



Research Infrastructures part of Horizon 2020

Opportunities for EU-Russia cooperation

Philippe Froissard

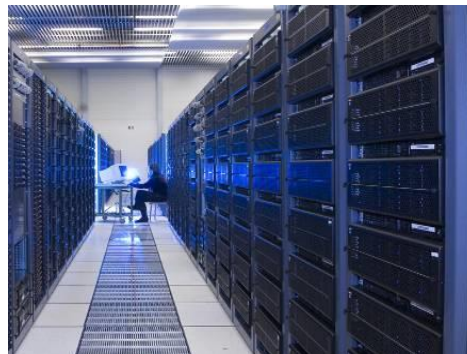
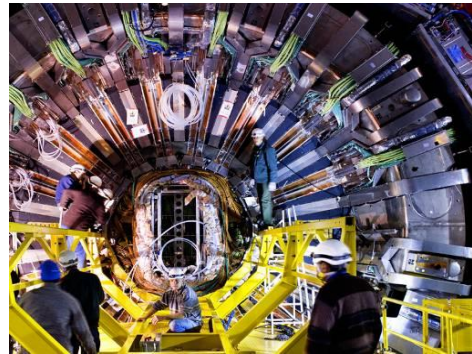
Deputy Head of Unit
DG Research & Innovation
European Commission

Research Infrastructures

Research infrastructures are *facilities, resources and services* that are used by the research communities to conduct research and foster innovation.

Major scientific equipments

Knowledge-based resources



e-infrastructures

International Cooperation for Research Infrastructures

Rationale

- The **nature and complexity** of the societal challenges require a global approach for the design and operation of the RI;
- Global cooperation is the only option when **pooling of resources** is necessary due to the scale of the investment for construction and operation of the RI;
- International cooperation on RI can be considered **strategic** in areas where a) **Europe has an international leadership** and can influence standardisation at global level; b) Europe can take advantage of **resources not available within Member States**; c) Europe can **develop internal capacities**, benefiting from best practices in the global arena;
- Global cooperation on RI can be used as a tool to support or complement the EU external policy and contribute to **Science Diplomacy**.

Horizon 2020 – Framework Programme for Research and Innovation (2014-2020)

Excellent science

- European Research Council
- Future and Emerging Technologies
- Marie Curie actions
- **European Research infrastructures (including e-infrastructures)**

Societal challenges

- Health, demographic change, wellbeing
- Food security, sustainable agriculture, marine - maritime research, bio-economy
- Secure, clean and efficient energy
- Smart, green, integrated transport
- Climate action, resource efficiency, raw materials
- Inclusive, innovative and reflective societies
- Secure societies
- Spreading excellence & Widening Participation
- Science with and for Society

Industrial leadership

- Leadership in enabling and industrial technologies (ICT, space, nanotechnologies, advanced materials and advanced manufacturing and processing, biotechnology)
- Access to risk finance
- Innovation in SMEs

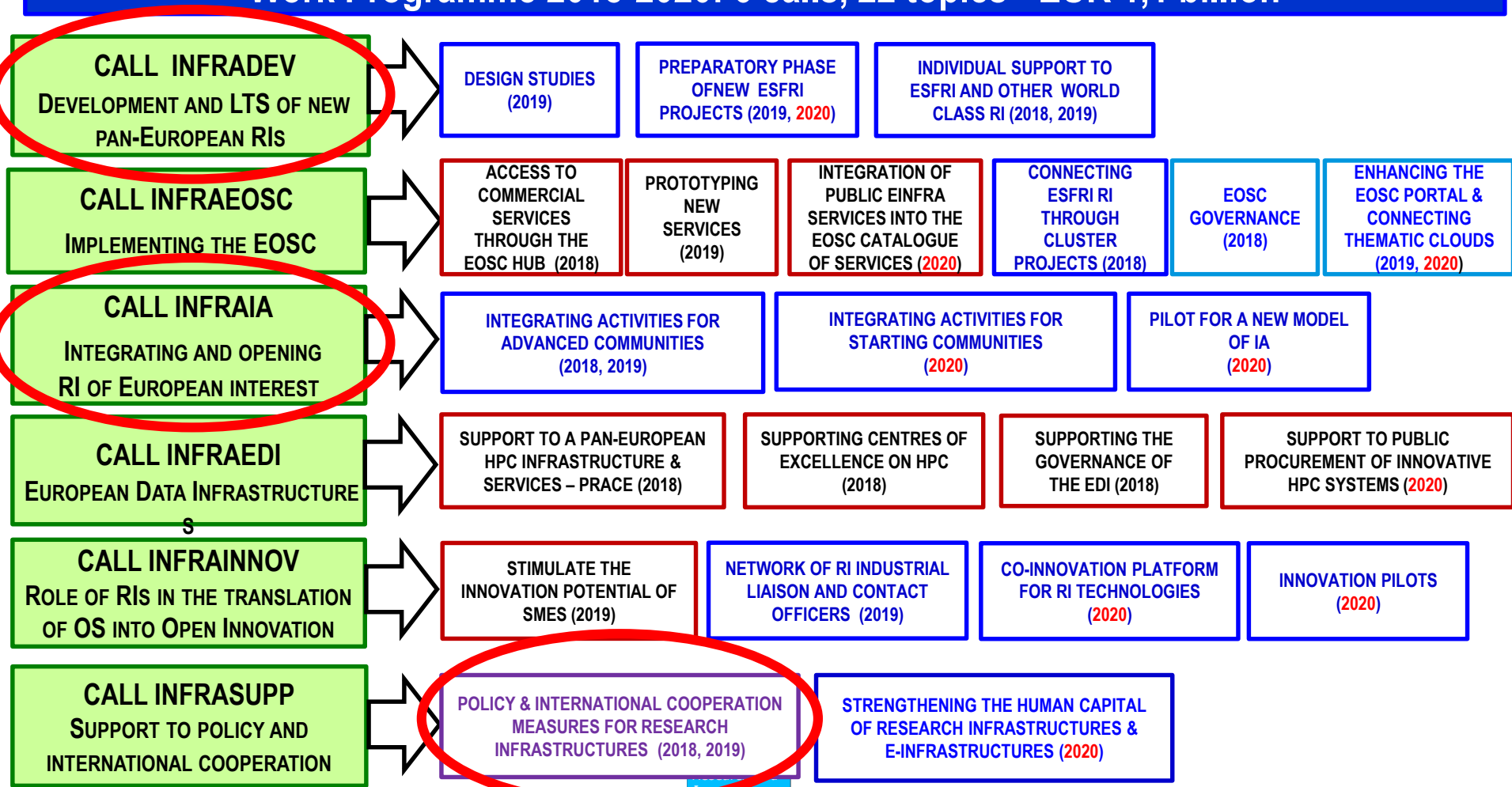
Research Infrastructures in Horizon 2020

Objectives

1. Developing the European RIs for 2020 and beyond
 - Developing **new world-class RIs**
 - **Integrating and opening national and regional RIs of European interest**
 - Development, deployment and operation of ICT based **e-Infrastructures**
2. Fostering the **innovation** potential of RIs and their **human resources**
3. Reinforcing European RI **policy** and **international cooperation**

In a snapshot:

RESEARCH INFRASTRUCTURE Work Programme 2018-2020: 6 calls, 22 topics - EUR 1,1 billion



Call INFRASUPP-01-2018–2019

Policy and international cooperation measures for research infrastructures

Specific challenge:

International cooperation for research infrastructures is needed with a number of key partners located in third countries/regions seen as **strategic** both for the **development, exploitation and management** of world-class research infrastructures and for ensuring the necessary **complementarities** required to address research challenges with a global dimension by **optimising the use of the available resources**.

→ 3 flagships initiatives with **Russia**, SESAME and CELAC



Call INFRASUPP-01-2018-2019

Policy and international cooperation measures for research infrastructures – topic 2019

- **Dedicated topic** for Russia with deadline in 2019
- Objective is to support the further structuring of the cooperation with the Russian Federation in the Research Infrastructure domain
- Proposals will have to demonstrate the involvement of relevant entities on **both European and Russian** sides
- Proposals will **build on the recommendations of the CREMLIN project** in particular as regard the cooperation between the Russian Mega Science initiatives and their European counterparts.

Call INFRASUPP-01-2018–2019

Policy and international cooperation measures for research infrastructures – scope of topic 2019

i) Cooperation with Mega Science projects:

- **Joint development and acquisition of specific instrumentation** to be used by the European and Russian Infrastructures. This activity will target the infrastructures that are close to being operational, e.g. NICA and PIK.
- **Joint conceptual and technical design** of Russian Infrastructures of European interest. This activity will particularly target the infrastructures that are at an early conceptual stage, e.g. SSRS-4, XCELS or SCT
- **Joint development of future technologies** required for Research Infrastructures' instrumentation;

Call INFRASUPP-01-2018–2019

Policy and international cooperation measures for research infrastructures – scope of topic 2019

ii) Facilitate the access of EU scientists to Russian Research Infrastructures:

- Contribute to overcoming the barriers that prevent European scientists from accessing Russian Research Infrastructures of European interest.
- The project will support Russian Facilities in setting-up the appropriate access conditions and cover the travel and subsistence costs that European researchers would sustain in accessing the facilities.
- The project will have to take into account the list of Research Infrastructures open to International collaboration produced by the Russian Federation in 2016 (update possible) and the European Charter for Access to research infrastructures.

Call INFRASUPP-01-2018–2019

Policy and international cooperation measures for research infrastructures – scope of topic 2019

iii) Develop staff exchange programme:

- The proposal will develop a staff exchange programme and thematic courses and workshops (e.g. summer schools), aimed at fostering **exchanges of best practices on management practices, access procedures and scientific collaboration** between infrastructure Staff and Scientists belonging to both the Russian Federation and European Union.



Call INFRASUPP-01-2018–2019

Policy and international cooperation measures for research infrastructures – topic 2019

Expected impacts:

- Strengthen the structured cooperation between European and Russian Research Infrastructures;
- Promote the harmonisation of procedures & framework conditions for access;
- Develop the framework conditions to improve access of European Scientists to Russian Research Infrastructures;
- Promote the participation of Russian researchers in EU projects.



Call INFRASUPP-01-2018–2019

Policy and international cooperation measures for research infrastructures – topic 2019

- Opening of the topic: 14 November 2018;
- Deadline of the topic: **20 March 2019**;
- Funding scheme: Research and Innovation Action (RIA);
- Indicative budget: **EUR 25 million** – one project expected to be selected

Thank you for your attention

HORIZON 2020

The image features a large, stylized globe of the Earth centered on the letter 'O' in the word 'HORIZON'. The globe is set against a bright blue sunburst effect that radiates across the center of the image. The background is a deep blue gradient, suggesting a sky or space theme. The text 'HORIZON 2020' is written in a clean, white, sans-serif font, with the globe acting as a visual separator for the word 'HORIZON'.