













## **Programme**

Background, results of 2021 calls, upcoming calls (2022)

Horizon-Infra-2022-DEV-01-01: Research infrastructure concept development

Horizon-Infra-2022-TECH-01-01: R&D for the next generation of scientific instrumentation, tools and methods

Horizon-Infra-2022-DEV-01-02: Cooperation, synergies and networking between research infrastructures and technology infrastructures







### **Horizon Europe structure**







Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

14/09/2021







### Strategic orientations for RI 2021-2024

- Consolidate and enhance the EU research infrastructures landscape
- Support Open Science and data-driven research through the European Open Science Cloud (EOSC) and high capacity network
- Enable and drive the green and digital transformation through research infrastructure services
- Push the limits of frontier research
- > Develop cutting-edge technologies for RIs and foster innovation
- Enhance the international dimension of RIs







### **Five destinations**

INFRADEV: Developing, consolidating and optimising European RIs

landscape, maintaining global leadership

> **INFRAEOSC**: Enabling an operational, open and FAIR

EOSC ecosystem

> INFRASERV: RI services to support health research, accelerate the

green and digital transformation, and advance frontier

knowledge

> **INFRATECH:** Next generation of scientific instruments, tools and

methods and advanced digital solutions

INFRANET: Network connectivity - enabler for collaboration

without boundaries

01/02/2022 5







Infra 2021 calls		Nombre de projets retenus (ranked	France : Participations in evaluated proposals	Participations in retained for	France: Requested EU contribution in retained for funding proposals
INFRA DEV (5 appels)	9	6	5	5	458 575,00 €
INFRA EOSC (6 appels)	15	9	24	18	4 959 505,00 €
INFRA SERV (7 appels)	11	8	31	24	13 144 409,00 €
INFRA TECH (1 appel)	8	4	9	4	1 842 109,00 €
Total	43	27	69	51	20 404 598,00 €







Topic(s)	Title	Budget disponible (€)	Action(s)	Ouverture	Clôture	Clôture (2nde étape)
HORIZON-INFRA- 2022-EOSC-01-01	Services and tools to underpin a research assessment system that incentivises open science practices	6 000 000	HORIZON Research and Innovation Actions	19/01/2022	20/04/2022	
HORIZON-INFRA- 2022-EOSC-01-02	Improving and coordinating technical infrastructure for institutional open access publishing across Europe	5 000 000	HORIZON Research and Innovation Actions	19/01/2022	20/04/2022	
HORIZON-INFRA- 2022-EOSC-01-03	FAIR and open data sharing in support of healthy oceans, seas, coastal and inland waters	16 000 000	HORIZON Research and Innovation Actions	19/01/2022	20/04/2022	
HORIZON-INFRA- 2022-EOSC-01-04	Support for initiatives helping to generate global standards, specifications and recommendations for open sharing of FAIR research data, publications and software	3 000 000	HORIZON Coordination and Support Actions	19/01/2022	20/04/2022	
Topic(s)	Title	Budget disponible (€)	Action(s)	Ouverture	Clôture	Clôture (2nde étape)
HORIZON-INFRA- 2022-SERV-01-01	Implementing digital services to empower neuroscience research for health and brain inspired technology via EBRAINS	38 000 000	HORIZON Research and Innovation Actions	01/06/2022	21/09/2022	







## Research infrastructure concept development





 Research and Innovation Action (RIA)



### **BUDGET**

- Total indicative budget for the topic: EUR 2.3 million
- Expected EU contribution per project:
  EUR 1 3 million



### **OTHER CONDITIONS**

 The granting authority expects to fund 7 projects



### **TIMING**

- Call opening: 19th Jan 2022
- Deadline: 20th April 2022







### Research Infrastructure concept development

### **Context:** proposals should

- Demonstrate the relevance of the new infrastructure
- Stress on scientific challenges
- Indicate the gaps and the synergies with existing research infrastructure

### **Expected Outcomes:**

- Science sound science cases for new research infrastructures, including expected scientific breakthrough, gap analysis and feasibility/design studies to support planning and decision making at the national level (e.g. funding bodies, governments) and at European level (e.g. ESFRI);
- A better alignment of the development of the research infrastructure landscape with the advancement of excellent science and frontier research
- New services and access opportunities available to the research community, allowing to better tackle scientific and societal challenges







### Research Infrastructure concept development

### Scope:

This topic aims at supporting the development of new concepts for the next generation of research infrastructures of European interest, single/multi sited, distributed or virtual, that none or few countries might individually be able to afford. All fields of research can be considered.

Major upgrades of existing infrastructures may also be considered if the end result is significantly transformative and equivalent to a new infrastructure concept.

Proposals for RI concept development will tackle all key questions concerning the technical and conceptual feasibility of new or upgraded fully fledged user facilities







Research Infrastructure concept development

Key points for a successful proposal/ behind the lines/additional information:

Addressing gaps in the landscape, in complementarity and synergy with existing RIs

Under HE topic more focused on the development, in all the various dimensions, of new concepts for the next generation of RIs in Europe, than the design studies were under H2020. However research can be carried out if needed for developing the RI concept and if it can be covered under the foreseen budget for this topic: topic is indeed a RIA.

Addressing the concept of fully fledged new RIs, not just new technical components, the latter being addressed under INFRATECH.







Research Infrastructure concept development

## **Live Questions and Answers**







# HORIZON-INFRA-2022-TECH-01-01: Next generation of scientific instrumentation, tools and methods



### TYPE OF ACTION

 Research and Innovation Actions (RIA)



### **BUDGET**

- Total indicative budget for the topic: EUR 110 million
- Expected EU contribution per project: EUR 5 – 10 million



### **OTHER CONDITIONS**

- At least 3 world-class research infrastructures.
- The Funding authority expects to fund 11 projects



### **TIMING**

- Call opening:19th January 2022
- Deadline: 20th April 2022







R&D for the next generation of scientific instrumentation, tools and methods

### **Context:** proposals should

- Implement Research and development of new scientific instrumentation, tools and methods for research infrastructures taking into due account resource efficiency and environmental impacts; their technology validation and prototyping
- Support training of RI staff for the operation and use of these new solutions;
- Target the innovative potential for industrial exploitation of the solutions and/or for the benefits of the society.

### **Expected Outcomes:**

- Enhanced scientific competitiveness of European research infrastructures
- Foundations for the development of innovative companies;
- Increase of the technological level of industries through the co-development of advanced technologies for research infrastructures and creation of potential new markets;
- Integration of research infrastructures into local, regional and global innovation systems.







R&D for the next generation of scientific instrumentation, tools and methods

### Scope:

The aim of this topic is to deliver innovative scientific instrumentation, tools and methods, which advance the state-of-art of European RIs, and show transformative potential in RIs operation. The related developments, which underpin the provision of improved and advanced services, should lead research infrastructures to support new areas of research and/or a wider community of users, including industrial users.

Cutting-edge technologies will also enhance the potential of RIs to contribute addressing EU policy objectives and socio-economic challenges.







R&D for the next generation of scientific instrumentation, tools and methods

Key points for a successful proposal/ behind the lines/additional information:

Not a design study: led by existing RIs

Well focused on a (set of) technological development(s) needed by RIs, usually of the same type/class, for their upgrade. However proposals can also come from a set of different RIs, even interdisciplinary ones, if they need joint technological developments

Leading core of at least 3 different RIs, being each of them an ESFRI infrastructure, and/or a European Research Infrastructures Consortium (ERIC) or another research infrastructure (even national) of European interest

This eligibility condition could also be fulfilled by a distributed ESFRI/ERIC RI and 2 other national RIs operating under that same ESFRI/ERIC, if the national RIs also work as standalone RIs not just as nodes of the ESFRI/ERIC, thus when their activity as RIs is not limited to the activity under the ESFRI/ERIC

Similar to H2020 long-term JRAs of an IA with some more emphasis on innovation through co-creation with industry







R&D for the next generation of scientific instrumentation, tools and methods

## **Live Questions and Answers**







# Cooperation, synergies and networking between research infrastructures and technology infrastructures

### **Policy context:**

New ERA: CSA will support Commission in New ERA action 10 (on RIs & TIs) and in development of a European strategy on technology infrastructures. This is linked to the ERA policy agenda actions 8 (Strengthening RIs) and 12 (Accelerating twin transition).

### **Expected outcomes:**

- Addressing the needs of industrial and SME users of research and technology infrastructures (RIs & TIs).
- Strengthening collaboration between RIs & TIs and integration of industry/SME relevant services in prioritised areas.
- Alignment of RI & TI activities with other relevant actions.

### Scope:

Support to: (i) Mapping (including also relevant RI services) and prioritisation; (ii) Operations and guidelines; (iii) Governance; (iv) Outreach and communication







Cooperation, synergies and networking between research infrastructures and technology infrastructures

## Live Questions and Answers







Thank you for your attention.

For your questions: pcn-infra@recherche.gouv.fr