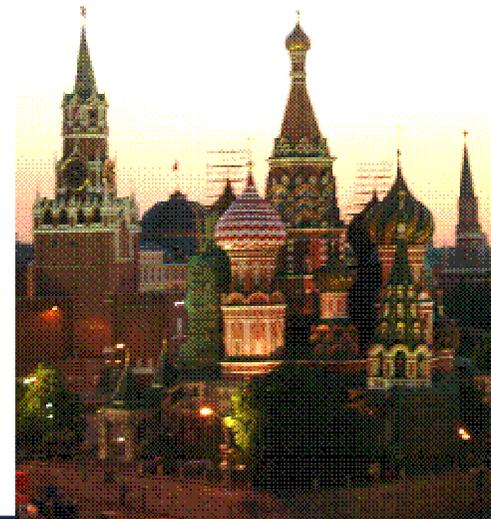


# From FP7 to Horizon 2020: Opportunities for EU - Russia Scientific Cooperation



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# EU-Russia Cooperation in Science & Technology

- In FP7 Russia has been the most successful third country non-associated partner (both in terms of the total number of participations and in terms of the total amount of EU financial contribution received)
- More coordinated calls with Russia than any other partner:
  - eight to date (health, FAFB, NMP (2 calls), ICT, energy, aeronautics and nuclear energy)
  - both sides committing ca € 31 million for the projects supported
  - new coordinated calls in ICT and aeronautics, for the 2013 work programme, are under development
- In FP7, **475** Russian research organisations involved in **302** FP7 projects, receiving an EU contribution of **€59 million**
- Highest levels of successful participation in: the Marie Curie actions, research infrastructures, transport, space, ICT and FAFB

# FP7: 2007 – 2013

## 4 specific programmes

### Cooperation

32.4 billion €

**Trans-national** cooperation in 10 research themes through multi-national **consortia**.

### Ideas

7.5 billion €

Funding for top researchers from anywhere in the World: investigator-driven “**frontier research**”, supported by an autonomous **European Research Council (ERC)**

### People

4.7 billion €

**Training, mobility, career development** of researchers, (“**Marie Curie**” actions) - incl. **international grants**

### Capacities

4.2 billion €

**Research infrastructures**; research specifically for **SMEs**; regional research driven **clusters**

# FP7 Cooperation Programme

## Thematic Priorities:

	Billion €
1. Health	6,1
2. Food, agriculture & biotechnology	1,9
3. Information & communication technologies	9,1
4. Nanotechnologies & materials	3,5
5. Energy	2,3
<b>6. Environment (including climate change)</b>	<b>1,9</b>
7. Transport	4,2
8. Socio-economic sciences	0,6
9. Security	1,4
10. Space	1,4
<b>Total:</b>	<b>32,4</b>

# FP7 Environment Theme

## Objective:

To promote the sustainable management of both the man-made and the natural environment and its resources.

## Research areas funded:

- Climate change
- Natural hazards
- Environment and health
- Biodiversity
- Environmental technologies including Cultural heritage
- Marine environment
- Land and urban management
- Natural resources management
- Earth observation
- Assessment tools for sustainable development

# Russia's Participation in FP7 Environment Theme

## Proposals

Call	2007	2008	2009	2010	2011	Total
Submitted proposals	38	50	18	28	6	140
Funded proposals	4	7	2	8	3	24

## Funding

Year	2007	2008	2009	2010	2011	Total
€ mln	1.3	1.8	0.3	1	0.6	5

# Environmental Research: EU Political Context

## **Biodiversity Strategy 2020 (May 2011)**

- to halt the loss of biodiversity and ecosystem services in the EU by 2020.

## **Bioeconomy Strategy (February 2012)**

- to build a more innovative and low-emissions economy, reconciling demands for sustainable agriculture and fisheries, food security, and the sustainable use of renewable biological resources for industrial purposes, while ensuring biodiversity and environmental protection.

# European Research Information

## **EU Research & Innovation**

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

## **Seventh Framework Programme (FP7)**

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

## **FP7 Environment Theme**

[http://cordis.europa.eu/fp7/environment/home\\_en.html](http://cordis.europa.eu/fp7/environment/home_en.html)

## **NCP for Environment (in Russia)**

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

## **FP7 Calls for Proposals and info on research programmes and projects**

<http://ec.europa.eu/research/participants/portal>

## **FP New Partners Service**

<http://cordis.europa.eu/partners/web/guest/home>

## **Experts' registration in FP7**

<https://cordis.europa.eu/emmfp7/index.cfm>

# HORIZON 2020

**The EU Framework Programme for  
Research and Innovation  
(2014-2020)**

# HORIZON 2020 – main features

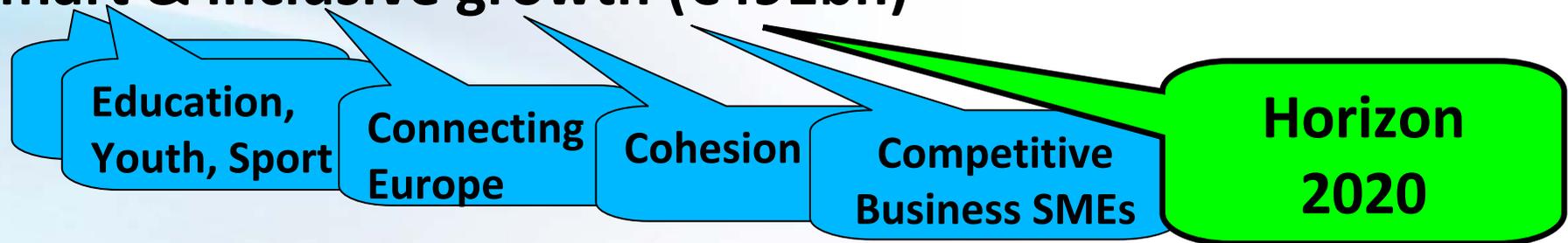
1. Context
2. Outline of the proposal
3. Cross-cutting issues
4. Timetable

# The Multiannual Financial Framework 2014-2020:

*Commission's proposals of 29 June 2011*

*Key challenge: stabilise the financial and economic system while taking measures to create economic opportunities*

## 1. Smart & inclusive growth (€491bn)



## 2. Sustainable growth, natural resources (€383bn)

## 3. Security and citizenship (€18.5bn)

## 4. Global Europe (€70bn)

## 5. Administration (€62.6bn)

**Total:  
€ 1,025bn**

# What is Horizon 2020

- Commission proposal for a € 80 billion research and innovation funding programme (2014-20)
- What's new
  - A single programme bringing together three separate programmes/initiatives\*
  - Coupling research to innovation – from research to retail, all forms of innovation
  - Focus on societal challenges facing EU society, e.g. health, clean energy and transport
  - Simplified access, for all companies, universities, institutes in all EU countries and beyond.

*\*The 7th Research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)*

# Three priorities:

**1 Excellent science**

**2 Industrial leadership**

**3 Societal challenges**

# Priority 1 Excellent science

## Why:

- World class science is the foundation of tomorrow's technologies, jobs and wellbeing
- Europe needs to develop, attract and retain research talent
- Researchers need access to the best infrastructures

# Proposed funding (million euro, 2014-20)

European Research Council - ERC <i>Frontier research by the best individual teams</i>	13 268
Future and Emerging Technologies - FET <i>Collaborative research to open new fields of innovation</i>	3 100
Marie Curie Actions - MCA <i>Opportunities for training and career development</i>	5 572
Research infrastructures (including e-infrastructures) <i>Ensuring access to world-class facilities</i>	2 478

# Priority 2 Industrial leadership

## Why:

- Strategic investments in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors
- Europe needs to attract more private investment in research and innovation
- Europe needs more innovative SMEs to create growth and jobs

# Proposed funding (million euro, 2014-20)

Leadership in enabling and industrial technologies – LEIT <i>(ICT, nanotechnologies, materials, biotechnology, manufacturing, space)</i>	13 781
Access to risk finance <i>Leveraging private finance and venture capital for research and innovation</i>	3 538
Innovation in SME <i>Fostering all forms of innovation in all types of SME</i>	619 complemented by 6 829 (expected 15% of societal challenges + LEIT) and 'Access to risk finance' with strong SME focus

# Priority 3 Societal challenges

## Why:

- Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport etc)
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

# Proposed funding (million euro, 2014-20)

Health, demographic change and wellbeing	8 033
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4 152
Secure, clean and efficient energy*	5 782
Smart, green and integrated transport	6 802
<b>Climate action, resource efficiency and raw materials</b>	<b>3 160</b>
Inclusive, innovative and secure societies	3 819

\*Additional €1 788m for nuclear safety and security from the Euratom Treaty activities (2014-18). Does not include ITER.

# Social sciences and humanities (SSH)

- **Integrated approach:** SSH included as an integral part of the activities, working beyond 'silos' (*e.g. understanding the determinants of health and optimising the effectiveness of healthcare systems*).
- The '**Inclusive, Innovative and Secure Societies**' challenge: issues such as smart and sustainable growth, social transformations, social innovation and creativity, the position of Europe as a global actor as well as the social dimension of a secure society (*SSH have the tools to contribute to addressing security challenges, enhancing the societal dimension of security policy and research*).

# Strong participation by SME

- **Integrated approach** - around 15% of the total budget for societal challenges and LEIT\* to go to SME\*\*.
- **Simplification** - particular benefit to SME (e.g. single entry point).
- A **new SME instrument** will be used across all societal challenges as well as for the LEIT
- A dedicated activity for research-intensive SMEs in '**Innovation in SMEs**'.
- '**Access to risk finance**' will have a strong SME focus (debt and equity facility)

*\* LEIT = Leadership in Enabling and Industrial Technologies, \*\* SME = Small & Medium-sized Enterprises*

# International cooperation

- **International cooperation is crucial** to address many Horizon 2020 objectives.
- **Principle of general openness:** the programme will remain to be the most open funding programme in the world.
- Horizon 2020 shall be open to the **association** of: acceding countries, candidate countries and potential candidates and selected third countries that fulfil the relevant criteria (capacity, track record, close economic and geographical links to the European Union, etc.).
- Targeted actions to be implemented taking a **strategic approach to international cooperation** (dedicated measures in the 'Inclusive, innovative and secure societies' challenge).

# Simplification: Rules for Participation (1)

## 1. A SINGLE SET OF RULES

- Adapted for the whole research and innovation cycle
- Covering all research programmes and funding bodies
- Aligned to the Financial Regulation, coherent with other new EU Programmes

## 2. ONE PROJECT - ONE FUNDING RATE

- Only one predetermined rate applicable to all participants and activities in the same project

## 3. SIMPLE EVALUATION CRITERIA

- Excellence – Impact - Implementation (Excellence only, for the ERC)

**4. NEW FORMS OF FUNDING** aimed at innovation: pre-commercial procurement, inducement prizes, dedicated loan and equity instruments.

**5. INTERNATIONAL PARTICIPATION:** facilitated but better protecting EU interests.

# Simplification: Rules for Participation (2)

**6. SIMPLER RULES FOR GRANTS:** broader acceptance of participants' accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of output-based grants.

## **7. FEWER, BETTER TARGETED CONTROLS AND AUDITS**

- Lowest possible level of requirements for submission of audit certificates without undermining sound financial management;
- Audit strategy focused on risk and fraud prevention.

## **8. IMPROVED RULES ON INTELLECTUAL PROPERTY**

- Balance between legal security and flexibility;
- Tailor-made IPR provisions for new forms of funding;
- A new emphasis on open access to research publications.

***Beyond the Rules:*** further simplified provisions in the Grant Agreement and implementing procedures to facilitate access to Horizon 2020 (e.g. common IT platform).

# Euratom Programme 2014-2018

- **Budget**
  - **TOTAL: € 1665 million**, including: Fission: €336million; Fusion € 673 million; JRC: € 656 million
- **Programme for 5 years, in line with the Euratom Treaty (art. 7)**
- **What is new?**
  - Stronger focus on nuclear safety and nuclear training
  - A single Euratom programme bringing together three separate decisions
  - The same rules for participation as in the Horizon 2020 - simplified access
  - Programme contributes to the implementation of priorities of the 'Horizon 2020'
  - Fusion research programme will be restructured
- **Funding for ITER in a separate supplementary programme: € 2,573 million for 2014-2018**

# Links to COSME

- Horizon 2020 and 'Programme for the Competitiveness of enterprises and SME' (COSME) 2014-2020 are **complementary programmes** to generate growth and jobs
- **Different focus:**
  - Horizon 2020 = innovation driven growth
  - COSME = support to create favourable business environment and competitiveness
- **Closely coordinated**, for instance:
  - Integrated financial instruments (debt and equity), with facilities in both programmes serving complementary objectives
  - Enterprise Europe Network set up under COSME, but support to SME for EU funding

# Next steps

- Ongoing:** Parliament and Council negotiations on the basis of the Commission proposals
- Ongoing:** Parliament and Council negotiations on EU budget 2014-20 (including overall budget for Horizon 2020)
- Mid 2012:** Final calls under 7th Framework Programme for Research to bridge gap towards Horizon 2020
- Mid 2013:** Adoption of legislative acts by EU Parliament and Council on Horizon 2020
- 1/1/2014:** **Horizon 2020 starts; launch of first calls**

# Thank you for your attention!

Find out more at:

[www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)