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Working Document: Towards a vision for research, technology and innovation cooperation between Russia and the EU, its Member States and Associated Countries

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Working Document

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1 INTRODUCTION AND COOPERATION BACKGROUND

This Working Document outlines development perspectives for cooperation in research, technology and innovation (RTI) between the EU, its Member States (MS), countries associated to the EU's FP7 (AC), and Russia. The Working Document has been prepared by the consortium members of the ERA.Net RUS initiative and is based on a comprehensive foresight exercise implemented over the years 2010-2013 and on analysis of on-going RTI cooperation. In-depth discussions among the ERA.Net RUS and ERA.Net RUS Plus consortia and Funding Parties, and expert workshops with policy makers and analysts provided essential input. Furthermore, results of other related projects (such as BILAT-RUS, BILAT-RUS Advanced, ACCESSRU, etc.) have been studied.

The paper proposes a vision for enhancing RTI cooperation between EU MS/AC and Russia in general, as well as a specific follow-up vision for the ERA.Net RUS and ERA.Net RUS Plus projects. Among other possibilities, cooperation according to Article 185 Treaty on the Functioning of the EU (TFEU) could be foreseen. A range of framework conditions and support measures for the RTI cooperation are outlined, and measures for improving the cooperation proposed. Furthermore, a concrete action plan suggests how to implement the measures in the short and longer terms to attain the goal of enhanced cooperation.

RTI is perhaps the most flourishing field of cooperation between the EU and Russia. The linkages between European and Russian researchers have always been intense at many levels (e.g. bilateral and multilateral). They have been strengthened through the mechanisms of the EU Framework Programmes for RTD (FP) and activities of the EU Member States, particularly since the introduction of European Research Area (ERA). The volume and intensity of scientific relations between EU and Russia have been mentioned in several analytical reports produced in the frame of the ERA.Net RUS project.[1] The commitment to cooperation was shown, for example, in the responses to a broad Delphi survey undertaken in the ERA.Net RUS foresight. The idea of RTI cooperation between the EU and Russia would be very or rather strongly supported by the scientific community in their countries (68% of EU respondents and 81% of Russian respondents respectively).

There seems to be, however, much scope for enhancing cooperation mechanisms beyond the existing levels, for improving the framework conditions for RTI cooperation and

[1] See the ERA.Net RUS Foresight Report and several other analytical reports available at http://www.eranet-rus.eu/en/107.php

for enhancing societal and economic value. The intensity of cooperation has yet to reach its full potential, considering the respective competences, advantages, and needs of the parties involved. Core drivers of the cooperation are scientific excellence, innovation and tackling jointly global challenges, faced by both the EU MS/AC and Russia. Also of great importance is the pooling of resources for joint research and innovation activities, which help to reduce transaction costs and to achieve critical mass. Science diplomacy is considered another major driver.

Relations progress at different levels, and we highlight here several success stories:

Policy level

- The EU and Russia are following-up a **strategic partnership in research and innovation**. Several policy cooperation fora have been established, which strengthen and underpin this partnership: the four common spaces between the EU and Russia, which include a space on research, education and culture, and a modernisation partnership.
- 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 five years.[2] A review of its impact in 2012/2013 yielded positive results. As a flexible legal basis it underpins cooperation and provides a cooperation forum, the EU-Russia S&T committee.
- To enhance the already vibrant S&T cooperation between the EU, its Member States and the Russian Federation, an **EU-Russia Year of Science has been agreed for the year 2014**. A year-long series of events will be jointly organised across the EU and Russia, in particular it will feature a series of high-level EU-Russia conferences in several areas of the next Horizon 2020 framework programme.

Multilateral Programme Level

- The **EU FP7 for Research and Technological Development** is the primary scheme for international (multilateral and multilevel) cooperation in which Russian research institutes and individual researchers can participate. Russia has been consistently the most

[2] Compendium of Science & Technology Cooperation between the European Union, the EU Member States and the Russian Federation, 2011, page 15. http://eeas.europa.eu/delegations/russia/documents/more_info/compendium_of_science_technology_cooperation_between_eu_and_russia_2011_en.pdf

successful third country participant[3] in both FP6 and FP7. It is the country ranked highest in terms of both funding received in FP projects and in the number of participants in the funded projects. It is therefore ahead of other third countries such as the USA, or the other BRICS. There have been 463 Russian participants in 291 signed grant agreements, receiving an EU contribution of €63 million (status December 2012) and a Russian contribution of €40 million.[4]

- The **ERA.Net RUS project** managed to pool successfully resources of funding agencies from 11 EU MS/AC, and from Russia. Two pilot joint calls were implemented, one for funding of 'Collaborative S&T Projects', and one for 'Innovation Projects'. With a total budget of €10.3 million, a total number of 42 joint projects were funded under the two calls.
- Policy support projects such as **BILAT RUS and ACCESS RU** have provided a considerable analytical basis on the EU-Russia STI cooperation as well as the knowledge portal on the Russian S&T landscape, S&T Gate RUS.EU. Currently, one of the successor projects, **BILAT RUS Advanced** is jointly responsible for coordinating and managing the EU-Russia Year of Science 2014.
- Coordinated calls between the EU and Russia in the context of FP7 have proved a useful and successful tool. To date, there have been nine coordinated calls and several other programme-level partnering initiatives launched with Russia under FP7, more than with any other third country, and involving a budgetary contribution of about € 43 million on both sides.[5]

Bilateral level

- Developments with regard to bilateral calls between Russian funding agencies (RFBR, RFH, FASIE) and funding agencies from the EU MS/AC countries have been impressive both in terms of the number of projects co-funded and the total amount of financial support provided in the scope of these bilateral projects.[6]

Unilateral level

- Russian Federal Targeted Programmes and in particular the Leading Scientists Programme have become increasingly open and relevant for cooperation with EU MS/AC.

[3] Third Country means here a country, which is not an EU Member State or a country associated to the FP.

[4] European Commission (2013). Russian participation in FP7. http://issek.hse.ru/news/79027067.html

[5] See Common Spaces Progress Report 2012, http://www.eeas.europa.eu/russia/docs/commonspaces_prog_report_2012_en.pdf

[6] See ERA.Net RUS analytical report 3: State of the art and perspectives of bilateral S&T programmes between EU MS/AC and Russia, http://www.eranet-rus.eu/_media/D_1.3_Analytical_Report_3.pdf

- Several programmes and initiatives of the EU Member States are either open for international cooperation or are even specifically targeted towards Russia.

The network of collaboration denotes the already solid RTI cooperation base between Europe and Russia. To merge this background with a Vision, one should turn to the policy objectives of the two sides.

2 POLICY OBJECTIVES

2.1 Russia

The Russian innovation system went through substantial changes following the country's independence in 1991. Research funding has increased significantly over the last decade after a dire period in the 1990s. It now stands at slightly above 1% of GDP. Innovation gained a pivotal place on the policy agendas: "coordination committees chaired by the President and Prime-Minister were established; key strategy documents were published; and a network of development institutions (Rusnano, the Russian Venture Company, etc.) providing an 'innovation lift' was put in place".[7] In addition, while many programmes and initiatives (e.g. Technology Platforms, Innovative Clusters) have been implemented, there is still scope for further diffusion of such programmes to enhance their impact on economic growth and social welfare.

In order to foster development at all levels, a new strategy document for innovation policy entitled "Innovative Russia 2020" was approved in December 2011. The 2020 targets focus on increasing:

- the private sector share of innovations;
- the Russian share of global market of hi-tech products;
- internal R&D expenditures as a share of GDP to a 2.5-3% level from current 1.1%;
- the quality of scientific publications and universities;
- the number of patents registered by Russians in patent organizations of EU, USA and Japan to exceed 2.5-3 thousands annually (from the current figure of 100-200);
- the share of Russian universities income obtained from contractual research and IP commercialization to reach 25%;
- the share of university research to reach 30% of the overall research funding provided by the state.

The main instruments for implementing Russia's strategies and for RTI funding are under preparation for the next programming period. In December 2012, the State Programme of the Russian Federation "Development of Science and Technology 2013-2020" was approved, which provides a framework for its main RTI funding programmes, the federal targeted programmes. In early May 2013, the Russian government approved the concept of the two main Russian RTI funding programmes relevant for international cooperation: the Federal Targeted Programmes (FTP) "R&D in priority fields of Russia's S&T complex 2014-2020" (total resources from the Russian

[7] Leonid Gokhberg and Vitaly Roud, The Russian Federation: A New Innovation Policy for Sustainable Growth, available at: http://www.wipo.int/export/sites/www/econ_stat/en/economics/gii/pdf/chapter6.pdf

federal budget: RUB 202.23 billion or about € 5.06 billion)[8] and "R&D personnel 2014-2020" (total resources from the federal budget RUB 153.48 billion or about € 3.84 billion).[9] In the FTP - R&D in priority fields, activities in the area of international research cooperation are incorporated into block No. 2:

- **Activity 2.1** Research in the framework of international multilateral and bilateral cooperation (total federal budget: RUB 6,135 million or about € 153 million for the years 2014-2020**);**

- **Activity 2.2** Supporting cooperation in R&D with EU countries (total federal budget: RUB 6,180 million or about € 155 million).

2.2 EU

The logic behind an EU policy for science and technology is to pool resources, which would otherwise be implemented as fragmented at the national level, with the ultimate aim of taking Europe towards the front of the current competitive global economy. The Lisbon summit of 2000 set the ambitious goal, for the EU to be the most competitive and dynamic knowledge-based economy in the world by the year 2010 (European Council, 2010). One crucial area to achieve this was science and technology, as the target included the establishment of a 'European Research Area' (ERA). The ERA concept provides a framework to use European scientific and technological resources more effectively; to better coordinate national policies to significantly reduce fragmentation; to develop new instruments to enhance European added value (i.e. establishing Networks of Excellence); and to greatly enhance conditions for researcher mobility.[10]

As the Lisbon Strategy could only partially be fulfilled, EU leaders established a new strategy, the 'Europe 2020 Strategy', in June 2010. The targets of the strategy include: increasing R&D expenditures as a percentage of GDP to 3%; reducing unemployment; reaching climate and energy targets; increasing the level of education; and reducing poverty by the year 2020. The successor to the Framework Programme (Horizon 2020) is also being developed by taking into consideration the 2020 targets, and is in particular focused on societal challenges. The programme will have a budget of about €70 billion and will be open to international RTI cooperation and participation of Third Countries (including Russia). Innovation has increasingly been the focus of the EU's strategies and programmes. Horizon 2020 will therefore combine the EU Framework Programme for RTD, parts of the innovation aspects of the previous Competitiveness and Innovation Framework Programme (CIP) and the EU contribution to

[8] In this paper Russian Roubles have been converted to EURO with an average rate of € 1 = RUB 40.

[9] See the documents at the website of the Ministry of Education and Science (in Russian): http://минобрнауки.рф/новости/3377

[10] Thomas Banchoff, 2002, The Politics of the European Research Area, *ACES Working Paper*, 3.

the European Institute of Innovation and Technology (EIT).

The Communication of the European Commission on "Enhancing and focusing EU international cooperation in research and innovation: a strategic approach"[11] paints a dynamic picture of international RTI developments: *"Research and innovation are increasingly interlinked internationally, aided by rapidly developing information and communication technologies. The number of internationally co-authored scientific publications and the mobility of researchers are increasing. Research organisations are establishing offices abroad and companies are investing outside their home countries, in particular in the emerging economies. Global challenges are important drivers for research and innovation. The Union needs to strengthen its dialogues with international partners to build critical mass for tackling these challenges."* This Communication had been discussed by the European Competitiveness Council in June 2013,[12] and respective conclusions had been taken.

The European Council reaffirmed in these conclusions the need to develop a European Research Area (ERA) which is open and inter-active with the world. The Council invited the Commission to prepare, in close coordination with the EU Member States, multi-annual roadmaps for cooperation with the strategic partners of the Union. The roadmaps will identify priorities and instruments for activities within Horizon 2020 for international cooperation on research and innovation. The Council invited the EU Strategic Forum for International S&T Cooperation (SFIC) to contribute to the design and development of the multi-annual roadmaps in collaboration and open discussion with the relevant stakeholders, while it will be developing joint research and innovation agendas between the Union, Member States and strategic partners in third countries.

The Council also suggested to develop common principles for facilitating international cooperation in research and innovation, including on issues such as responsible research and innovation, research integrity; peer review; promotion of gender equality and the gender dimension in research and innovation; researcher careers; fair and equitable treatment of IP; and open access to publicly funded research publications and to research infrastructures.

The European Commission Communication on international cooperation, states that *"[t]he Union also has a clear interest in its neighbouring countries developing their research and innovation capacity"*, while the Council calls for a more strategic approach to international cooperation with strong joint ownership by the Commission and the Member States. As Russia has an impressive

11 http://ec.europa.eu/research/iscp/pdf/com_2012_497_communication_from_commission_to_inst_en.pdf

12 http://ec.europa.eu/research/iscp/pdf/council_conclusions_on_enhancing_focusing_eu_international_coop.pdf#view=fit&pagemode=none

track record in the FPs and has a dense network of links in RTI with the EU MS/AC, and based on its strategic partnership in research and innovation with the EU, it fits well with this more strategic approach.

3 TOWARDS A VISION FOR THE FUTURE BASED ON FORESIGHT

3.1 Joint policy objectives

There is clear resonance in the objectives defined for 2020 by both the EU and Russia. They are both ambitious strategies that aim to move them to a next level in terms of knowledge based economic development and social prosperity. The crucial point is that in today's highly globalized world, every policy at the national level should be met with an adequate level of international cooperation. National targets and policies alone cannot result directly in desired outcomes. With globalization, R&D investments do not affect only the domestic economy but spill over to the whole world. Thus, success lies in the ability of the actors to enable and obtain access to knowledge rather than being the direct producer of it.

The following common objectives could be highlighted:

- supporting research and innovation as drivers of future economic growth and societal well-being;
- Improving framework conditions and access to finance for research and innovation;
- Tackling grand societal challenges through research and innovation activities (e.g. energy, climate change, etc.);
- Upgrading and construction of world-class research infrastructure;
- Modernising the education system and improving the performance of the universities;
- Utilising the full potential of science and research through integration into the international scientific community and thus strengthening the excellence and attractiveness in research and innovation as well as economic and industrial competitiveness.

Within this framework, cooperation between the EU and Russia, nourished by the existing cooperation; historical and neighbourhood relations; and defined by similar, complementing objectives, is not only a desired outcome but also a necessity. This vision can be defined as a ***'Multi-level Enhanced Cooperation'*** in the area of science, technology and innovation that would function at varying speeds at different levels. Efforts should focus on two critical dimensions: widening and deepening. More precisely, while some actions would focus on deepening existing cooperation schemes, the others should focus on finding new ways and mechanisms of cooperation between the two sides. The multi-level approach is crucial in the sense that policy level, institutional level, and researcher level should all be covered with varying instruments.

EU-Russia STI relations build on three main axes, which are a sustainable framework, pooling of competence, and true partnership. Going into further detail, first, the programmes developed are to serve the aims of establishing sustainable frameworks for collaboration and for assuring a critical mass of joint activities based on shared ownership. Improving through feedback, constant monitoring, communication and adaptability to change are significant in terms of designing and implementing sustainable programmes. Second, taking into consideration the needs of both sides, policies and programmes should develop a joint competence that would create a synergy fuelling further joint initiatives. Third, cooperation and dialogue are crucial in terms of deepening the discussions between the two sides, and for developing ideas for enhanced collaborative approaches which may lead to the integration of certain programmes. Indeed, an important aim of this report is to initiate such a discussion. The general approach proposed is visualised in figure 1.

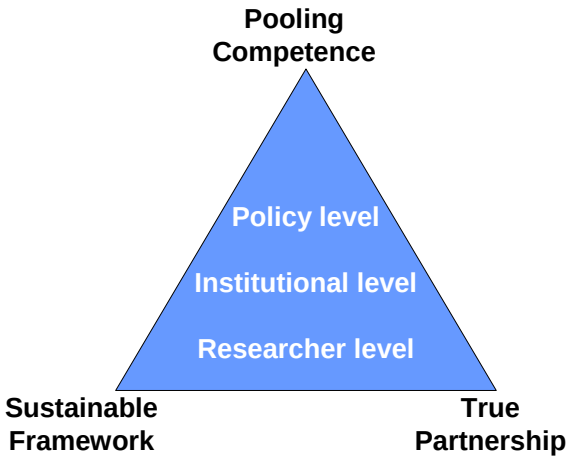


Figure 1.

3.2 Ideal cooperation scenario

The ERA.Net RUS foresight exercise studied thematic perspectives of EU MS/AC and Russian RTI cooperation, as well as related structural and organisational issues. Scenarios on how the cooperation could evolve over the coming years up to 2020 were developed and assessed in a Delphi survey. The survey population consisted mostly of researchers from the EU MS/AC and from Russia involved in active scientific cooperation. Furthermore, policy makers and other experts involved in EU-Russia RTI cooperation were included in the sample. In total, nearly 7000 experts were contacted for the survey. The **response rate (23%) was relatively high**, reflecting high interest in the topic of the survey.

Scenario 1 "R&D policy paradise" was the most optimistic regarding RDI cooperation intensity and more than 95% of respondents considered it as rather or very desirable.

Scenario 1 – R&D policy paradise *(short version)*

In the year 2020 we are looking back at a decade of prosperous cooperation in Research, Development and Innovation (RDI) between the EU and Russia. Russia's participation as an associated country in the EU's Horizon 2020 RDI funding programme has proven an unexpected huge success. A free trade zone has been established between the EU and Russia and Russia acceded to the OECD. Business cooperation on RDI has strongly intensified. New RDI cooperation instruments have been successfully established, such as a joint EU-Russia RDI Fund and calls in the frame of an ERA-NET plus project.

However, more than two thirds of respondents thought it as rather or very unlikely to happen.

Three other, more pessimistic, scenarios were prepared and assessed in the survey. We could observe similar response patterns here: **more than 60% of respondents considered the more pessimistic scenarios as rather or very likely to happen. However, between 84% and 90%** of respondents considered these scenarios **as rather not or very undesirable.** Therefore **scenario 1**, being the most desirable but rather unlikely, can be considered as a **"goal scenario"** to be targeted by the EU and Russia.[13] The three more pessimistic scenarios can be considered as scenarios to be avoided. In the following framework conditions and support programmes are outlined, and related measures suggested to advance closer to the goal scenario and to reduce the likelihood to move towards the more pessimistic ones.

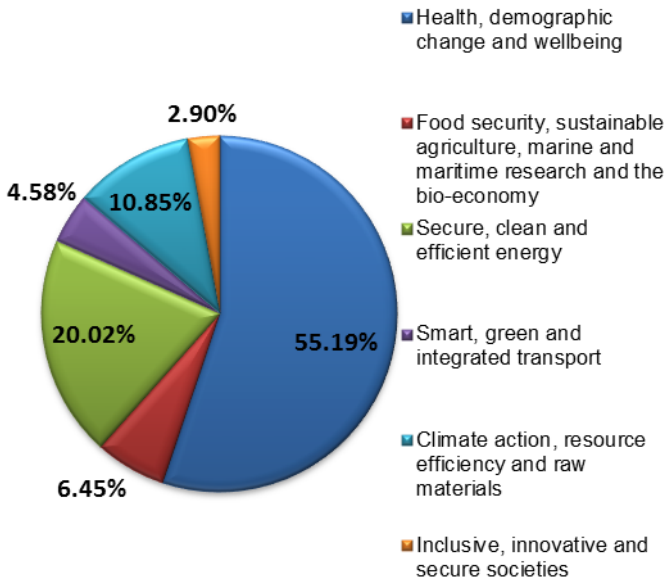
3.3 Priorities for thematic cooperation

RTI cooperation among EU MS/AC and Russia covers a wide range of thematic fields. This was proven in several contexts, e.g. in the FPs, in bilateral cooperation programmes, in the ERA.Net RUS calls or in the bottom-up funding programme INTAS. In the frame of the ERA.Net RUS DELPHI survey, key future trends in the cooperation in research, technology development and innovation between Russia and the EU MS/AC were identified. Societal challenges of Horizon 2020 and promising thematic fields identified in Russian foresight studies were taken as a basis for the questionnaire and then surveyed in the Delphi.[14] The list of thematic fields dealt with in the DELPHI survey is not meant to be exclusive and there might be other areas such as reformation of innovative systems or industrial reorientation that are also of interest for the EU MS/AC-Russia cooperation.

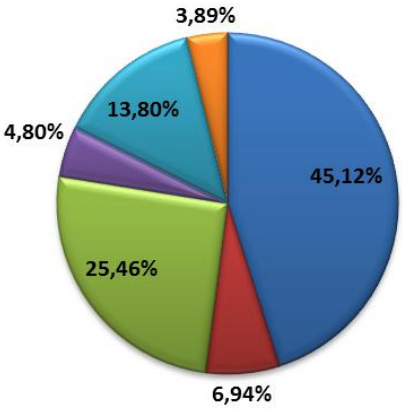
[13] The full descriptions of the scenarios are available in the ERA.Net RUS foresight report, forthcoming in 2013; at www.eranet-rus.eu.
[14] For a detailed analysis of the survey regarding challenges and thematic fields for cooperation see the ERA.Net RUS foresight report, forthcoming in 2013 at www.eranet-rus.eu.

Figure 2. Societal challenges important for the EU-Russia RDI cooperation

Russian questionnaire



English questionnaire

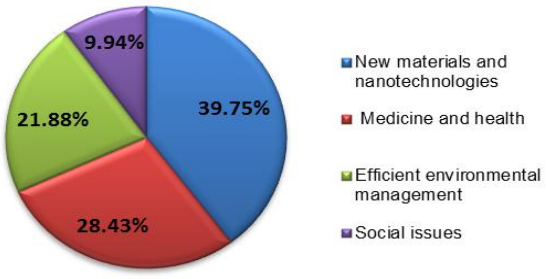


Among the societal challenges addressed by the Horizon 2020 programme, the most important ones (see figure 2 above) for the EU-Russia RTI cooperation were according to experts the following:

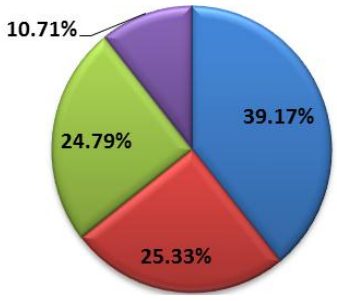
1) Health, demographic change and wellbeing (55.19% — the Russian questionnaire; 45.12% — the English questionnaire).
2) Secure, clean and efficient energy (20.02% — the Russian questionnaire; 25.46% — the English questionnaire).
3) Climate action, resource efficiency and raw materials (10.85% — the Russian questionnaire; 13.80% — the English questionnaire).

Figure 3. Promising thematic fields of the EU-Russia RDI cooperation (Delphi questionnaire)

Russian questionnaire



English questionnaire



Promising thematic fields for EU-Russia RDI cooperation are presented in figure 3 above. The distribution of answers by Russian and European respondents was surprisingly similar. Around 40% of Russian and European experts agreed that the most perspective field of cooperation is "New materials and nanotechnologies"; "Medicine and health" was in second place (more than 25% of respondents), and efficient environmental management in third place, with more than 20%.

Table 1.

Topics for S&T cooperation between EU MSs/ACs and Russia by thematic area			
Health	**Nano**	**SSH**	**Environment and climate change**
Three topics selected for the joint call of ERA.Net RUS Plus			
1. Molecular Mechanisms of Brain Function and Pathology 2. Regenerative Medicine and Biomaterials 3. Drug Discovery for Cancer, Cardiovascular and Infectious Diseases	1. Advanced nano-sensors for Environment and Health 2. Novel functional nanomaterials based on design and modelling 3. Nanomaterials for efficient lighting	1. Understanding Conflict, Identity, and Memory: Past and Present 2. Demographic Change, Migration and Migrants 3. Opportunities for and Challenges to Regional Development and Social Cohesion	1. Increasing the reliability of regional climate projections: models and measurement 2. Environmental impact and risk of raw materials extraction and transportation 3. Extreme climate events and their impact on the environment
Additional topics for future S&T collaboration			
4. Translational Medicine 5. 3D Medicine, Virtual Surgery	4. Solar Cells: Nano-photonics for energy conversion 5. Diagnostics: Metrology at the Nanoscale 6. Nano-sized catalysts 7. Nanomaterials and technologies for memory devices 8. Interdisciplinary of nanotechnologies	4. Understanding conflict and security issues 5. The relevance of archives for SSH research	4. Climate impact on ecosystems (fisheries, land based agriculture) 5. Prevention and remediation of pollution of aquatic systems 6. Climate and pollution in big cities 7. Impact of transport/traffic on climate change and pollution

Furthermore, considering the above mentioned priority fields for EU and Russian STI policy and based on discussions between the ERA.Net RUS Plus funding organisations, the following four broad scientific priorities were selected as promising areas of cooperation for the ERA.Net RUS Plus call: Nanotechnologies, Environment/Climate Change, Health, and Social Sciences and Humanities (SSH). For each of the priority areas, a thematic roadmapping workshop was organised in spring 2013 with international

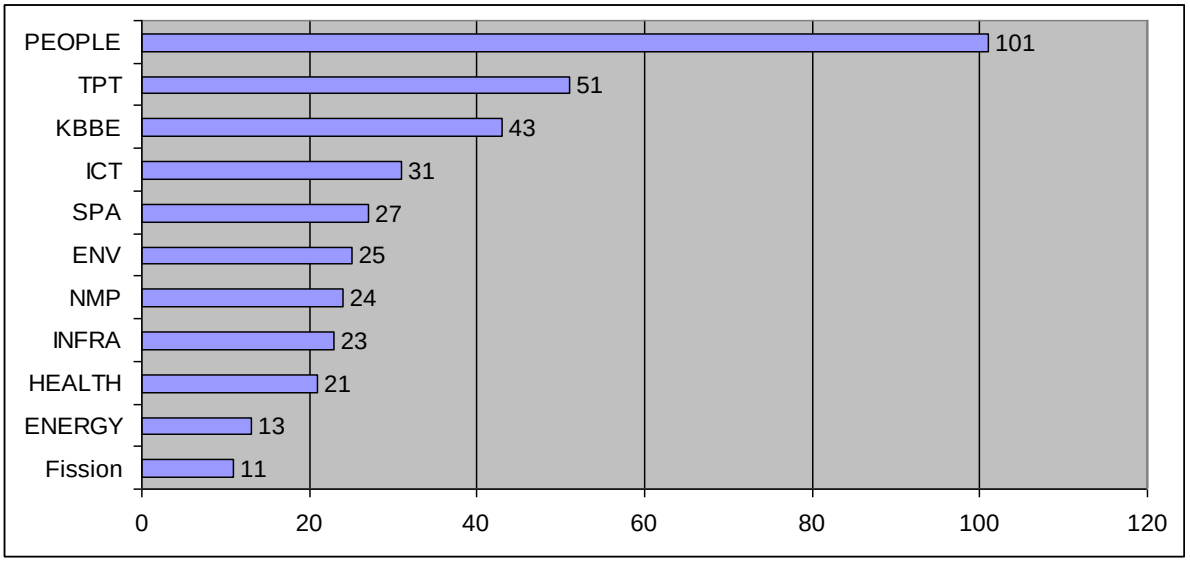
experts in the fields, which relied on a thematic part in the Delphi questionnaire (See figures above) and thematic roadmaps for future S&T collaboration. This has resulted in a set of more specific topics for future collaboration as shown in table 1. The topics will serve both the launch of a joint call under the ERA.Net RUS Plus project, as well as other types of future collaboration using other instruments.

S&T cooperation goes well beyond those topics identified, however they can be considered as a first step for thematic cooperation, as there appears to be common interest in those specific topics from all sides.

The FP7 gives a further orientation on thematic cooperation. Most projects with Russian participation have been funded under the FP7 thematic sub-programmes Transport (TPT), and Knowledge Based Bio Economy (KBBE) followed by ICT, Space (SPA), Environment (ENV) and Nanotechnology, Materials and New Processes (NMP). These data depend of course on the size (in terms of available budget) of the respective FP7 sub-programmes.

The specific FP7 cooperation tool of coordinated calls between the EU and Russia has hitherto been agreed and implemented in the following areas: Aeronautics; Energy; Health; ICT; Knowledge Based Bio Economy; Nanotechnology, Materials and New Processes; Nuclear Fission.

FIGURE 4. Number of funded projects in FP7 sub-programmes with Russian participants[15]



[15] Source: European Commission, 2012.

4 MEASURES FOR IMPLEMENTING THE VISION

The legal and policy environment for RTI in and between the EU and Russia determines the possibilities for cooperation. In addition, respective business and research cultures also have an important influence.

The following main pillars of cooperation can be distinguished:

- Optimising the common framework
- Mutual (policy) learning
- Joint agenda setting
- (Joint) Funding at the level of projects (competitive grants) as well as institutions (including STI infrastructures)
- Information and Communication (Science to Society, Joint PR, …)

4.1 Optimising the common framework

4.1.1 Legal framework

EU-Russia S&T agreement

At the multilateral level, the EU-Russia S&T agreement is the main legal document on which the cooperation is based. It was concluded in 2000. In late 2012 and early 2013 the results of the agreement were reviewed by an international panel of four experts (two nominated by the EU and two by Russia), experienced in cooperation. The review found that "EU-Russia S&T cooperation is very intensive, mostly well balanced and efficient and – so far - successful. Many of the thematic priorities in S&T policies of the EU and Russia are compatible, and each of the partners has a high level and potential of S&T knowledge and expertise."[16]

The agreement is crucial as a basis for RTI cooperation, for tax free status of research grants provided by the EU, and for its cooperation forum, the EU-Russia S&T committee and its constituent working groups. It provides a basis for and underpins the EU-Russia strategic partnership in research and innovation.

Measure: A prolongation of the agreement was recommended by the review panel. This prolongation should be concluded as soon as possible, by the end of 2013. A more detailed revision should be considered for the next renewal after 2013. The EU-Russia S&T Agreement might serve as a legal umbrella for all EU Member States, to be complemented by individual agreement of EU-Member States with Russia.

EU-Russia cooperation agreement

The EU concluded a Partnership and Cooperation Agreement with Russia in 1997. This agreement was concluded for an initial duration of 10 years and has been automatically extended beyond 2007 on an annual basis. Negotiations on a comprehensive follow-up agreement started in July 2008, but have so far not advanced much. A new agreement would be a key instrument for deeper cooperation and

[16] Review of the S&T Cooperation Agreement between the European Union and Russia, 2013.

economic integration between the EU and Russia in the near future.[17]

Measure: Negotiations on a new comprehensive EU-Russia cooperation agreement should be speeded up and lead to a new agreement to allow for deeper cooperation.

Common Spaces

At the St. Petersburg summit in May 2003, the EU and Russia agreed to reinforce their cooperation by creating four common spaces, which include a space on Research, Education and Culture designed to promote scientific, educational and cultural cooperation. For the implementation of the spaces, roadmaps have been agreed. The current EU-Russia roadmap on scientific and technological cooperation for the years 2011-13 covers thematic fields and sub-programmes of the FP7. Measures comprise among others the identification of thematic priorities for cooperation, facilitating the participation of Russian teams in the FP, and furthering the mobility of researchers.[18]

Measures:

- *Continue updating and following-up the roadmaps for the common space on research, education and culture.*
- *Concrete mechanisms to implement the cooperation agenda of the roadmaps are needed, such as a monitoring body (e.g. the task force of the S&T committee) and support tools (e.g. coordinated calls, Art. 185 cooperation).*

Modernisation Partnership

The principles and objectives of the Partnership for Modernisation were defined at the EU - Russia Summit in Rostov-on-Don in 2010. The Partnership for Modernisation is a shared agenda to help bring about reform in the area of socio-economic development, with due respect for democracy and the rule of law. Its priority areas include investment and trade, the alignment of technical standards, the promotion of a sustainable low-carbon economy and dialogue with civil society. It is a pragmatic and flexible framework which provides additional momentum to the EU - Russia relations. It is accompanied by 25 bilateral modernisation partnerships between Russia and EU Member States. The Partnership is in full implementation phase.[19]

Measures:

- *Full integration of research and innovation cooperation among the EU MS/AC and Russia into the modernisation partnership.*
- *Develop advanced instruments for the modernisation partnership facilitating*

[17] See Memo for EU-Russia summit June 2013 at http://europa.eu/rapid/press-release_MEMO-13-485_en.htm

[18] Progress reports on the Common Spaces are available at: http://eeas.europa.eu/russia/common_spaces/index_en.htm

[19] See the progress report on the Modernisation Partnership for 2012 at: http://www.eeas.europa.eu/russia/docs/2012_p4m_progress_report_signed_en.pdf

research and innovation cooperation based on a concerted action of MS, EC and Russia.

Regulatory issues: visa, customs, transfer of funds/taxation, transfer of material (biological etc.), working permits and IPR

The EU as well as Russia require visas for citizens of the partner region. This visa issue has been bemoaned on many occasions as a hampering factor to RTI cooperation. It was again confirmed in the ERA.Net RUS Delphi survey 2012, where several experts requested the lifting of visa procedures. The EU and Russia have tried to advance on this issue and concluded a visa facilitation agreement. This has made scientific visas free of charge, with an invitation letter of the hosting organisation sufficient for the issue of visas. Nevertheless it imposes a burden on researchers to provide the requested administrative information, and more importantly it is a time consuming exercise. Russia has repeatedly suggested lifting visa procedures.

Another regulatory issue to be addressed by policy makers concerns customs and the exchange of scientific material and equipment. An efficient research and innovation cooperation needs to purchase and exchange material and equipment quickly. As our survey showed, this is not currently ensured.

Finally Intellectual Property Rights (IPR) are indicated as another issue, which hampers cooperation in some fields. Lack of transparency, bureaucracy, complicated legal procedures in Russia, etc. have been mentioned here in the ERA.Net RUS Delphi survey. With the accession of Russia to the World Trade Organisation (WTO) in 2012, it will fully apply the provisions of the WTO Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS). The agreement fixes minimum standards for IPR (e.g. copyright, patents, etc) and enforcement procedures. This adds reliability and stability in IPR matters in the research and innovation cooperation. Russia intends to promote this issue during its G8 Chairmanship in 2014 also on the G8 Summit Agenda.

Measures:

- *Continue efforts for lifting of visa procedures between the EU and Russia. Consider lifting visas for researchers (such as those involved in FP7 or Horizon 2020 projects), e.g. on the example of visa free travel for sportsmen and women introduced by Russia.*

- *Make customs regulations research and innovation friendly, and facilitate exchange (import/export) of scientific material and equipment.*

- *Assure transparent application of the rules and regulations.*

- *Increase transparency of Russian IPR, align IPR regulations between the EU and Russia, and make IPR procedures less bureaucratic. Investigate effects of*

Russia's accession to the TRIPS agreement on research and innovation cooperation.

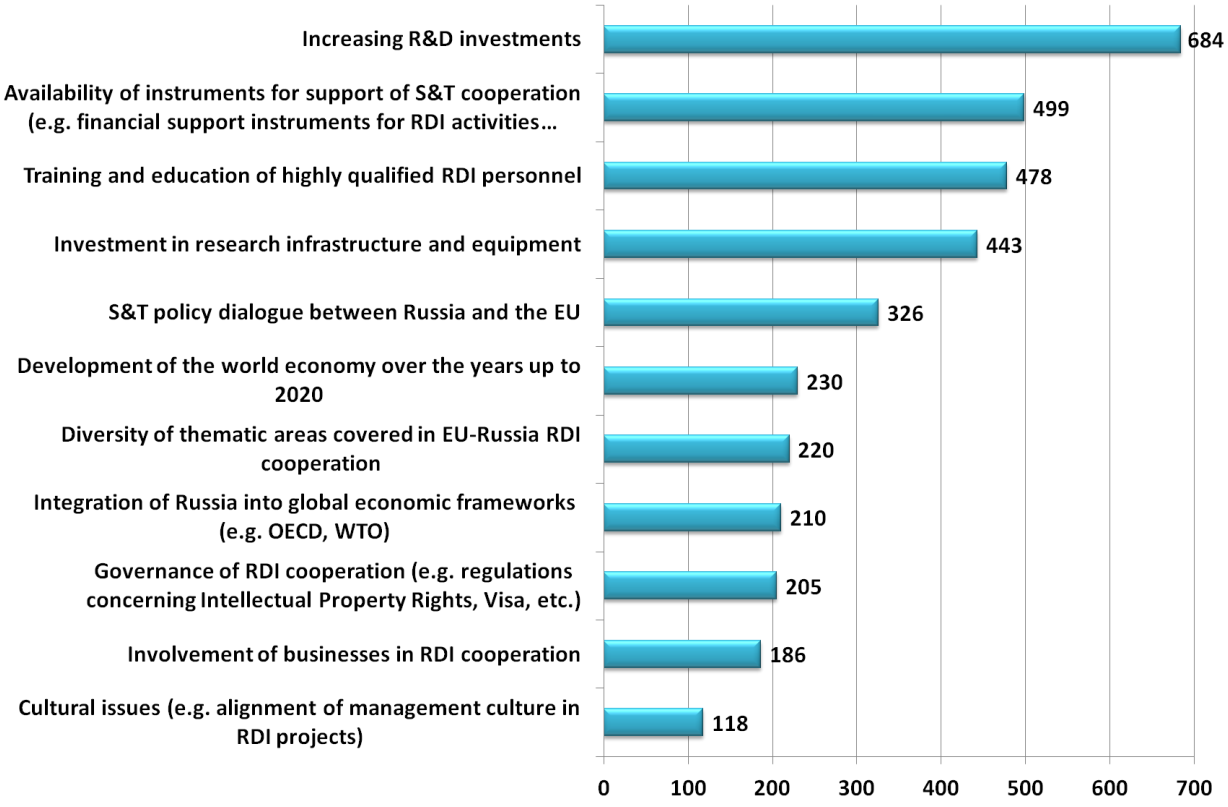
4.1.2 General framework conditions for cooperation

Based on the results of the ERA.Net RUS Delphi survey the following **framework conditions** were ranked as very important for the cooperation:

Increasing R&D investment was the key issue for EU-Russia RTI cooperation (684 respondents). Many experts also underlined the importance of **availability of financial instruments** to support S&T cooperation (499 respondents), as well as **training and education** of highly qualified RTI personnel (478 respondents). Also still quite relevant were **nvestment in research infrastructure and equipment**, and **S&T policy dialogue**.

Figure 5.

Overall responses to English and Russian questionnaires



Source: ERA.Net RUS Foresight Report, 2013

The opinions of the EU and Russian respondents on the policy makers' support for RTI cooperation differed. While about half of **EU experts** expected that EU-Russia RDI cooperation would be **weakly or very weakly supported (53%) by policy makers, 80% of Russian respondents voted for weakly or very weakly supported**.

Among the open questions to the survey the following responses were relevant:

- In general, the majority of respondents **welcomed any increase/ improvement in the EU/Russia cooperation**.
- The **need for financial support of research cooperation and appropriate instruments** (e.g. joint fund, INTAS like instrument) were mentioned frequently.
- More **support for exchanges and mobility of researchers** was highlighted by respondents.
- **Political will** was stressed by many as a determinant factor for the success of any cooperation scheme.
- **Basic research** was highlighted as important to be supported.

<u>*Measures:*</u>

- *Address the perception that RTI cooperation is weakly supported by policy makers in the EU and Russia: Policy makers should show commitment at the policy level by focusing on generating results, such as improving framework conditions for the cooperation, implementing a SFIC Pilot Initiative on Russia and joint agenda setting with Russian authorities, increasing the investment in the RTI cooperation EU MS/AC-Russia, developing new joint support tools and scaling-up of already existing instruments.*
- *Consider measures for addressing the need for training and education of qualified R&D personnel as well as RTI managers at institutional and policy level.*

4.2 Mutual (policy) learning in dialogue forums

EU-Russia summits

The main fora for dialogue at the highest level between the EU and Russia are the biannual EU-Russia summits. Research and innovation are issues which are also on the agenda of the summits. For example, the EU-Russia Year of Science 2014 was announced as one of the results of the EU-Russia summit in December 2012.

EU-Russia S&T Committee and Working Groups

A dedicated forum, the EU-Russia S&T committee, and ten EU-Russia thematic working groups (e.g. aeronautics; energy; environment; etc.) have been established under the S&T Agreement. The working groups have not fully met the expectations, as some have not convened regularly or

provided the input expected.[20] It was decided to launch a new task force of the S&T committee at the committee meeting in June 2013. This will meet more frequently and follow up the implementation of committee decisions. New programming periods for the main RTI programmes of both the EU and Russia, will start with the end of 2013 and beginning of 2014. The new Horizon 2020 programme will start in the EU, while Russia will begin its new Federal Targeted Programmes for research in priority fields and for R&D personnel.

Measures:

- *Conclude the S&T agreement and continue and advance the cooperation forums to ensure a smooth transfer to the new programming periods.*
- *Continue the working groups into Horizon 2020 and the Russian FTPs, by adapting them to the necessities and structure of the new programmes. Assure coordination with MS´ activities.*
- *Ensure commitment of the new task force and of the working groups to their task and regular meetings.*
- *Ensure up-take of recommendations and proposals.*

[20] See progress report on the Common Spaces 2012: http://eeas.europa.eu/russia/docs/commonspaces_prog_report_2012_en.pdf

Member States Dialogues (and their coordination)

Many EU Member States and countries associated to the FP7 conduct a regular dialogue on research and innovation issues with Russian counterparts. Such dialogue fora are provided in the frame of agreements on S&T cooperation and in the frame of bilateral modernisation partnerships, which Russia has concluded with several EU MS/AC. Some EU MS/AC have particularly intense RTI cooperation with Russia. For example, Germany has established a strategic partnership with Russia on education, research and innovation. Within the framework of the Russian-German STI agreement, joint thematic working groups meet regularly.

Measures:

- Strive to coordinate the S&T and innovation dialogue among EU MS/AC on issues of joint interest, and for bringing the RTI cooperation forward in a strategic and effective way.

Projects in support of EU-RU RTDI cooperation and coordination

Coordination and support actions funded under the FP6 and FP7, such as the ERA.Net RUS, BILAT-RUS, the ACCESSRU, the INCO-Net EECA projects have facilitated EU-Russia RTI cooperation. They allow establishing a solid analytical base for the cooperation, support networking among research and innovation actors, provide new impetus by suggesting cooperation instruments, and support S&T

and related political dialogue. They highlight priority areas of cooperation (e.g. thematic fields), include foresight exercises, monitor and assess the cooperation, and allow EU MS/AC to cooperate in a variable geometry approach with target countries. These coordination and support projects accompany the cooperation in a complementary way.

The ongoing BILAT-RUS Advanced project started in autumn 2012 and will continue through to autumn 2015. It will be an important tool in support of the EU-Russia Year of Science 2014.

Such supporting projects were also funded within the Russian FTP R&D in priority fields.

Measures:

- *Continue to fund geographical and thematic coordination and support actions in Horizon 2020, in Russian FTPs, and through other Programme Owners to analyse, facilitate and accompany the RTI cooperation and to foster coordination of RTI policies.*
- *Make regular use and ensure a proper dissemination of results of completed or ongoing EU funded coordination and support projects targeting Russia.*

4.3 Joint agenda setting

SFIC Pilot Initiative on Russia

A Pilot Initiative on RDI cooperation with Russia has been proposed in the frame of the Strategic Forum on International S&T Cooperation (SFIC) in spring 2013. Such Pilot Initiatives are already underway for countries such as Brazil, China, India, and USA. They usually focus on information exchange and coordination among EU MS/AC towards a certain target country, but also include joint agenda setting and joint RDI funding activities with the target country.

Measures:

- *It is recommended that SFIC launches the Pilot Initiative with Russia in 2013.*
- *Pilot Initiatives with other Third Countries (e.g. India, USA) should be studied. Good practice from these pilots should be applied in the Russia initiative.*
- *Comprehensive funding cooperation should be considered, for example initiating an Article 185 TFEU cooperation in the frame of the SFIC initiative (details see below).*

A first task of a SFIC pilot action towards Russia would have to focus on identifying joint thematic fields of cooperation. A good starting point might be the topics elaborated in the ERA.Net RUS foresight and Delphi exercises (see chapter 3 above). One way to increase cooperation on the promising topics is to build on existing EU initiatives related to those topics (see table 2 below).

Table 2. Existing Initiatives in the EU related to the topics identified for EU MS/AC – Russia S&T cooperation in the ERA.Net RUS Plus			
Health	**Nano**	**SSH**	**Environment and climate change**
• AAL Art. 185 • EDCTP Art. 185 • EMRP Art. 185 • NEURON II ERA-NET • JPI Neurodegenerative diseases • EUROCOURSE • INFECT-ERA • TRANSCAN • EURANID	• EMRP Art. 185 • M-era.NET	• JPI Urban Europe • EIP Smart Cities • Ruragri • Cultural Heritage ERANET+ • JPI Cultural Heritage	• BONUS Art. 185 • EMRP Art. 185 • BIODIVERSA2 • CIRCLE-2 • ERA-ARD-II • CRUE ERA-NET • JPI Climate Clik´eu • CRIE ERA-NET • JPI Cultural Heritage • JPI healthy and productive seas and ocenas • JPI Water challenges • Acqueau • Seas-ERA • EIP Water Efficient Europe • ERA-MIN • JPI Urban Europe • EIP Smart Cities • MARTEC II • ERA-NET TRANSPORT II • ERA-NET AirTn

Measures:

- *Try to support a broad range of thematic fields in the EU MS/AC – Russia RTI cooperation, from basic research to innovation. This can be done in a complementary way over various funding instruments at multilateral and bilateral levels.*
- *Take up and use topics selected in ERA.Net RUS foresight and Delphi exercise.*
- *Consider Russian participation in currently ongoing initiatives in the EU that are related to the topics identified (e.g. ERA-NETs, Art. 185 cooperation, Joint Programming Initiatives, Joint Technology Initiatives).*
- *Combine bottom-up and top-down approaches for supporting thematic areas in the cooperation. In top-down support, use solid methodologies to select the most appropriate thematic fields and call topics for the EU MS/AC and Russia RTI cooperation (e.g. input from ongoing cooperation, expert workshops, foresight methodologies, etc.).*

- *Consider capacity building measures in thematic fields and specific topics of common interest, such as establishing joint laboratories or research institutions on certain topics.*

4.4 (Joint) Funding at the level of projects (competitive grants) as well as institutions (including STI infrastructures)

Support instruments (mostly funding) are crucial for facilitating cooperation among RTI actors.

FP7 and Horizon 2020

For the time being, the EU RTD framework programmes provide for the most significant single funding tool for the EU-Russia RTI cooperation at the multilateral level. Russia is traditionally the most important third country cooperation partner in the FPs (e.g. in FP6 and FP7), which is not an EU Member State or a country associated to the FP. However, the majority of funding is based on a rich variety of RTI programmes at Member State and Russian levels.

Russia had declared in 2008 its interest in upgrading cooperation through an association to FP7. However, this was not realised and the perspectives for association to Horizon 2020 are also currently dim. The international cooperation approach of the EU to be applied for the new RTI Framework Programme Horizon 2020 does not foresee an associated status. for Russia. Thus, Russia will have to cover the costs of participating Russian teams from its own resources, as will do other important emerging economies, such as China, India or Brazil. In order to keep Horizon 2020 as a major cooperation tool, measures will have to be taken to ensure maximum Russian participation in it. Taking into account the very high level of cooperation in FP6 and FP7 an ultimate goal could be an open budget from the Russian side for the open participation of Russian participants in all projects of Horizon 2020.

Measures:

- *Appropriate participation of Russia in the EU RTI Framework Programme should be given highest priority both by the EU and its Member States and Russia. A scaling up should be the ultimate target considering the rich RTI potential of Russia.*

- *Russian policy makers should consider introducing a support tool for Russian participants in Horizon 2020 projects. Appropriate funding mechanisms (grant funding, etc.) will have to be developed in this case by Russia.*

Coordinated calls EU-Russia within FP7 & Horizon 2020

Since 2007, several coordinated calls for co-funded research projects between the EU and Russia were implemented in the frame of the FP7. Coordinated calls have been completed in such areas as health; food, agriculture and biotechnology; ICT; energy; aeronautics; nanotechnologies; nuclear energy.

Measures:

- *In case that coordinated calls with third country partners will be continued in Horizon 2020, a broad variety of scientific fields should be covered by coordinated calls with Russia and the financial commitments be scaled up.*

- *Learn lessons from the previous coordinated calls – define good practice.*

ERA.Net RUS and ERA.Net RUS Plus

European Research Area Networks (ERA-NETs) aim at coordinating national research and innovation funding programmes and at pooling of resources for joint calls for research and innovation projects. ERA-NETs offer several advantages for EU MS/AC – Russia RTI cooperation: the thematic fields of ERA-NET calls are defined jointly with the other funding partners; the management of calls for project proposals is agreed and performed jointly; and national funding mostly flows back to the research teams of the country from where the funds originate (juste retour principle). Research funding cooperation is organised herewith on an equal footing among interested partners from the EU MS/AC and Russia. The coordinated approach in the ERA-NET enables pooling of financial resources and concentrating administrative efforts on joint funding activities. It opens up the possibility for multinational consortia to be formed with the involvement of players from different environments: companies, public research organisations, and higher education institutions. It also allows countries that do not see the need for their own bilateral funding programmes to embed their stimulation activities in a broader multi-partner and multinational environment.

ERA.Net RUS has successfully implemented calls for S&T and innovation projects. Based on this initial success, Programme Owners have decided to continue the good cooperation and submit an ERA-NET Plus project proposal to the EU. This **ERA.Net RUS Plus** project was approved for funding and will start in November 2013. The consortium managed to attract new funding organisations to the Group of Funding Parties (e.g. from Germany, Moldova). This path for its further evolution should lead to an activity according to Article 185 TFEU (in detail described below).

Measure:

- *Stimulate additional funding parties to participate in the ERA.Net RUS Plus calls, with particular emphasis on the innovation funding pillar.*

Thematic ERA-NETs

Thematic ERA-NETs are dealing with RTI funding cooperation on a specific scientific thematic area (e.g. industrial biotechnology). They have to be differentiated from regional ERA-NETs, which focus on RTI funding cooperation with a certain region or country (e.g. in the case of the ERA.Net RUS cooperation with Russia). Regional ERA-NETs support research projects in a broader

spectrum of thematic fields. Russian R&D and innovation funding organisations become increasingly involved in thematic ERA-NETs. ERA-NET participations under FP6 have generated only limited results. However, under FP7 these have become more substantial and successful. Russian funding organisations have participated or are still participating in a number of thematic ERA-NETs such as ERA-IB 2[21], ASPERA 2[22] or EuroTransBio [23] and have successfully co-funded calls for projects in these ERA-NETs.[24]

Measures:

- *Continue supporting and stimulating participation of Russian funding parties in thematic ERA-NETs based on the ERA.Net RUS experience.*
- *Identify ERA-NETs in promising areas of EU-Russia RTI cooperation and stimulate the ERA-NET as well as Russian funding parties to cooperate.*
- *Attract new Russian funding parties, such as the Ministries, to ERA-NETs.*

Article 185 cooperation

Article 185 of the Treaty of Lisbon on the Functioning of the EU (TFEU) provides a legal basis for the Union to participate in the joint implementation of national research programmes undertaken by several Member States. It offers the possibility to combine EU, national and regional efforts into single European programmes. The Union provides support beyond a simple coordination of research programmes in that it requires a scientific, management and financial integration process. So far, five Article 185 Initiatives have been set up.

The most relevant in our context is the Joint Baltic Sea Research and Development Programme (Bonus, Decision 22/09/2010), because it involves the Russian Foundation for Basic Research (RFBR), a Russian funding partner. RFBR is not a member of BONUS, but finances the participation of Russian researchers in projects supported under BONUS on the basis of an agreement RFBR-BONUS. BONUS has a budget of € 100 million, whereby up to 50% of the funds come from the European Union.

The five existing Article 185 initiatives are implemented by indirect centralised management through a Dedicated Implementation Structure (DIS) which is responsible for the administrative, financial and contractual management of a joint research programme. The initiatives are based on the Rules for Participation of national programmes concerned, but they have to be compatible with EU legislation and with any additional requirement which may be imposed by the Delegation Agreement between the European Commission and the DIS. This means that *de facto* the FP7 rules for participation usually have to be observed.

[21] The ERA-NET "Towards an ERA in Industrial Biotechnology" 2.
[22] The Astroparticle ERA-Net 2.
[23] The ERA-NET for International Biotech Cooperation.
[24] For a complete list of Russian participation in ERA-NETs see the ERA.Net RUS Foresight Report.

All running initiatives are opting for a successor programme based on Article 185 in Horizon 2020.[25] They will have to apply the Horizon 2020 Rules for Participation. Additional Art. 185 cooperation initiatives are under preparation for Horizon 2020. This concerns for example an Art. 185 cooperation for the Mediterranean region, named PRIMA, or another Art. 185 funding initiative considered for the Danube region in the framework of an upcoming Danube INCO-NET.

In view of the strategic partnership in research and innovation between the EU and Russia and the strong performance of Russia in the FPs, as well as due to the fact that an ERA.Net RUS Plus has already been approved starting in November 2013, and that other regional Art. 185 cooperation initiatives are in preparation, a logical follow-up to the ERA.Net RUS Plus would be an Art. 185 cooperation for the EU-Russia RTI cooperation.

Measures:

- *Establish a task force to advance the work on this cooperation.*
- *Get Member States involved – exploit the political interest in a sustainable, long-term measure following Art. 185. Integrate this discussion in the up-coming European SFIC pilot activity on Russia. Build a potential Art 185 activity around the strategic cooperation agenda to be developed towards and with Russia.*
- *Collect opinions from additional funding parties, which may be potentially interested in such a cooperation.*
- *Analyse the potential and interest of Russian funding organisations for participating in other Art. 185 cooperations than BONUS. Facilitate the participation of Russian funding organisations in case of interest.*

Joint Funding Initiative

A Joint Funding Initiative for research and innovation such as a Joint STI Funding Programme of interested EU MS/AC and Russia complementing the EU RTDI Framework Programme could be a fall-back option in case an Article 185 cooperation cannot be realised. As other ERA-NETs have shown (e.g. EraSME), interested funding parties can continue pooling resources and organise calls beyond an EU funded phase, although only among a far narrower group of EU MS/AC as compared to the EU funded phase. This can be an option for the ERA.Net RUS Plus, after EU funding has expired. The advantage of such an initiative would be more flexibility in the administrative procedures as Horizon 2020 rules would not have to be applied. Disadvantages would be that significantly more financial commitment from EU MS/AC would be required, also for managing the initiative, as the EU itself will not provide any funding, and that probably only few EU MS/AC will financially and administratively be able to set up and join such an initiative.

[25] European Commission, Fifth FP7 Monitoring Report, 2012

Measures:

- *Explore the interest in a Joint Funding Initiative among EU MS/AC and Russia, with or without EU funding.*
- *Conduct a comparative SWOT analysis on Art. 185 and the joint funding initiative.*

Other International Funding Frameworks

Russian scientists and teams participate in projects of the European initiatives COST and EUREKA. Russia has the highest participation in COST actions of all COST non-member countries. Russia has been a member of EUREKA since 1993, although the participation of Russian organisations is in comparison to the duration of its involvement rather low. This confirms the limited innovative capacities available in the country, a lack of appropriate innovative companies and administrative barriers in the management of EUREKA. Russia is not yet a member of EUROSTARS, the EUREKA funding tool co-funded by EUREKA member states and the European Commission.

Measures:

- *Russia should take full advantage of its EUREKA membership. A clear organisational structure and funding mechanism for EUREKA projects in Russia is recommended.*
- *Russia should consider participation in EUROSTARS, e.g. through the FASIE agency or a Ministry.*

Funding tools of EU Member States and countries associated to the FP with Russia

A multitude of bilateral funding tools for mobility, research projects, workshops, joint institutions and other support instruments have been established between Russia and individual EU MS/AC. These instruments and their scope have been analysed in an ERA.Net RUS report.[26] This analysis was based on a survey among Programme Owners (POs) from EU MS/AC cooperating with Russia, which showed which instruments were used and how common they were (figure 6).

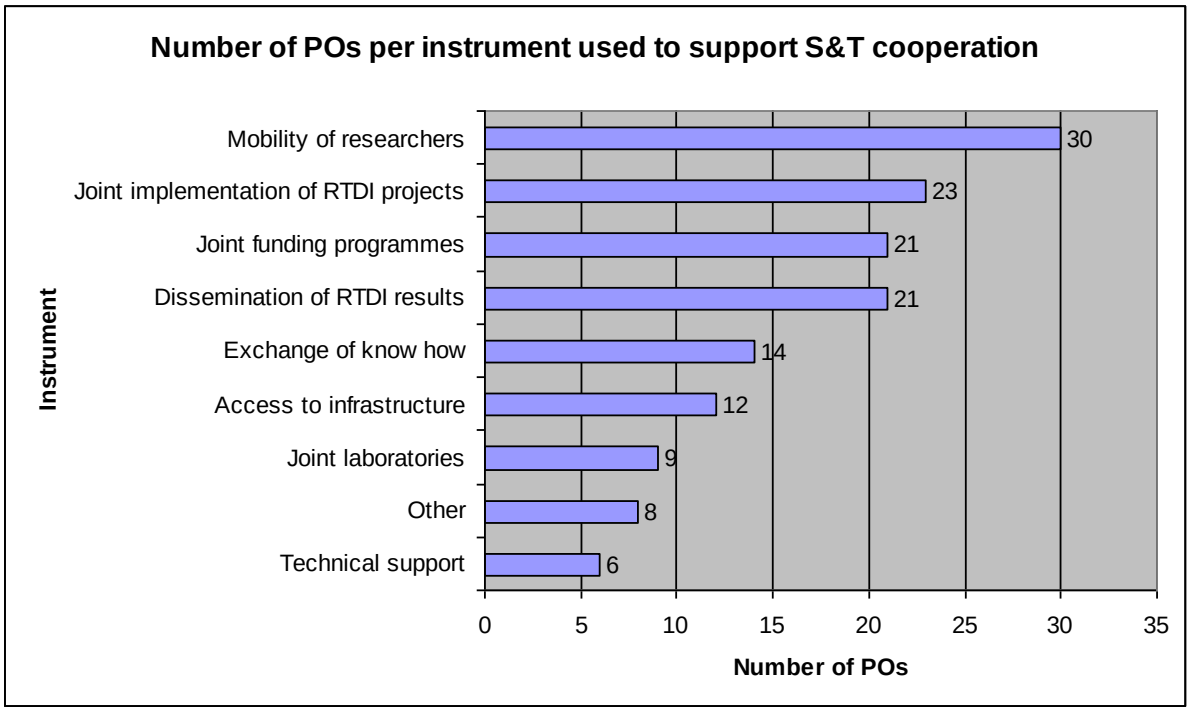
Coordination of these instruments and of funding activities has to some extent taken place in the frame of the ERA.Net RUS and will be continued in the ERA.Net RUS Plus. However, more can be done in the field of thematic coordination and in joining forces for coordinated support activities.

Measures:

- *Consider up-scaling and advancing bilateral funding instruments.*
- *Enhance efforts for coordinating EU MS/AC funding tools with Russia. Use foresight results and analysis for coordinating thematic fields (see chapter Joint agenda setting).*

[26] State of the art and perspectives of bilateral S&T programmes between EU MS/AC and Russia, 2010: http://www.eranet-rus.eu/_media/D_1.3_Analytical_Report_3.pdf

Figure 6.



n=40

- *Consider further coordination of funding tools, for example through establishing more joint EU MS/AC-Russian laboratories, widening of bilateral cooperation to trilateral or multilateral (modelled on the example of trilateral German-French-Russian laboratories), etc.*

The Russian Leading Scientists Initiative and Federal Targeted Programmes (FTPs)

Attracting leading scientists to Russian universities has proven to be useful tool to stimulate inward researcher mobility to Russia. It has focused on a narrow group of leading scientists until now. However, the initiative is considered to have been very successful. In three application rounds (2010, 2011 and 2012) more than 1,500 scientists from all over the world participated, with 121 scientists selected. At around EURO 3 million, the amount of funding per project is considerable . Due to the great success and high response, the initiative will be continued. Also, the Russian Federal Targeted Programmes show increasing participation by EU Researchers, e.g. in the FTP R&D in Priority Fields.

Measures:

- *A broader outreach to stimulate wider groups of EU researchers to work temporarily in Russia could prove very useful and should be considered by policy makers.*
- *Participation of EU researchers in Russian funding programmes, such as the Federal Targeted Programme for Research in R&D priorities should be*

stimulated and facilitated. Assure reciprocity.

Russian Innovation Support Tools

In recent years Russia has introduced a broad range of new innovation support tools. These include the Skolkovo Innovation Centre, the State Corporation for Nanotechnologies - Rusnano, the Russian Venture Company, the Russian Foundation for Technological Development (RFTR), Special Economic Zones for Technology Development, Innovative Territorial Clusters, and Technology Platforms. Actors from EU countries have become involved with some of these tools, but there seem to be many more opportunities for cooperation.

Measures:

- *Information on these tools and in particular on cooperation opportunities with EU counterparts and actors should be made available. Opportunities for cooperation should be explored and stimulated.*

- *Stimulate cooperation among EU and Russian Innovative Clusters and Technology Platforms, and explore opportunities for Russian participation in EU Joint Technology Initiatives.*

Cooperation in research infrastructure

Investment in research infrastructure and equipment was ranked as an important condition for stimulating RTI cooperation in the ERA.Net RUS Delphi survey (see above). EU Member States and Russia are partners in a growing number of international research infrastructures. Russia has committed significant resources in order to participate in the international XFEL (Russian contribution € 250 million) and FAIR (Russian contribution € 178 million) projects under construction in Germany. It is a partner in the International Thermonuclear Experimental Reactor – ITER. Moreover, Russia has recently signed a Memorandum of Understanding with the European Synchrotron Radiation Facility (ESRF) that paves the way to full membership in the next few years, and in December 2012 it announced an expression of interest to join CERN as an associate partner. For many decades already, European organisations have been involved in the Joint Institute for Nuclear Research (JINR) in Dubna, Russia. In Russia several infrastructure projects are either under construction or consideration in the framework of the so-called Mega-Science projects. These projects are open for international cooperation. *In order to further increase EU-Russian collaboration in the field of research infrastructures, it is recommended to take the following measures:*

Measures:

- *Increase transparency of existing Russian STI infrastructures – build and disseminate an inventory based on the present data base of key institutions provided via the portal S&T gate Rus.EU.*

- *As recommended by the recent review of the EU-Russia S&T agreement: consider a possible incorporation of Russia into the*

European Strategy Forum on large Research Infrastructures (ESFRI) and on its related Roadmap.

- *Promote further synergies between the ESFRI roadmap and existing unique large research facilities in Russia, as well as the Russian Mega Science Projects (e.g. NICA/Dubna and PIC/Gatchina).*
- *Stimulate access schemes for European researchers to Russian research infrastructures.*
- *Develop a legal framework or guidelines to facilitate the creation and/or operation of joint research databases.*
- *Initiate specific EU-Russia coordinated calls in the area of research infrastructures on topics of mutual interest supporting mutual opening and networking.*

4.5 Information and Communication

The EU-Russia Year of Science 2014

The EU-Russia Year of Science 2014 is an excellent opportunity for highlighting the vibrant and multifaceted STI cooperation between the EU, the EU Member States and the Russian Federation in all its facets. It can be considered as a joint information and communication campaign addressed to the science and innovation communities in the EU and Russia on the benefits and achievements of EU-Russia STI cooperation. In a year long series of events, EU-Russia cooperation in research, higher education and innovation is promoted involving scientists, universities, research organisations, innovators and the wider public. It is the first time to organise joint EU-Russian communication activities on a multilateral level. However, on the bilateral national level, similar years have already been realised with great success, for example between Russia and Germany, and Russia and France.

Measures:

- *Communication instruments and practices implemented throughout the year should be maintained and used even after the year is finished such as the joint web portal and the established communication channels or competitions with high visibility.*
- *Based on the existing experience and success of this instrument with Russia, other EU member states should feel encouraged to organise similar initiatives.*

Information and PR tools

Websites, databases, analytical reports and other material on EU MS/AC - Russia RTI cooperation have been produced in the frame of FP6 and FP7 funded projects such as the ERA.Net RUS, BILAT-RUS and ACCESSRU. The EU delegation to Russia has produced a compendium on EU Member State programmes relevant for RTI cooperation with Russia thus answering to the need for up-to-date information on opportunities and frameworks for S&T cooperation.

Measure:

- *Ensure continuation and updates of appropriate information for the EU MS/AC – Russia RTI cooperation, in particular through events, relevant publications and portals such as st-gaterus.eu, the websites of research and innovation funds, of ministries responsible for research and innovation, and through other tools.*

- *Ensure access to up-to-date information on each other's S&T landscape as well as on opportunities and frameworks for cooperation.*

5 CONCLUSIONS

- EU-Russia STI relations should follow a more active and clearly defined path, where the ultimate vision can be defined as **'Multi-level Enhanced Partnership'**. Cooperation may continue with varying degrees at different levels but the crucial point is to look for complementarity and constant progress.
- Previous studies and our current ERA.Net RUS foresight study show that there is a lot of activity on both bilateral and multilateral platforms and that there is a high interest in cooperation between the two sides. This can be considered as **sufficient grounds for further collaboration** with all parties are willing to **increase their level of involvement**.
- The RTI relationship between EU MS/AC and Russia has evolved from "support" to "collaboration", which means a more **equal basis of actual collaboration**, in particular in terms of funding.
- Societal challenges and innovation are core **topics** that any cooperation effort can focus on. This can be seen from the policy documents of both the EU and Russia, and it has also been expressed at different platforms.[27] A solid basis for concrete research topics has been laid with the ERA.Net RUS foresight exercise and its thematic roadmapping workshops.
- Many issues and measures for enhancing EU MS/AC – Russia RTI cooperation have been touched upon in this Vision Paper. For coming closer to our vision, we suggest as most promising measure to follow-up on **developing cooperation according to Article 185 TFEU**. This will allow for a sustainable, long-term and financially significant cooperation programme between the EU MS/AC and Russia, which may expect a strong financial co-funding from the EU.
- There is a need for continued **monitoring of ongoing activities** to respond to the needs and demands of different stakeholders, i.e. researchers, institutions.
- Russia has developed **capacities to take part in trilateral and multilateral initiatives** (joint project funding mechanisms, joint laboratories).
- With reference to the **Foresight** and the results of the survey for **Impact Analysis for ERA.NET-RUS Pilot Joint Calls,** it has been concluded that there is a sound basis for collaboration for individual researchers between Russia and the EU MS/AC countries and based on this, further collaborative actions can be envisaged on the Institutional and Policy Levels.
- **ERA.NET-RUS Plus** will be a crucial step in exploiting synergies between different programmes and initiatives, in developing common standards in cooperation and in integrating national scientific, management and financial spheres of activities through joint programming.

[27] Conference Conclusions, 'From Dialogue to Joint Programmes', Bonn 2011.

6 ANNEX 1: SUMMARY TABLE – OVERVIEW OF MEASURES

Measures	Sustainability	Competence	Cooperation
Policy level			
Prolongation of the EU-Russia S&T agreement	X		X
EU-Russia cooperation agreement	X		X
Common spaces			X
Modernisation partnership		X	
Regulatory issues: visa, customs and IPR	X		
Culture of business and research performance		X	
International regulatory environment	X		
Address the perception that RTI cooperation is weakly supported by policy-makers	X		
Show commitment at policy level by focusing on generating results	X	X	X
EU-Russia S&T committee and working groups	X		X
SFIC Pilot Initiative on Russia	X	X	X
Member States Dialogues	X		X
Art. 185 cooperation or Joint Funding Initiative	X	X	X
EU-Russia Year of Science 2014	X	X	X
Institutional level			
Culture of business and research performance		X	
Make S&T dialogue more effective for underpinning the RTI cooperation			X
Continue and upscale thematic cooperation, both through Russian involvement in existing initiatives (ERA-NETs (Plus), Art. 185 coop., JPIs, EIPs, KICs, JTIs) and through creating new bilateral and multilateral joint initiatives, using topics selected in the ERA.Net RUS foresight exercise.	X	X	X
Consider capacity building measures in thematic fields and on specific topics (joint infrastructure or research institutions)	X	X	
Continue coordination & support actions in Horizon2020, in Russian FTPs and through other Programme Owners	X	X	
Use and disseminate research results of joint cooperations	X	X	
Upscale Russian participation in EU RTI Framework Programme/Horizon2020 and consider support tools for Russian participants	X	X	
Stimulate additional funding parties to participate in ERA.Net RUS Plus calls (esp. İnnovation)	X	X	X
Measures for training and education of qualified R&D personnel		X	
Art. 185 cooperation or Joint Funding Initiative	X	X	X
Coordinated calls EU-Russia within FP7 & Horizon2020	X	X	
Optimise EUREKA Membership; consider EUROSTARS membership	X	X	
Russian R&D funding tools	X	X	
Russian Leading Scientists Initiative and Federal Targeted Programmes (FTPs)	X	X	
Russian Innovation Support Tools	X	X	
Cooperation on research infrastructure	X	X	
Information and PR Tools			X
Researcher level			
Common spaces			X
Measures for training and education of qualified R&D personnel		X	
Upscale Russian participation in EU RTI Framework Programme/Horizon2020 and consider support tools for Russian participants	X	X	
Use and disseminate research results of joint cooperations	X	X	
Coordinated calls EU-Russia within FP7 & Horizon2020	X	X	
Optimise EUREKA Membership; consider EUROSTARS membership	X	X	X
Russian R&D funding tools	X	X	
Russian Leading Scientists Initiative and Federal Targeted	X	X	

Programmes (FTPs)			
Russian Innovation Support Tools	X	X	
Continue and upscale thematic cooperation, both through Russian involvement in existing initiatives (ERA-NETs (Plus), Art. 185 coop., JPIs, EIPs, KICs, JTIs) and through creating new bilateral and multilateral joint initiatives, using topics selected in the ERA.Net RUS foresight exercise.	X	X	X

November 2013

Annex 2: Action Plan

EU MS/AC-RUSSIA RTI COOPERATION

1. Optimising the common framework

Measure	Actors concerned	Scope and level of participation	Time frame
EU-Russia S&T agreement: • *A prolongation of the S&T agreement was recommended by a review panel. This prolongation should be concluded as soon as possible and still in 2013. A more detailed revision should be considered for the next renewal after 2013. The EU-Russia S&T Agreement might serve as a legal umbrella for all EU Member States, to be specified by individual agreement of EU-Member States with Russia.*	European Commission Russian Ministry of Education and Science (MON)	Signing of the agreement by the actors during EU-Russia Year of Science 2014 kick-off	25 November 2013
EU-Russia cooperation agreement: • *Negotiations on a new comprehensive EU-Russia cooperation agreement should be speeded up and lead to a new agreement to allow for deeper cooperation.*	European Council, European Commission, Russian Government		2013-2014
EU-Russia Common Spaces • *Continue updating and following-up the roadmaps for the common space on research, education and culture.* • *Concrete mechanisms to implement the cooperation agenda of the roadmaps are needed, such as a monitoring body (e.g. the task force of the S&T committee) and support tools (e.g. coordinated calls, Art. 185 cooperation).*	European Commission, Russian Ministry of Education and Science (MON)	EC and MON to develop implementation mechanisms	Continuously up to 2020
EU-Russia Modernisation Partnership	European Commission,		Continuously up to

• *Make use of the modernisation partnership for the benefit of research and innovation cooperation among the EU MS/AC and Russia.* • *Consider using support instruments such as the modernisation partnership facility for research and innovation facilitation.*	Russian Government		2020
Regulatory issues: visa, customs transfer of funds/taxation, transfer of material (biological etc.), working permits and IPR • *Continue efforts for lifting of visa procedures between the EU and Russia. Consider lifting visas for researchers (such as those involved in FP7 or Horizon 2020 projects), e.g. on the example of visa free travel for sportsmen introduced by Russia.* • *Make customs regulations research and innovation friendly, and facilitate exchange (import/export) of scientific material and equipment.* • *Increase transparency of Russian IPR, align IPR regulations between the EU and Russia, and make IPR procedures less bureaucratic. Investigate effects of Russia's accession to the TRIPS agreement on research and innovation cooperation.*	European Commission, Russian Government		2013/2014 Continuously Continuously
Culture of business and research performance • *Enhance efforts to combat corruption and bureaucracy in the RTI sector, both in the EU and Russia.*	EU MS/AC, European Commission, Russian Ministry of Education and Science		Continuously, 2013-2020
International regulatory environment • *Russia and EU MS/AC among OECD members should follow-up and facilitate a Russian OECD membership.*	OECD Members among EU MS/AC, Russian government		2013 ongoing until membership
The ERA.Net RUS Delphi survey on framework conditions for cooperation • *Address the perception that RTI cooperation is weakly supported by policy makers: Policy makers should show commitment at the policy level by focusing on generating results, such as improving framework conditions for the cooperation, implementing a SFIC Pilot Initiative on Russia, increasing the investment in the RTI cooperation EU MS/AC-Russia, developing new support tools and scaling-up of already existing instruments.* • *Consider measures for addressing the need for training and education of qualified R&D personnel as well as RTI managers at institutional and policy level.*	RTI policy makers at the EU Institutions such as Council and Commission, EU MS/AC, and Russia Research and Innovation Funds involved in cooperation	Actors to increase investment and enhance support tools; Funds to develop new or scale-up existing mobility and training schemes	Continuously up to 2020

2. Mutual (policy) learning in dialogue forums

Measure	Actors concerned	Scope and level of participation	Time frame
EU-Russia S&T Committee and Working Groups • *Conclude the S&T agreement and continue the cooperation forums to ensure a smooth transfer to the new programming periods.* • *Continue the working groups into Horizon 2020 and the Russian FTPs, by adapting them to the necessities and structure of the new programmes. Assure coordination of MS´ activities.* • *Ensure commitment of the new task force and of the working groups to their task and regular meetings.*	European Commission, Russian Ministry of Education and Science, Other Russian Ministries and actors concerned (e.g. Rosatom, Roscosmos)	EC DG RI and MON to ensure operation of task force and working groups	2013/2014 Continuously up to the end of Horizon 2020/Russian FTPs - 2020
Member States Dialogues (and their coordination) • *Strive for coordinating the S&T and innovation dialogue among EU MS/AC on issues of joint interest, and for bringing the RTI cooperation forward in a strategic way.* • *Continue and make the S&T dialogue more effective for underpinning the RTI cooperation.*	EU Member States representatives, Representatives of countries associated to FP7 Russian Ministries concerned	Actors to focus on results of dialogue, in relevant meetings (S&T committees), coordination in fora such as ERA.Net RUS Plus	Continuously

3. Joint agenda setting

Measure	Actors concerned	Scope and level of participation	Time frame
SFIC Pilot Initiative on Russia • *It is recommended that SFIC proceeds with the Pilot Initiative with Russia in 2013.* • *Pilot Initiatives with other Third Countries (e.g. India, USA) should be studied. Good practice from these pilots should be applied in the Russia initiative.* • *Comprehensive funding cooperation should be considered, for example initiating an Article 185 TFEU cooperation in the frame of the SFIC initiative (details see below).*	Strategic Forum on International S&T Cooperation (SFIC), EC DG Research and Innovation - Directorate for International Cooperation (INCO)	EU MS/AC SFIC representatives move RU pilot forward and suggest art. 185 as part of pilot	2013-2020
Thematic fields of cooperation • *Try to support a broad range of thematic fields in the EU MS/AC – Russia RTI cooperation, from basic research to innovation. This can be done in a complementary way over various funding instruments at multilateral and bilateral levels.* • *Take up and use topics selected in ERA.Net RUS foresight and Delphi exercise.* • *Consider Russian participation in currently ongoing initiatives in the EU that are related to the topics identified (e.g. ERA-NETs, Art. 185 cooperations, JPIs, JTIs).* • *Combine bottom-up and top-down approaches for supporting thematic areas in the cooperation. In top-down support, use solid methodologies to select the most appropriate thematic fields and call topics for the EU MS/AC and Russia RTI cooperation (e.g. input from ongoing cooperation, expert workshops, foresight methodologies, etc.).* • *Consider capacity building measures in thematic fields and specific topics of common interest, such as establishing joint laboratories or research institutions on certain topics.*	EC Directorate General for Research and Innovation, Russian Ministry of Education and Science, RTI Funding Organisations in EU MS/AC and Russia, ERA.Net RUS Plus GFP	ERA.Net RUS Plus to use topics for its call, EC to use topics in Horizon 2020 calls EC, MON and Russian Programme Owners to check for participation in more ERA-NETs, etc. RTI Funding Organisations (MON, RFBR, RAS, EU MS/AC) to try to establish joint institutions	2013-2020

4. (Joint) Funding at the level of projects (competitive grants) as well as institutions (including STI infrastructures)

Measure	Actors concerned	Scope and level of participation	Time frame
FP7 and Horizon 2020 • *Appropriate participation of Russia in the EU RTI Framework Programme should be given highest priority both by the EU and its Member States and Russia. A scaling up should be the ultimate target considering the rich RTI potential of Russia.* • *Russian policy makers should consider introducing a support tool for Russian participants in Horizon 2020 projects. Appropriate funding mechanisms (grant funding, etc.) will have to be developed in this case by Russia.*	Russian Ministry of Education and Science	MON to coordinate H2020 participation with EC	2013
ERA.Net RUS and ERA.Net RUS Plus • *Stimulate additional funding parties to participate in the ERA.Net RUS Plus calls, with particular emphasis on the innovation funding pillar.*	ERA.Net RUS and ERA.Net RUS Plus coordinator (IB-DLR); ERA.Net RUS and ERA.Net RUS Plus mirror secretariat in Russia (RAS) and GFP		2013-2014
Article 185 cooperation • *Establish a task force to advance the work on this cooperation.* • *Get Member States involved – exploit the political interest in a sustainable, long-term measure following Art. 185. Integrate this discussion in the up-coming European SFIC pilot activity on Russia. Build a potential Art 185 activity around the strategic cooperation agenda to be developed towards and with Russia.* • *Collect opinions from additional funding parties, which may be potentially interested in such a cooperation.* • *Analyse the potential and interest of Russian funding organisations for participating in other Art. 185 cooperations than BONUS. Facilitate the participation of Russian funding organisations in case of interest.*	ERA.Net RUS and ERA.Net RUS Plus consortium/ Groups of Funding Parties, Russian Ministry of Education and Science, Additional Programme Owners, Art. 185 task force	Art. 185 task force to check with ERA.Net RUS Plus GFP and other POs Art. 185 task force to analyse potential with Russian funding organisations	
Joint Funding Initiative • *Explore the interest in a Joint Funding Initiative among EU MS/AC and Russia,*	ERA.Net RUS and ERA.Net RUS Plus consortium/		2013-2014 and beyond

with or without EU funding. • *Consider such an initiative as a fall-back option in case an Article 185 initiative with substantial co-funding from the EU cannot be realised.* • *Conduct a comparative SWOT analysis on Art. 185 and the joint funding initiative.*	Groups of Funding Parties	Art. 185 task force to perform the SWOT	
Thematic ERA-NETs • *Continue supporting and stimulating participation of Russian funding parties in thematic ERA-NETs based on the ERA.Net RUS experience.* • *Identify ERA-NETs in promising areas of EU-Russia RTI cooperation and stimulate the ERA-NET as well as Russian funding parties to cooperate.* • *Attract new Russian funding parties, such as the Ministries, to ERA-NETs.*	BILAT-RUS Advanced Project, Russian funding organisations	BILAT-RUS Advanced consortium analyse ERA-NETs and potential for Russian participation	2013, and continuously up to 2020
Coordinated calls EU-Russia within FP7 & Horizon 2020 • *In case that coordinated calls with third country partners will be continued in Horizon 2020, a broad variety of scientific fields should be covered with coordinated calls with Russia and the financial commitments be scaled up.* • *Learn lessons from the previous coordinated calls – define good practice.*	EC Directorate General for Research and Innovation; Russian Ministry of Education and Science, other relevant Russian ministries	EC, MON and other Russian actors analyse FP7 coordinated calls and define good practice for new calls in H2020	2013-2020
Projects in support of EU-RU RTDI cooperation • *Continue to fund geographical and thematical coordination and support actions in Horizon 2020, in Russian FTPs, and through other Programme Owners to analyse, facilitate and accompany the RTI cooperation and to foster coordination of RTI policies.* • *Make regular use and ensure a proper dissemination of results of completed or ongoing EU funded coordination and support projects targeting Russia.*	EC Directorate General for Research and Innovation; Russian Ministry of Education and Science, Programme Owners from Russia and EU MS/AC		2013-2020
Other EU funding tools • *Russia should take full advantage of its EUREKA membership. A clear organisational structure and funding mechanism for EUREKA projects in Russia is recommended.* • *Russia should consider participation in EUROSTARS, e.g. through the FASIE agency or a Ministry.*	Russian Ministry of Industry and Trade, Russian Ministry of Education and Science, Skolkovo Foundation, EUREKA Secretariat		2013-2014
Funding tools of EU Member States and countries associated to the FP • *Enhance efforts for coordinating EU MS/AC funding tools with Russia. Use foresight results and analysis for coordinating thematic fields (see chapter Joint agenda setting).* • *Consider further coordination of funding tools, for example through*	EU MS/AC, EC Directorate General for Research and Innovation		continuously

establishing more joint EU MS/AC-Russian laboratories, widening of bilateral cooperation to trilateral or multilateral (modelled on the example of trilateral German-French-Russian laboratories), etc			
The Russian Leading Scientists Initiative and Federal Targeted Programmes (FTPs) • *A broader outreach to stimulate wider groups of EU researchers (beyond leading scientists) to work temporarily in Russia could prove very useful and should be considered by policy makers.* • *Participation of EU researchers in Russian funding programmes, such as the Federal Targeted Programme for Research in R&D priorities should be stimulated and facilitated. Assure reciprocity.*	Russian Ministry of Education and Science		2013-2020
Russian Innovation Support Tools • *Information on these tools and in particular on cooperation opportunities with EU counterparts and actors should be made available. Opportunities for cooperation should be explored and stimulated.* • *Stimulate cooperation among EU and Russian Innovative Clusters and Technology Platforms, and explore opportunities for Russian participation in EU Joint Technology Initiatives.*	Russian Ministry of Economy, Russian Ministry of Education and Science, FASIE, BILAT-RUS Advanced Project		2013-2020
Cooperation in research infrastructure • *Increase transparency of existing Russian STI infrastructures – build and disseminate an inventory based on the present data base of key institutions provided via the portal S&T gate Rus.EU.* • *As recommended by the recent review of the EU-Russia S&T agreement: consider the incorporation of Russia into the European Strategy Forum on large Research Infrastructures (ESFRI) and on its related Roadmap.* • *Promote further synergies between the ESFRI roadmap and existing unique large research facilities in Russia, as well as the Russian Mega Science Projects under consideration and/or construction, e.g. enhancing European cooperation in NICA (Dubna) and PIC (Gatchina) projects.* • *Stimulate access schemes for European researchers to Russian research infrastructures.* • *Develop a legal framework or guidelines to facilitate the creation and/or operation of joint research databases.* • *Initiate specific EU-Russia coordinated calls in the area of research infrastructures on topics of mutual interest.*	European Strategy Forum on large Research Infrastructures (ESFRI), Russian Ministry of Education and Science, BILAT-RUS Advanced project		2013-2014 & continuously up to 2020

5. Information and Communication

Measure	Actors concerned	Scope and level of participation	Time frame
The EU-Russia Year of Science 2014 • *Communication instruments and practices implemented throughout the year should be maintained and used even after the year is finished such as the joint web portal and the established communication channels or competitions with high visibility.* • *Based on the existing experience and success of this instrument with Russia, other EU member states should feel encouraged to organise similar initiatives.*	BILAT-RUS Advanced project, European Commission, Russian Ministry of Education and Science EU Member States		2013-2015 and beyond
Information and PR tools • *Ensure continuation and updates of appropriate information for the EU MS/AC – Russia RTI cooperation, in particular through events, relevant publications and portals such as st-gaterus.eu, the websites of research and innovation funds, of ministries responsible for research and innovation, and through other tools.*			

Update of this ERA.Net RUS Action Plan	ERA.Net RUS and ERA.Net RUS Plus coordinator IB-DLR	Regular update, at least once per year	2013-2020

Detailed Action Plan
EU MS/AC – RUSSIA Art. 185 COOPERATION

Measure	Actors concerned	Scope and level of participation	Time frame
• *Nominate an institution (or several in a task force) that will take the lead for coordinating ERA.Net RUS follow-up activities, in particular for advancing the work on the Art. 185 cooperation (Deliverable D4.4.3. of ERA.Net RUS)*	ERA.Net RUS and ERA.Net RUS Plus consortium/ Groups of Funding Parties	Proposed task force: IB-DLR, ZSI, TÜBITAK, HSE ICISTE – to advance Art. 185 cooperation	July 2013, Istanbul meeting
• *Explore with ERA.Net RUS and ERA.Net RUS Plus Groups of Funding Parties options for an Art. 185 cooperation.*	ERA.Net RUS and ERA.Net RUS Plus consortium/ Groups of Funding Parties		2013-2014
• *Explore with the European Commission the perspectives and concrete steps to be taken for preparing an Art. 185 cooperation.*	Art. 185 task force, EC	Task force to schedule meeting with EC in autumn 2013	2013
• *Explore with Russian policy makers and Programme Owners (in particular the Ministry of Education and Science) their interest and capacity to establish and participate in an Art. 185 cooperation.*	Art. 185 task force Russian Ministry of Education and Science, Russian Programme Owners	Task force to schedule meeting with Russian actors in autumn 2013 and 2014	2013-2014
• *Collect opinions from additional funding parties, which may be potentially interested in such a cooperation.*	Art. 185 task force		2013-2014 and then continuously
• Provide regular updates on advancement with Art. 185 cooperation.	Art. 185 task force, EC	Updates to be provided by task force and EC at appropriate meetings.	Regularly, 25-27 November 2013 – ERA.Net RUS closing event/ ERA.Net RUS Plus kick-off
• *Prepare a strategic research agenda on the basis of the thematic foresight, in particular thematic roadmapping workshops.*	Art. 185 task force	Task force with contribution of relevant	2014

		stakeholders.	
• *Scale-up resources for an Art. 185 and envisage a long term cooperation programme (e.g. 5-7 years).*	ERA.Net RUS and ERA.Net RUS Plus Funding Parties, additional Programme Owners		2014-and beyond
• Consider options for a Dedicated Implementation Structure (DIS).	Art. 185 task force, ERA.Net RUS & ERA.Net RUS Plus Funding Parties, EC	Task force to analyse DIS options, in coordination with EC and interested Funding Parties	2013-2014

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Abstract

This Working Document outlines development perspectives for cooperation in research, technology and innovation (RTI) between the EU, its Member States (MS), countries associated to the EU's FP7 (AC), and Russia. The Working Document has been prepared in the framework of the ERA.Net RUS project and is based on a comprehensive foresight exercise implemented over the years 2010-2013 and on analysis of ongoing RTI cooperation. In-depth discussions among the ERA.Net RUS and ERA.Net RUS Plus consortiums and Funding Parties, and in the frame of expert workshops with policy makers and analysts provided essential input. Furthermore, results of other related projects (such as BILAT-RUS, BILAT-RUS Advanced, ACCESSRU, etc.) have been studied. The paper proposes a vision on enhancing the cooperation between EU MS/AC and Russia overall, as well as a specific follow-up vision for the ERA.Net RUS and ERA.Net RUS Plus projects.

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