and four partners from Russia. The project coordinator is the International Bureau of the Federal Ministry of Education and Research in Germany at the German Aerospace Centre.

In support of its goals, BILAT-RUS implements three main activities aiming at:

- Information dissemination and awareness raising
- Optimising the framework and instruments for enhanced future cooperation in S&T and innovation
- Addressing the short and medium term needs of the existing joint thematic EU-Russian Working Groups and at exploiting the potential of Russian Technology Platforms established in relation to existing European Technology Platforms.

BILAT-RUS is supporting coherence and coordination of the various (thematic) activities under the umbrella of the EU-Russian S&T agreement and is contributing to a stronger coordination of bilateral activities with Russia at EU and Member State level. According to the directions taken for the Fourth EU-Russian Common Space on Research, Education and Culture, it is providing assistance to optimise the framework for collaborative efforts, to specify fields of cooperation in joint priority research domains and to disseminate information and knowledge more effectively. Moreover, it helps to develop and implement measures aimed at strengthening the systematic and structural nature of EU-Russian S&T cooperation as well as devising an effective machinery for the establishment of partner links.

Intermediate results (among others):

- Launching and maintenance of the web portal S&T gate RUS.EU (<http://www.st-gaterus.eu>);
- Several case studies of good cooperation practice in S&T and analytical summary report on the lessons learnt;
- Concluding report on success factors for Russian participation in the EU RTD Framework Programme.

WHERE CAN I FIND MORE INFORMATION?

Website BILAT-RUS: <http://www.bilat-rus.eu/>

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ERA.NET RUS: LINKING RUSSIA TO THE ERA: COORDINATION OF MS/AC TOWARDS AND WITH RUSSIA

ERA.Net RUS (ERA.Net with Russia) is a European Union (EU) project aimed at promoting a unified European approach to collaborating with Russia in the field of science and technology. ERA.Net RUS forms part of the 7th Framework Programme suite of European research initiatives, and has as a primary objective, namely the creation of a “European Research Area Network” with Russia, similar to other “ERA-Nets” with India (New INDIGO) or the Far East (KorA-Net).

ERA.Net RUS is targeted at stakeholders at policy and programme level, the research community and industry. Funded by the European Commission for an amount of 2.6 million Euro, ERA.Net RUS unites 18 prominent institutes from 10 countries, 11 partners from EU Member States Countries, 2 partners from Associated Countries, 4 partners from Russia and 1 partner from the European Commission (Joint Research Centre). The project coordinator is the International Bureau of the Federal Ministry of Education and Research in Germany.

In support of its goal, ERA.Net RUS has a range of activity clusters aiming at:

- Raising knowledge on bilateral and national S&T programmes with or towards Russia
- Raising knowledge on the Russian S&T system
- Identifying common ground across bilateral S&T programmes of EU MS/AC with Russia and providing a basis for a joint programmatic approach
- Implementing and learning lessons from Pilot Joint Calls
- Developing and promoting a sustainable S&T cooperation programme with Russia

ERA.Net RUS further emphasises the significance of the EU-Russian partnership and helps to achieve a new level in EU-Russian S&T cooperation by improving the coherence and coordination of European scientific cooperation with Russia and the complementarities between MS/AC and Community activities. Focusing on Russia, the ERA.Net RUS project targets the EU's largest neighbouring country and one of its main strategic partners.

Intermediate results (among others):

- Analytical reports on “The Russian S&T system”, “The Russian S&T funding system from the perspective of international cooperation” and “S&T cooperation patterns”.
- Database of S&T programmes of Russia, EU Member States and Countries Associated to the 7th RTD Framework Programme, which are relevant for the S&T cooperation between EU MS/AC and Russia.
- Setting up and launching of two Joint Calls on “Innovation” and “S&T” projects
 - Call on Innovation, February 15 – April 15, 2011
 - Call on Collaborative S&T projects, March 15 – May 31, 2011

WHERE CAN I FIND MORE INFORMATION?

Website ERA.Net RUS: <http://www.era.net-rus.eu/>

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ACCESSRU: STRENGTHENING EU-RUSSIA S&T COOPERATION AND EU ACCESS TO RUSSIAN NATIONAL FUNDING PROGRAMMES

ACCESSRU is a support action of FP7, aimed at stimulating Science and Technology cooperation between the EU and Russia.

The project was launched on 01 November 2009 as part of a lot of 11 similar projects, united under a global initiative ACCESS4EU. ACCESS4EU is an initiative of the FP7 sub-programme «Capacities». It has been designed not only to support and stimulate the participation of third countries in the Framework Programme, but also to provide opportunities to access research programmes managed by third countries. Indeed, The EU's Research Framework Programme is generally open to third countries. In turn, the EU's agreements on scientific and technological cooperation with third countries require these countries to open their national programmes to EU researchers. ACCESS4EU projects are intended to strengthen and increase the implementation of this reciprocal opening. They foster international cooperation by putting measures in place to promote dialogue and information exchange activities with third countries in order to enable the EU and targeted states/regions outside Europe to discuss current and future research priorities.

Within this context, ACCESSRU has the following main objectives:

1. To assess access opportunities in Russia for EU organizations;
2. To raise awareness on access opportunities in Russia amongst European research organisations and to stimulate, encourage and facilitate the participation of European organisations in Russian programmes;
3. To enhance the S&T policy dialogue and to formulate strategic recommendations on scientific collaboration between Europe and Russia, ensuring reciprocity issues.

In practical terms, during its 36 months lifecycle, ACCESSRU has been observing a measurable increase of European research organisations carrying out effective cooperation with Russia, as well as less readily measurable improvements in the mutual understanding of the respective research systems. In this respect, the project performed an in-depth analysis of the Russian research and innovation system and produced two analytical reports on it, gave written input on the ways to access Russian programmes - "Opportunities report" - aiming to stimulate European participation in Russian R&D and innovation programmes. The project's latest findings are addressed in the following three core access channels: (i) Russian Federal Programmes, (ii) Bilateral and multilateral programmes; and (iii) New Russian Initiatives. Further suggestions on access mechanisms will be available in the final set of policy recommendations foreseen by the end 2012.

WHERE CAN I FIND MORE INFORMATION?

More information about the ACCESSRU project and reports delivered can be found on the Internet site www.access-ru.eu

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INCONET EECA: S&T INTERNATIONAL COOPERATION NETWORK FOR EASTERN EUROPEAN AND CENTRAL ASIAN COUNTRIES

The 'S&T International Cooperation Network for Eastern European and Central Asian (EECA) countries – IncoNet EECA' is a project funded under the 7th Framework Programme for Research and Technological Development. It was launched on 01 January 2008 to last for 54 months.

The project has as its main aim to enhance S&T cooperation between EU and EECA. In order to achieve this goal, the IncoNet EECA aims at:

- Supporting and facilitating a bi-regional EU – EECA S&T policy dialogue involving policy makers, as well as representatives from the scientific community;
- Implementing a series of analyses and studies to feed the policy dialogue and to increase its efficiency;
- Implementing coherent dissemination activities in order to increase the visibility and impact of the project (e.g. website, web portal, coordination with other projects, etc.);
- Carrying out several activities aiming at an increased participation of researchers from EECA countries in the Specific Programmes of FP7.

Work performed since the beginning of the project and the main results achieved so far

To support the bi-regional policy dialogue the organisation of a series of Policy Stakeholders' Conferences (PSCs) is underway, involving policy makers and representatives of the research community. Two PSCs have already been organised in Athens (June 2009) and in Moscow (April 2010) on the state-of-affairs, the challenges and the way forward in EU-EECA ST&I cooperation policy. Two additional PSCs have been scheduled for November 2011 in Warsaw and for the first half of 2012 in Kyiv:

- In Warsaw the PSC will be held in the frame of the Polish EU Presidency and will focus on the presentation and discussion of the White Paper for the EU-EECA cooperation, which is currently under preparation.
- In Kyiv the PSC will focus on Global Challenges and the role of ST&I in addressing them.

In order to feed the bi-regional policy dialogue, a number of analyses have already been implemented that address key factors influencing the scientific cooperation between EU and EECA countries. These include analyses on the status of implementation/use of S&T indicators in the EECA countries, on S&T cooperation patterns (review of the most important cooperation programmes), the mapping of outstanding research institutes, as well as a review of national policies towards global challenges. In parallel, a study was completed on the identification of barriers to incoming and outgoing mobility of researchers.

In order to provide pertinent and updated information on the EU – EECA S&T cooperation as a single entry point, a 'Central Information Office' has been created and is currently under operation, complemented by the dedicated web portal IncrEAST (www.increast.eu)

Finally, in order to increase the participation of researchers from EECA countries in FP7 extensive support was given to NCP/NIP structures in these countries through training activities. In addition, a number of Information Days (five) and Brokerage Events (four) were organised across the EECA countries on different themes of FP7.



WHERE CAN I FIND MORE INFORMATION?

For further information please visit the project's website (www.inco-eeca.net) as well as the IncoEAST web portal www.increast.eu

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