

European Commission's view on Research Infrastructures

LEAPS: League of European Accelerator-based Photon Sources for the present and future Grand Challenges

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**European
Commission**

RI Achievements

- A proven and exemplary experience of Member State cooperation and joint investment
- A uniquely rich research infrastructure landscape underpinning European leadership in the global context
 - 23 ERICs (facilitating establishment and operation of large European research infrastructures among Member States and Associated Countries); 41 ESFRI Landmarks (implemented research infrastructures with multi-country membership, providing services to researchers and industry); 22 ESFRI Projects (prioritised research infrastructures under preparation); EIROs (international organisations established in Europe underpinning research infrastructures facilities); well-organised and interconnected networks and communities
- Well-established **EU framework** relying on mutually supporting activities
 - Strategic roadmapping ensured by **ESFRI**
 - Setting up dedicated “operators” enabled by the **ERIC** Framework Regulation,
 - Dedicated funding under the **framework programme**

R&I support to research infrastructures: challenges and opportunities

- **Systemic links** among different European RI processes and establishing R&I priorities
 - e.g. ESFRI landscape analysis, existing roadmap processes (national, networks),
- **Optimising needs** for curiosity-driven and science-based solutions and services
 - identifying the right balance and strategic approach
- Structured and systemic involvement of **stakeholders**
 - to anticipate R&I needs
- Untap the potential of more **strategic investments** including through Horizon Europe

Objectives - towards a new paradigm for R&I needs

- **Align** research infrastructures policy framework and programmatic framework underpinning a long-term vision
 - Cross-cutting aspects (e.g. curiosity-driven, broader research and innovation goals, industry)
 - Thematic or cluster-specific aspects
 - Horizon Europe and beyond
- Stronger engagement of **stakeholders** to anticipate R&I needs of RIs
 - Research infrastructures, universities, research performing organisations, funders, industry, civil society(national funders, research infrastructures, ERA stakeholders)
 - ESFRI Stakeholder Forum
- Establish a **process to identify R&I needs** in the long-term
 - What: Infrastructures, services, technologies, instrumentation, innovation
 - Why: adequately sequence programme-based actions, optimising resources to needs
 - How: timeline, platform for dialogue, roadmaps, position papers

ERA Policy Agenda: Research Infrastructures

Deepening a truly functioning internal market for knowledge

Action 8 - Strengthen sustainability, accessibility and resilience of research infrastructures in the ERA

Set of foreseen activities

- **Strategic analysis** of the European Research Infrastructure **landscape**;
- Broader and more sustainable **access** for all countries to European research infrastructures and their services and revision of the European Charter of Access to Research Infrastructures;
- Update of the ESFRI **Roadmap** and implementation of the research infrastructures performance **monitoring** framework;
- Report on the **ERIC Framework**;
- Increased **cooperation** between research infrastructures, e-infrastructures and stakeholders, including through EOSC;

Towards an EU Innovation Agenda

Access to finance

- A series of enabling measures in the EU regulatory space to render the important deployment of public funds in the European innovation landscape more effective
- Close the scale-up gap, by increasing investments by EU-based providers of private and patient capital

European experimentation space for innovation

- Support the establishment of regulatory sandboxes, living labs and test beds
- Explore interlinkages between emerging technologies and regulatory practices
- Address perceived innovation challenges and regulatory hurdles

Better innovation policy making

- Strengthen the existing information base underpinning R&I (definitions, data and methodology)
- Provide targeted policy support to Member States
- Enhance coordination of innovation policy initiatives

Innovation ecosystems

- Strengthen local R&I ecosystems
- Bridge the innovation divide
- Connect innovation ecosystems to EU-level initiatives and interconnect them into horizontal and vertical value chains

Talents

- Promote entrepreneurial mindset & conditions
- Mainstream inclusion and gender balance
- Foster cooperation between research performing organisations and industry
- Facilitate the access to state-of-the art technology infrastructures

RIs in HE – WP Destinations

- **INFRADEV :** Developing, consolidating and optimising European RIs landscape, maintaining global leadership
- **INFRA SERV :** RI services to support health research, accelerate the green and digital transformation, and advance frontier knowledge
- **INFRA TECH :** Next generation of scientific instruments, tools and methods and advanced digital solutions
- **INFRA EOSC :** Enabling an operational, open and FAIR EOSC ecosystem
- **INFRA NET :** Network connectivity - enabler for collaboration without boundaries

For further information

ESFRI Roadmap

<https://roadmap2021.esfri.eu/media/1295/esfri-roadmap-2021.pdf>

Horizon Europe

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

EU Missions

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe_en