



Russian-European Workshop
**PROSPECTS FOR COOPERATION BETWEEN RUSSIAN ACADEMY
OF SCIENCES AND EUROPEAN RESEARCH COUNCIL**
September 19, 2012; Moscow



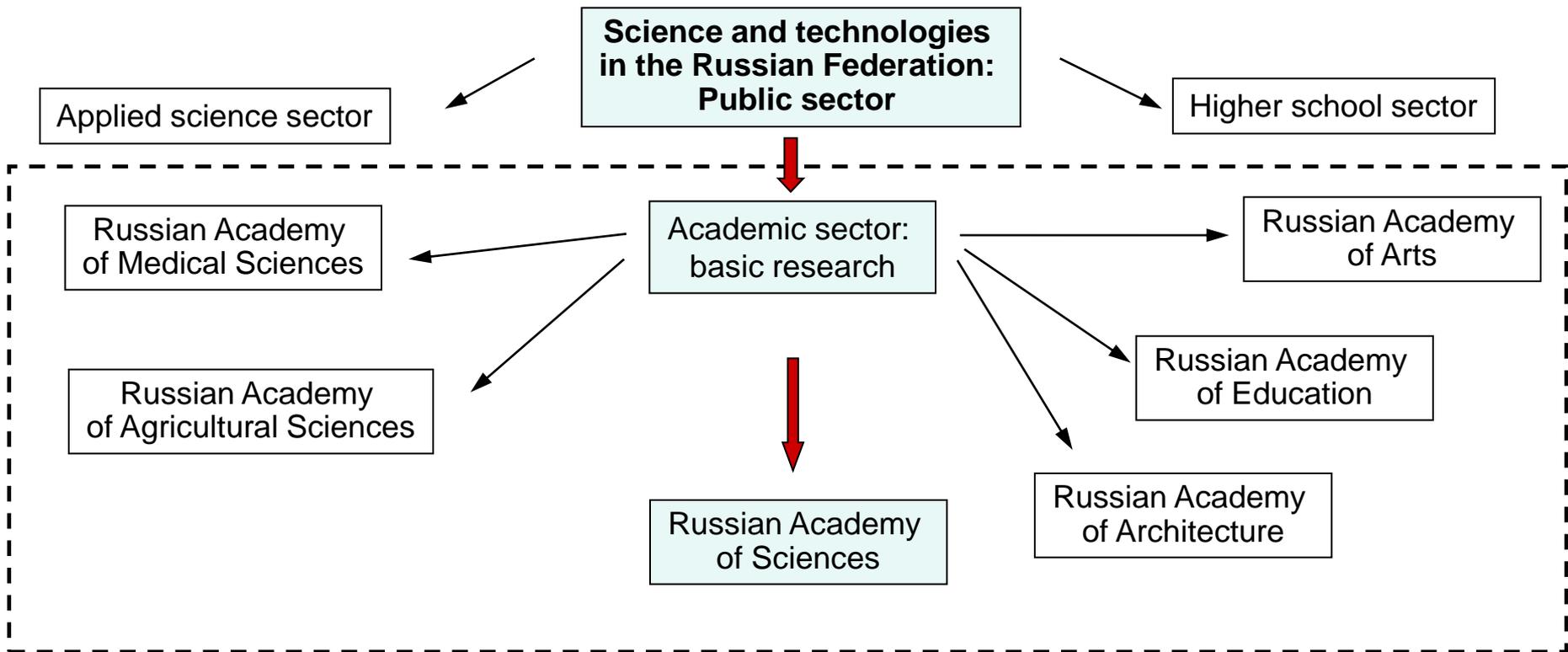
**RUSSIAN ACADEMY OF SCIENCES: OVERALL PERFORMANCE
AND PROSPECTS FOR COOPERATION WITH EUROPEAN COUNTRIES**

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Presidium of the Russian Academy of Sciences



RAS IS A CRUCIAL SOURCE OF NEW KNOWLEDGE IN BASIC SCIENCES IN RUSSIA



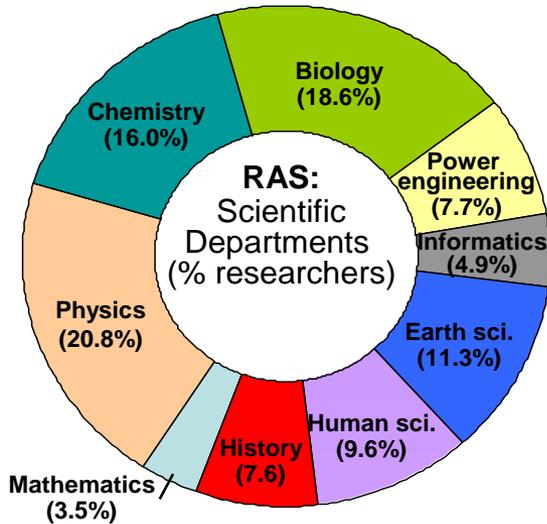
**Russian institutions contributing
to sciences and technologies:**

3957 Total number

432 RAS institutes

3525 Non-RAS institutes
and other organizations

What is the Russian Academy of Sciences (RAS) ?



New departments:

- ✓ Nanotechnology;
- ✓ Physiology and basic medicine.

Important characteristics:

- Total number of scientific institutes: **430**;
- The whole staff, **100 000**;
- Researchers, **50 000 / 13%** of all Russian researchers;
- Papers in peer-reviewed international journals, **57%** of all papers of Russian researchers;
- Patents, **25%** of all Russian patents

Russian Academy of Sciences, a state self-governed non-commercial organization

Objectives:

- Gaining of **new knowledge** in Basic and Social Sciences;
- Development of **innovative technologies** and their transfer to industry;
- **Training** of PhD students and postdocs;
- **Coordination and expertise** of basic research in Russia;
- Development of **international cooperation** in Basic and Social Sciences

Indicators of scientific performance:

- Papers in peer-reviewed international journals;
- Patents.

Financing of the RAS institutes and laboratories:

- Basic;
- Targeted programs under competition:
 - ✓ RAS Presidium and Scientific Departments;
 - ✓ Ministry of Education and Science;
 - ✓ Russian Foundation for Basic Research;
 - ✓ Russian Foundation for Humanities
 - ✓ "Bortnik's" Foundation (support of small enterprises)

COOPERATION OF RAS WITH EUROPEAN COUNTRIES IN BASIC RESEARCH: *PRINCIPAL PARTNERS*

Country	Agreements
France	Centre National de la Recherche Scientifique; Institut National de la Recherche Agronomique; French Academy of Sciences; L'École des hautes études en sciences sociales; Maison des science de l'homme; Universities Bordeaux I and Paris 6
Germany	Max Planck Society, Deutsche Forschung Gemeinschaft, Berlin-Brandenburg Academy of Sciences; Helmholtz Society, German Academic Exchange Service
Italy	National Research Council, Accademia Nazionale dei Lincei, "Alessandro Volta" Centre for Scientific Culture, National Institute of Nuclear Physics, Consiglio Nazionale delle Ricerche
UK	The Royal Society
Czech Republic	The Academy of Sciences of the Czech Republic
Hungary	The Academy of Sciences
Norway	University of Oslo, Bergen University
Spain	Spanish High Council for Scientific Research, Madrid Polytechnic University
Sweden	Royal Academy of Sciences, Royal Swedish Academy of Letters, History and Antiquities
Switzerland	World Agency for Planetary Monitoring and Earthquake Risk Reduction



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Advanced tools
for the international cooperation of RAS:

- ❖ Bilateral and multilateral international projects (programs);
- ❖ Joint international laboratories;
- ❖ International scientific networks;
- ❖ Technical centers – “*platforms*”;
- ❖ Mobility of scientists – “*brain circulation*”

Exchange of novel ideas
and technologies



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Major challenges for world society and science in the 21st century:
Climate, energy, food, pure water, human health, space flights, terrorism

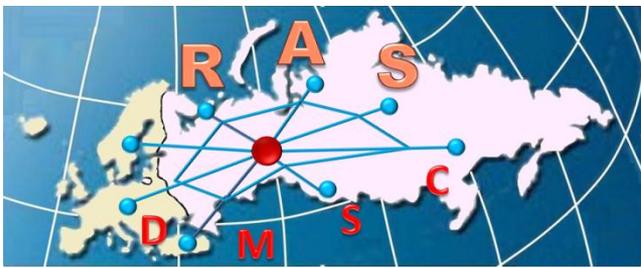


Internationalization and globalization of science :
Cooperation instead of competition – pooling of international facilities



International megaprojects :

- ✓ *Human genome project;*
- ✓ *Large hadron collider;*
- ✓ *International space station, etc.*



Department for Multilateral Scientific Cooperation of RAS with European Countries

Goal is to strengthen and enlarge multilateral cooperation between Russia and European countries in science and technologies

Objectives:

- ❖ Organization and coordination of multilateral cooperation of the RAS institutes with European countries with focus on the informational and methodological support;
- ❖ Analytical estimation of efficiency and prospects of the development of multilateral cooperation;
- ❖ Improvement of current forms of multilateral cooperation and generation of new ones.

Major European targets for Department activity:

- Framework Programs of the European Union;
- Russian-European program “EraNet.RUS”;
- All European Academies of Sciences;
- International Interacademical Association

Organizers and Participants of Multilateral Scientific Cooperation in Russia and Europe



Directorates-General of European Commission (EC)

European Research Council

EU Framework Programmes (FP)

FP Subprogramme «IDEAS»

All European Academies (ALLEA)

Programme ERA. Net RUS

International forums for organization of science

European national ministries, scientific agencies and funds

RF Missions in EU

EU mission in Russia

Ministry of Foreign Affairs of RF

European Departments

Embassies of European countries in RF

Embassies of RF in European countries

Ministry of Education and Science of RF

Department of international cooperation

National contact points

Department for Multilateral Scientific Cooperation with European countries

Specialized Ministries of RF
(Ministry of Economy Development of RF and others.)

International Interacademical Association
(*European Committees*)

RAS
RAS regional divisions

RAS institutes
Foreign departments

European Academy of Science and Arts

Russian science funds and agencies

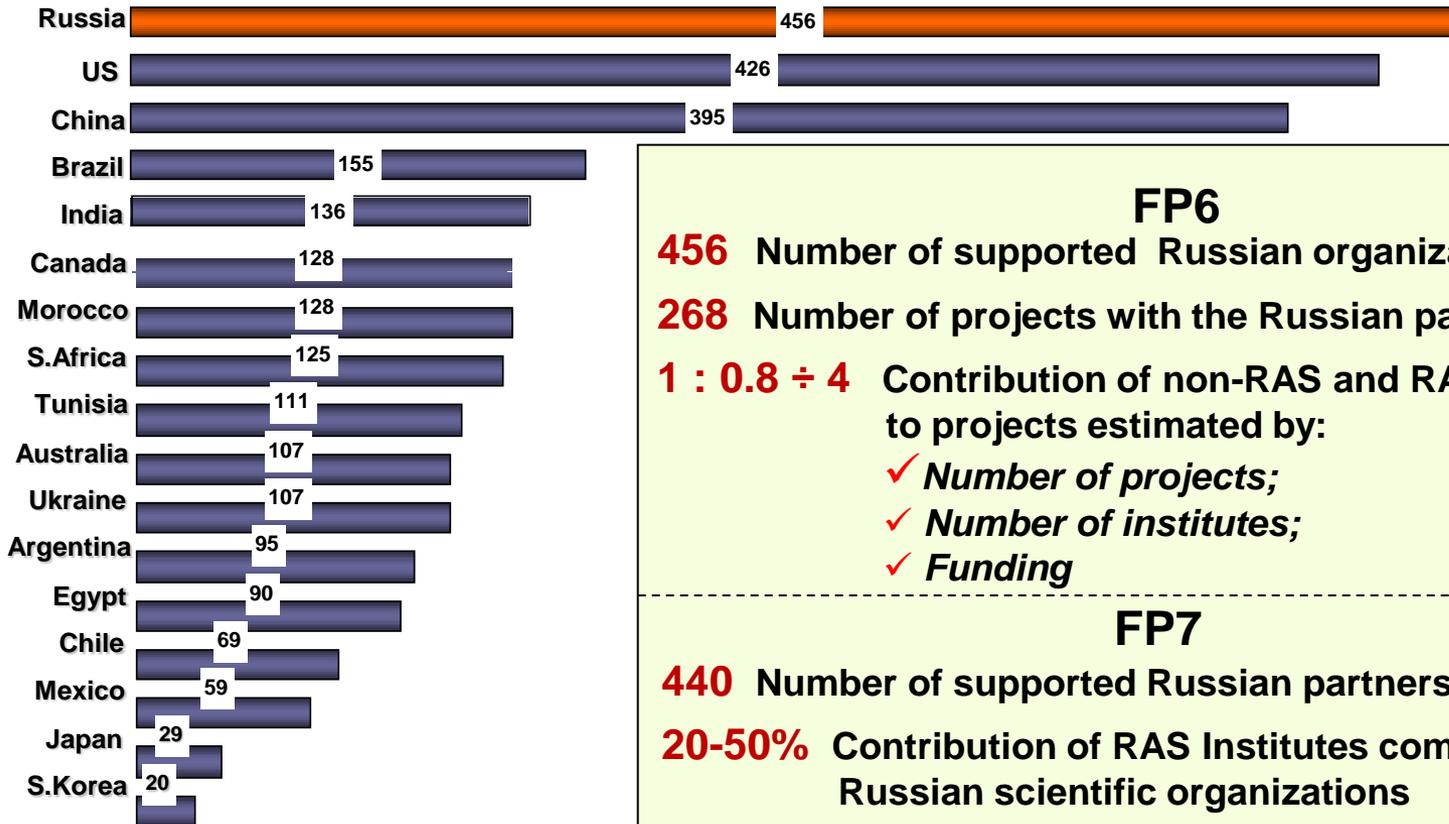
Russian state academies of sciences



ERA.Net RUS



EU FRAMEWORK PROGRAMS: *Number of supported organizations in non-EU countries*



FP6

456 Number of supported Russian organizations;

268 Number of projects with the Russian partnership;

1 : 0.8 ÷ 4 Contribution of non-RAS and RAS organizations to projects estimated by:

- ✓ *Number of projects;*
- ✓ *Number of institutes;*
- ✓ *Funding*

FP7

440 Number of supported Russian partners;

20-50% Contribution of RAS Institutes compared to other Russian scientific organizations

ERA.Net RUS / ERA.Net RUS Plus:

New instrument for multilateral cooperation of Russia with European countries

- ❖ Promotors: National scientific agencies and foundations; (Russia: RAS, RFBR, HF);
- ❖ Holding the first competition with participation of 10 European countries

ALL European Academies

42 European countries;

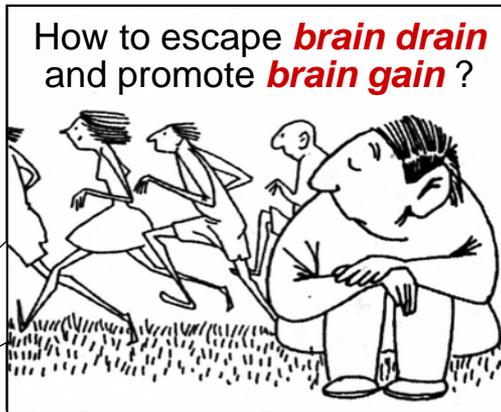
53 Academies



The objective of the specific program 'IDEAS' and RAS is to reinforce excellence, dynamism and creativity in European fundamental studies and improve the attractiveness of Europe for the best researchers



RAS



Brain drain [?] ≡ Brain circulation

Russian Academy of Sciences
(St. Petersburg's department) :
National Contact Point on "IDEAS"



Goal:
Encouragement of the participation
of Russian researchers in competition
in the frame of "IDEAS"

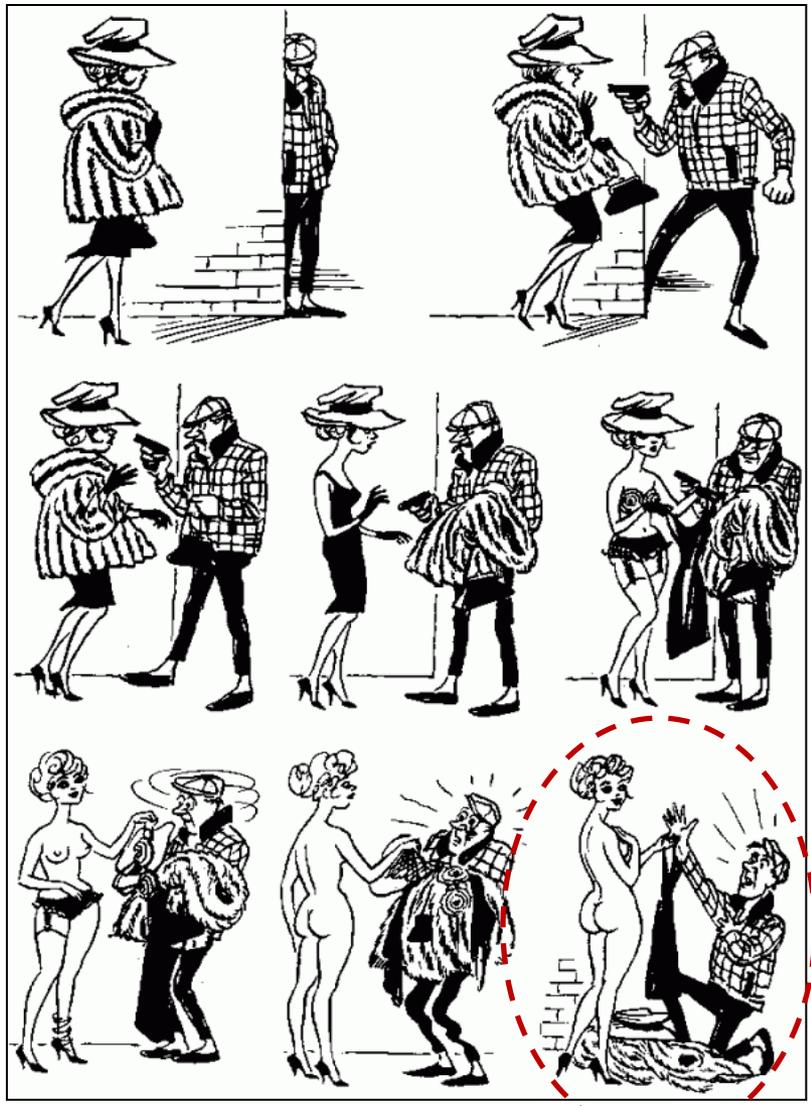


What is the prospect for Russia to be an associate member of FP7



Major points for discussion:

- Value of annual registration fees;
- Rights of the potential Russian members; of the executive committees of FP7
- Relations with ERC and the program IDEAS.

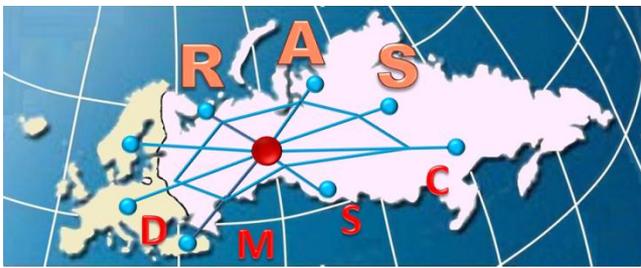


Herluf Bidstrup

What should be done to strengthen the RAS international cooperation ?

It would be reasonable:

- To promote a creation of international laboratories and networks;
- To strengthen cooperation with FP and develop a complementary system of multilateral cooperation with European countries (*Era.Net.Rus*);
- To use the RAS targeted programs for the support of international projects under competition;
- To extend the bilateral program of training of PhD students under co-supervision;
- To create European scientific and technical platforms in Russia with focus on innovations;
- To slow down the brain-drain and to promote brain-gain by using the opportunities of different Russian and international foundations and programs (*RFBR, Mobility-FP, etc.*);
- To develop a network of the RAS representatives in European national and international scientific organizations



Department for Multilateral Scientific Cooperation of RAS with European Countries

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Thank you for your attention

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