The Research Infrastructures Work Programme

e-IRG Workshop under Belgian EU Presidency

5 June 2024

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Research Infrastructures WP in Horizon Europe

Pillar 1 Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures EUR 2,4 bn

Pillar 2

Global Challenges and European Industrial Competitiveness

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

Pillar 3 Innovative Europe

European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system





Research Infrastructures

"Research Infrastructures are facilities that provide resources and services for research communities to conduct research and foster innovation"

They can be used beyond research e.g. for education or public services and they may be single-sited, distributed, or virtual. They include

- major scientific equipment or sets of instruments
- collections, archives or scientific data
- computing systems and communication networks
- any other research and innovation infrastructure of a unique nature which is open to external users

RI's Work programme. Areas of Intervention

- Consolidating and developing the landscape of European research infrastructures
- Opening, integrating and interconnecting research infrastructures
- Reinforcing European research infrastructure policy and international cooperation
- Consolidating and developing the innovation potential of European research infrastructures and activities for innovation and training.



Research Infrastructures Strategic orientations 2025-2027



- WP 2025: planned adoption Q1/Q2 2025
- WP 2026-2027: indicative adoption Q3/Q4 2025



RI Strategic orientations 2025-2027 Destination 1. Consolidation and evolution of research infrastructures, research infrastructures services, and technology development

1.1. Consolidation and evolution of RIs

- o Effective support to evolve, consolidate and optimise the European landscape of Ris
- Improved synergies between European level funding sources, such as structural and investment funds, Recovery and Resilience Facility, Neighbourhood, Development and International Cooperation Instrument for the external dimension of RI, and national funding instruments.
- Reinforced international dimension, including through: enlarging geographical coverage for scientific fields; promoting globally European standards and approaches to access, data management and open science.

1.2. RI services to support large research domains, societal challenges and EU priorities

- o Further improved balance between curiosity-driven and challenge-driven access to RI services
- Piloting of new approaches to transnational access
- Trained and up-skilled researchers through transnational access

1.3. Next generation of scientific instrumentation, tools, methods, and advanced digital solutions of RIs and fostering innovation and co-creation with industry

- New instrumentations, tools, methods and solutions & Stable RI innovation ecosystem.
- Digitalisation of RIs instruments, fostering high FAIR data productivity by RIs, promoting FAIR data literacy and sovereignty of FAIR research data, and harnessing the potential of AI, in synergy with the EOSC objectives and actions
- Greening

RI Strategic orientations 2025-2027 Destination 2: European Open Science Cloud (EOSC), Destination Earth (DestinE) and panEuropean National Research and Education Networks

2.1. Enabling an operational, open and FAIR EOSC ecosystem

- Enable the alignment of common practices and definition of common standards for FAIR data of high quality and the
 development of tools and services to allow researchers to find, access, reuse and combine FAIR research results as a
 European contribution to a "Web of FAIR data";
- Develop, deploy and demonstrate value to the research communities of the core components and services of EOSC and enlarge the EOSC federation through connecting existing research infrastructures in Europe;
- Ensure that Open Science policies, practices and skills are monitored, rewarded and taught, becoming the 'new normal' across the European Research Area (ERA).

2.2. Destination Earth (DestinE)

o Further evolve DestinE as a digital model of the Earth on a global scale

2.3. Ensure state-of-the-art connectivity across Pan-European NRENs

- Further evolve and improve high-bandwidth networks and network services interconnecting researchers, data and computing resources to deliver state-of-the-art secure and resilient connectivity
- Strengthen above-the-net collaboration service catalogue, trust and identity services, and the overall access infrastructure.



HE WP 2025 preparations





(some) Strategic directions and challenges for EOSC

- Tripartite governance (EC + MS/AC +EOSC-A) and EOSC Partnership (EC +EOCS-A) jointly define strategic directions for EOSC. EOSC SRIA as input for the WP.
- Develop the EOSC Federation as an operational infrastructure:
 - Definition of the high-level architecture of the Federation (Nodes vs service providers, policies and requirements, interoperability framework), ensuring effective expansion, inclusiveness and scalability of the EOSC federation
 - Demonstration of the EOSC added-value. Stimulate the connection of RIs and major FAIR data producers, as well as the federation of e-infrastructures and integration of services in the EOSC.
 - Increase of high-quality FAIR data productivity. Exploit EOSC as a driver for AI in ecosystem approach (computing + data + skills + training).
 - Continuous development and testing of technologies and service elements for the EOSC Core and Exchange
- Defining a suitable model for EOSC post-2027 governance and operations (FP10).
- Gradual expansion of the EOSC Federation. Interconnecting it with other EU data spaces. Interconnection of RIs to other relevant digital infrastructures, including those funded under the Digital Europe Programme expression | EuroHPC and TEFs or Horizon Europe programmes e.g. AI on Demand Platform.

Policy context for next steps

- New Commission in the fall 2024. Policy direction and Multiannual Financial Framework
- Letta and Draghi's reports. "A fifth freedom to enhance R&I and education in the single market"

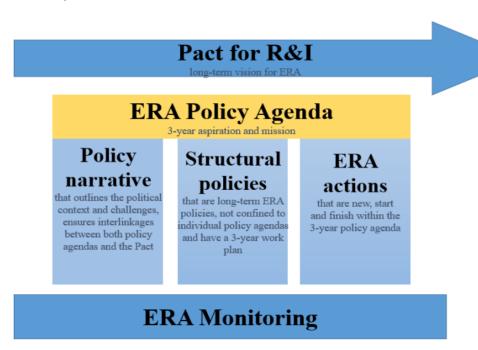


"A central pillar of this strategy is the creation of a **European Knowledge Commons** – a centralised, digital platform providing access to publicly funded research, data sets, and educational resources. ..."

ERA Policy Agenda 2025-2027

Council negotiation adoption Q1/Q2 2025

Renewed strategy for Research
 Infrastructures





Thank you!

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