



**Towards reinforcement of S&T cooperation between
Russian and EU:
facilitation of access of European organizations and
researchers to Russian research and innovation
programmes**

**Green paper
(Document for consultation)**

*The present paper is a discussion document intended to stimulate debate and launch a process of consultation, at European and Russian level, on opportunities for European researchers to access the Russian national R&D and innovation programmes. It presents a **current context for EU-Russia scientific and technological cooperation and identified access channels for the EU researchers to the RU programs.***

Interested individuals or organizations are invited to contribute views and information on a range of presented ideas. The key objective is elaborating a set of proposals that will be used as a vehicle to support EU Russian S&T policy dialogue.



The current context for EU-Russia scientific and technological cooperation

European and Russian scientists and research organisations have been working together for many years in all areas of science. Such co-operation has been initiated in the past and fostered by numerous bilateral programmes between the URSS/Russian Federation and the EU Member States, and now it is pursued through programs funded and managed by the European Union (e.g. Framework R&D Programmes, AIDCO/TACIS, INTAS). Furthermore, pan-European science organisations like e.g. EUREKA and the European Science Foundation) as well as international organisations and initiatives such as CERN, ISTC, and ITER have contributed to an intensification of transnational joint research between the EU and Russia.

EU-Russia bilateral cooperation agreements¹ have been signed in a variety of scientific

¹ - *Agreement on scientific & technological cooperation between the European Community and the Russian Federation (concluded in 2000 and renewed in 2003 and in 2009); this agreement is completed by the A roadmap for actions 2010-2012;*

- *Agreement for cooperation between the European Atomic Energy Community and the Government of the Russian Federation in the field of nuclear safety (2001);*

- *Agreement for cooperation between the European Atomic Energy Community and the Government of the Russian Federation in the field of controlled nuclear fusion (2001);*

- *Roadmap for the EU-Russia Common Space in Research and Education including Cultural Aspects (2005);*

- *EU-Russia - Partnership & Cooperation Agreement (chapter on science & technology - article 62).*

disciplines. The EC-Russia science and technology (S&T) policy dialogue contributed to the Permanent Partnership Council (first meeting in May 2008), the joint EC-Russia S&T Cooperation Committee (under the S&T cooperation agreement); and several joint EC-Russia Thematic Research Working Groups in common priority areas of research: Nano-technologies & New Materials, Health, Food-Agriculture-Biotechnology, Non-Nuclear Energy, Nuclear Fission, Aeronautics, and ICT with possibly more to come in future. Following the most recent Joint Committee meeting (Moscow, July 2010), two additional working groups have been created in the areas of research infrastructures and researcher mobility.

Cooperation between the EU and Russia is very active at political and at research level. The future holds a strong potential in terms of even closer EU-Russian S&T relations. In order to fully exploit these potentials, it is necessary that European research organizations can make better use of Russian funding schemes, though.

Whereas the European Commission funded Russian participation in FP projects with more than **€ 45 million** in respect to FP6 and **€ 39.3 Million** in respect to FP7, funding of EU researchers by Russian schemes was minimal.

One of the key approaches for ensuring an equals-based partnership is the recently established '**coordinated calls**' instrument. Coordinated calls are research calls published in parallel by both the EU and Russia with common research content. These calls require that research teams from the EU and Russia wish to collaborate and submit separate but complementary proposals to the EC and to the Russian funding agency. The Russian Authorities have announced a corresponding equivalent

funding from the Russian Ministry of Education and Sciences. To date, six such calls have taken place on the base of 50%-50% funding scheme in key thematic areas: health research, biotechnology, nuclear fission, nanotechnology, aeronautics & air transport and energy research. New coordinated calls with Russia in high performance computing and in nanotechnology are currently being implemented.

Another approach for ensuring an equals-based partnership is participation of research

organisations established in the European Union in projects funded by Russian national programmes. Although the EU-Russia agreement on scientific and technological cooperation foresees a reciprocal opening of domestic programs, the participation of European researchers to Russian programmes – with or without funding - has been very limited so far. The ACCESSRU project has been launched and funded by the 7th Framework Programme in order to contribute to an improvement of this situation.



ACCESSRU project is a support action of the FP7, aimed at stimulation Science and Technology cooperation between the EU and Russia. The project has been launched November 1, 2009 as part of the lot composed of 11 similar projects, united under a global initiative ACCESS4EU. ACCESS4EU is a unique initiative of the FP7 sub-programme "Capacities". It have been designed in order designed not only to support and stimulate the participation of third countries in the Framework Programme, but well as 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 discuss current and future research priorities.

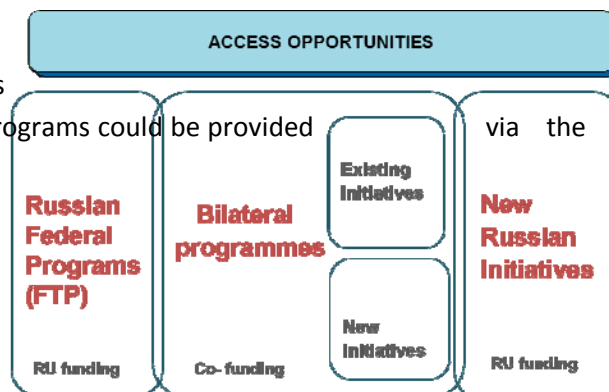
In practical terms, ACCESSRU translates into a measurable increase of European research organisations' effective cooperation with Russia, as well as less readily measurable improvements in mutual understanding of the respective research systems. In this respect, the projects will contribute to the implementation of the agreements by identifying the different funding programmes open to EU researchers and promoting their participation, i.e. developing the reciprocity aspects of S&T agreements.

Overview of the access opportunities for the European organisations and researchers to the Russian S&T programmes

At Russian level, various initiatives and programmes support research and innovation; most of them have any formal restriction for the participation of the foreign researchers. However, in practice, the level of their openness varies from one program to another and the mechanisms providing access to these programmers to foreign, and in occurrence, to the European researchers are not clearly established .

Based on the review of current experiences, the access to EU researchers to the Russian S&T and innovation programs could be provided via the following three channels:

- ✓ Russian Federal Programmes
- ✓ Bilateral and multilateral programmes
- ✓ New Russian Initiatives



Channel A: Russian federal targeted programmes

Russia mainly implements its S&T and innovation policy through federal targeted programmes (FTP). FTPs (and inter-governmental targeted programmes in which the Russian Federation takes part) aim at efficiently solving system problems in the field of state, economic, ecological, social and cultural development of the Russian Federation. They comprise of many different dimensions like, for instance, scientific, research, experimental-design, production, social-economic, and organisational activities. The targeted programmes are linked by goals, resources and terms. Besides, there is direct funding of institutes and scientific research organisations.

In the list of Federal targeted programmes, there are programmes which can be referred to Science and technology (list is non exhaustive):

FTPs constitute the most important instrument to ensure and provide a strategic and focused state support to key areas of state development, including S&T and innovation development. Each FTP is signed by the Government regulation and has clear identification of goals, budget, types of activities and target audiences.

	<i>Period</i>
Federal Space programme	2006-2015
Electronic Russia	2002-2010
Creation of property cadastre	2006-2012
World Ocean	Phase III - 2008-2012
Development of education	2006-2010
Global navigation system	2002–2011
Development of civil aircraft engineering	In 2002-2010 and for the period to 2015
Prevention and treatment of socially dangerous diseases	2007-2011
Development of nuclear energy production complex	to 2015
Russian space-vehicle launching sites development	2006-2015



Channel B: Bilateral and multilateral initiatives

Historically, the **easiest way for cooperation with Russian organizations was and still is through bilateral and multilateral programmes** realized 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 typically more transparent. However, the bilateral character of such programmes can put certain restrictions to the project itself. For example, recently Russia and Israel announced a bilateral programme in the field of nano-technologies (Russian operator – Rosnano) in order to finance joint commercial projects. The Russian side put in place conditions that rule that production of the products developed within the programme has to be located in Russia.

In respect with **bilateral and multilateral programmes** can be mentioned different educational programmes of Universities or internship programmes. It is relatively easy to take part in such programs as Russian organizations work with non-budget funding. On the opposite of budget funding which puts strong restrictions, rules and reporting procedures these schemes are the most open for international cooperation and the most flexible in decision making.

Ongoing initiatives

During the past 10 years, the Russian partner in most bilateral S&T tenders and programmes was either the Ministry of Education and Science), the Russian Academy of Sciences, the Russian Foundation for Basic Research (RFBR), the Foundation for Assistance to Small Innovative Enterprises (FASIE), private corporations.

<i>EU-RU R&D bilateral initiatives</i>	<i>Russian support Organisation</i>	<i>EU support organisation</i>	<i>Funding scheme</i>
Bilateral programmes in the framework of Federal Targeted Programme / R&D in Priority Fields of the S&T Complex of Russia for 2007-2012	Ministry of Education and Science	European Commission	Co-funding from the Ministry of Education&Science and EU FP7
Joint research projects based on competitive selection events	Russian Academy of Sciences	Homologous organisations or research centres of the MS	Separate funding (each foundation mainly supports its own researchers)



<p>Joint research projects based on competitive selection events</p>	<p>Russian Foundation for Basic Research²</p>	<p>German Research Foundation (DFG), National Center for Scientific Research of France (CNRS), Estonian Science Foundation (ESF), Swedish Natural Science Research Council (NFR), Netherlands Organization for Scientific Research (NWO), Volta Landau Center and the Cariplo Foundation (Italy), Royal Society of Britain, Academy of Finland, the Ministry of Flanders (MF, Belgium), British Council (Britain), Bureau of Academic Exchange (BAD, Austria), Lithuanian State Foundation for Science and Education</p>	<p>Parity funding (50%-50%)</p> <p>Co-funding where RFBR supports only Russian participants efforts</p> <p>100% Funding by a foreign partner foundation</p>
<p>Calls for proposals for joint innovation projects</p>	<p>Foundation for Assistance to Small Innovative Enterprises (FASIE)</p>	<p>OSEO-Innovation (France) International Bureau (IB) of Federal Ministry of Education, Science, Research and Technologies of Germany</p>	<p>Separate funding (each foundation mainly supports its own researchers)</p>

² In 2010, RFBR held the following competitions for participation in bilateral projects:

- ✓ *Competition for Joint Russian-British Research Projects*
- ✓ *Competition for Projects to Hold Russian-French-German Seminars*
- ✓ *Bilateral Competition by RFBR and CNRS of France (PICS - International Projects for Scientific Cooperation)*

Furthermore, during 2010, RFBR held the following **continuous competitions**:

- ✓ *Continuous competition of Russian-German projects under the programme International Research Training Groups*
- ✓ *Continuous Joint Competitions by the RFBR and the German Research Society (DFG)*
- ✓ *Continuous Competition for Joint Russian and French Research Projects in the Framework of International Associated Laboratories and International Research Associations*
- ✓ *Continuous Competition for Bilateral Russian-Austrian Research Projects*
- ✓ *Continuous Competition for Projects to Hold Bilateral Russian and Austrian Seminars*



New bilateral initiatives

While Russia is not alone amongst third countries having a separate Agreement on Scientific & Technological Cooperation with the European Community, it is the only third country with which the EU has entered into a political commitment to create a "Common Space in Research & Education, including Cultural Matters" (the 4th Common Space). One of its main objectives is the '*development of a dialogue to support joint efforts in elaboration and harmonization of the approach towards the creation of a EU/Russia common space in the field of research.*' This concept carries a great potential through underlining the efforts of the EU and Russia to start synchronizing their RTD programmes. This includes the vision to define a more common research agenda based on thematic areas of mutual interest by a joint decision-making process. Therefore lots of efforts are being made to coordinate research programmes and activities between the two.

One of the new bilateral EU-Russian initiatives is **ERA.NET RUS** project. It will contribute to the success of the European Research Area (ERA) by improving the coherence and coordination across Europe of international S&T cooperation programmes with Russia. The ERA-NET is implemented through a virtual common pot without transfer of research funding from EU to Russia and vice versa. The objectives of the project will be reached by:

- ✓ Implementing knowledge based dialogue between programme owners in the EU (including member states MS and associated countries AS) and Russia;
- ✓ Identifying the options for joint funding activities of particular benefit for programme owners in EU MS/ AC and by developing a sustainable S&T (and or innovation) programme to be agreed upon by interested programme owners from EU MS/AC and Russia.

Two calls within the ERA.Net RUS project were launched in February and March 2011:

1. "A Pilot Joint Call in Innovation Projects" with the participating countries being Germany, Greece, Israel, Russia, Switzerland and Turkey;
2. "A Pilot Joint Call in Collaborative S&T Projects" with the participating countries being Estonia, Finland, France, Germany, Greece, Norway, Poland, Russia, Spain, Switzerland, and Turkey.

Project proposals can be based upon the following themes:

- ✓ *Innovative materials and cutting edge technological processes;*
- ✓ *Environmental research and climatic changes;*
- ✓ *Research on serious human health problems and*
- ✓ *Contemporary socio-economic studies.*

Project consortia must comprise project partners from at least 3 different countries, of which at least one from Russia.

The duration of a project can be up to 24 months and the total budget of the call is € 5.930.000.



Another example of new bilateral initiatives is situated on the national level related to the cooperation between Russia and a European Member State. We have chosen an INTERPOLE program recently launched by the French government.

Calls for proposals for joint French-Russian projects of competitiveness clusters - INTERPOLE

INTERPOLE's main aim is to help innovative SMEs (in association with one of their academic research partners) to evaluate and identify French and Russian partners to collaborate with on R&D projects. Led by the Scientific Service of the French Embassy in Russia, the programme is open to all **French** competitive and technical clusters. Any SME who is linked with a French competitive or technical cluster and who is accompanied by an academic research partner can apply for this programme, what's more, all domains of technological research are permitted.

Channel C: New Russian Initiatives

It is important to note that the Russian S&T landscape is very dynamic and changes are incorporated on a regular basis. There is ongoing development of new mechanisms aiming to ensure world class S&T and raising the level of S&T education. With aims to form innovative environment, to develop cooperation between educational institutions and industrial enterprises, to support creation of economic societies, state support of development of innovative infrastructure is carried out, including support of small-scale innovative enterprise, in the federal educational institutions of higher professional education.

Three federal decrees are referred to this ambitious goal:

- **decree 218** - Development of cooperation of the Russian high schools and the industrial enterprises
- **decree 219** - Development of innovative infrastructure in Russian universities
- **decree 220** - Attracting leading scientists to Russian universities

At administrative and legislative levels, Russia continues to ease the process of opening of its R&D and innovation program to European participation and engaging foreign research excellence. Over the past year a number of significant changes in the legislation has been implemented in the Russian Federation what consequently facilitate the participation of the foreign specialists in Russian programs. An important breakthrough has been achieved in **migration law**³. The procedures for obtaining permits have been substantially simplified and the number of 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 center) has the right to decide the degree of qualification of such employees on the base 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 in this respect with the Skolkovo project: (i) no necessity to obtain permits in

³ *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"*



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 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 temporary employment of citizens on the territory of their respective states.

Substantial changes are expected in the **public procurement law** (94-FL) concerning procurement of equipment, materials, components and related research.

Ministry of Education and Sciences sent for approval the unilateral **recognition of diplomas and certificates** of academic degrees obtained in the leading world universities. This will remove some restrictions to hire scientists and researchers who have been trained abroad.

What does the overview of the access opportunities show?

In theory, EU organizations researcher can take part in most Russian S&T programmes. In practice one can hardly identify foreign winners of the Russian tenders. Fortunately, under the pressure of globalisation, this “market” of domestic calls and tenders progressively becomes more and more open and Russian government has stated to ease the process of engaging foreign scientific and attracting innovation excellence. New Russian initiatives and programs confirm this trend and its vital role for strengthening the EU-RU S&T collaboration. The process engaged from the Russian side proves also that the approaches to international cooperation of Europe and Russia become closer. The openness concerns not only the reciprocal access to R&D and innovation programs but also access to markets and protection of intellectual property rights.

The dynamic pool of the EU-RU R&D and innovation collaboration is still situated in the perimeter of bilateral and multilateral programmes. The landscape of such programs, based on co-funding principle has developed over recent decade and now constitutes a major vector for the EU-RU collaboration with a variety of schemes and entry channels.

The analysis of Russian Federal Target Programs showed that research domains covered by the FTPs are highly relevant to the EU-Russia scientific cooperation objectives and that the access to the FTPs is open to foreign participation in principle.

However, the analysis of the entry channels have also identified a number of shortcomings and deficiencies, in particular the complexity of the schemes and instruments, administrative rules and procedures and a lack of awareness on reciprocal openness of research and innovation programmes as well on European as on Russian levels. To overcome the existing limits and shortcomings, the future actions should focus on :



- Increasing awareness on the access opportunities to Russian research and innovation programs as well on European as on Russian levels by putting ahead opportunities to capture the benefits of knowledge produced outside ;
- Simplifying participation of the European researchers in Russian programs by lowering administrative and legislative burdens. The initiatives such as Leading scientists and Skolkovo project could serves as examples;
- Attracting young scientists, as a driving force for research and innovation;
- Encouraging bilateral and multilateral programs at the EU Member States-Russia level.



Towards reciprocate openness of European and Russian S&T cooperation programmes

To reinforce cooperation between EU and the Russian Federation and to bring it at a new level, access for European organizations and researchers to Russian R&D and innovation programmes need to be facilitated. Some initiatives could have a huge co-operative and driving force for this process:

- Developing Information pack for relevant Russian calls (ex. via NCPs, infodays);
- Translating relevant Russian calls & tenders;
- Creating one stop shop / interface for calls & tenders open for EU participation;
- Enlarging the practice of involving the EU experts in the RU programs/ projects' evaluation;
- Simplifying administrative rules and procedures for the EU participants in Russian programs;
- Encouraging Russian and European research organizations to involve EU and RU teams in their proposals, respectively.

European and Russian organizations can benefit substantially from engaging in an intensified collaboration; therefore, Europe and the Russian Federation need of appropriate measures to remove obstacles to the mobility of participants. These measures could focus on :

- Informing RU research centers and innovation companies on the possibilities of the EU Participation in RU programs;
- Providing training opportunities for EU researchers wishing access RU programs;
- Providing training opportunities for RU research centers / innovative companies wishing to host EU partners;
- Attracting young scientists.

Attracting young scientists, as a driving force for innovation should be placed in a heart of the EU-RU collaboration strategy. Some concretes actions can be implemented:

- Developing scholarships;
- Implementing thesis co-supervision;
- Developing summer schools with EU participation and vis-versa ;
- Encouraging participation of young scientists in join research programs;
- Creating specific programs supporting collaboration between young scientists/teams.

To assess the performance of the EU participation in RU R&D and innovation programs and vice-versa, specific performance indicators could be used, such as:

- Number of EU participations in RU programs and vice-versa;
- Total amount of funding of the projects with respective participation;
- Number of joint publications;



- Number of joint participation in the relevant conferences;
- Number of spin-offs / starts-up issued from the collaboration;
- Number of young scientists attracted.

FP7 programs as well other European research and innovation funding and initiatives are well known in Russia since an import awareness raising strategy has been put in place. At Russian side, the lack of transparency could be removed by promotion Russian R&D and innovation programs in Europe by organising regular info days for EU researchers and by communicating during conferences, workshops, and showrooms or via press⁴.

⁴ E.g. scientific journals, general journals for scientific communities



Looking ahead

The issues and questions raised above are the aspects to be considered in future developing the mechanisms (including funding) aiming at reinforcement of the EU-RU S&T cooperation. S&T stakeholders, European and Russian researchers and innovative companies are invited to promote the debate on this important issue. To support the debate, on-line questionnaire is available on the ACCESS4EU web-site.

*A round table on the **DEVELOPMENT OF MECHANISMS FACILITATING ACCESS FOR EU R&D ORGANISATIONS AND RESEARCHERS TO RUSSIAN S&T PROGRAMMES** will take place on May, 31st, in Moscow, Russia. All participants will be asked to submit comments on the topic.*

The consultation will be close on 30th June, 2011.

The results of the public consultation will be translated into proposals of mechanism aiming at facilitation of access of European organizations and researchers to Russian research and innovation programmers.

Some of the actions will realistically takes years to fully implement. On other, progress can be made much more swiftly. In any case, it is a matter of political will, not only at the level of the European Commission, Members states and Russian Federation authorities, but also at the level of universities, research centres and innovative companies involved in the collaboration process. It will require a intensive work of the referent parts of governments, S&T policy-related bodies, research centres and industrial companies to push ahead the EU-Russia collaboration level.

This document is just a beginning of the process and a milestone on a long path of EU-Russia S&T relation. The ACCESSRU project till the end of its lifecycle will contribute to building a community of relevant stakeholders which will enhance long-term bilateral relationships and networks, allowing doubtful EU organizations to efficiently interact with Russian partners informing them about joint opportunities and helping them with specific questions and concerns. Furthermore, tandems of EU-Russia relationship promoters could be fostered.