

## ERA Policy Agenda 2025-2027: Research & technology infrastructures

#### **ERA Structural Policies**

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**Structural policy 2** - Strengthening sustainability, accessibility and resilience of research infrastructures in the ERA

Set of foreseen activities

• [...] a long-term EU strategy for research infrastructures including a new, strategic approach for EU support to research infrastructures;

#### **ERA Actions**

Kick-off meeting: 10/10

**Action 16** – Accelerating R&I investments for Europe's industrial transformation and competitive sustainability

Set of foreseen activities

• [...] contribution to the European policy on Research and Technology Infrastructures including actions leading to demand-driven use of such infrastructures by industry, in particular SMEs, start-ups and scale-ups



# Towards a European strategy on Research and Technology Infrastructures

#### **Throughout 2024-2025**

Evidence collected in the context of the ERA Policy Agenda and ESFRI, as well as interaction with key infrastructure stakeholders.

#### **Specific Milestones:**

#### 26 June 2024

ERAC discusses the general approach towards a European strategy for research Infrastructures

#### 25 October 2024

ERAC stresses TI policy must be considered within broader ecosystem, in particular in relation to RIs

#### 13 June 2025

ERAC adopts opinion on Research and Technology Infrastructures

#### 17 September 2024

Commissioner Zaharieva's mission letter includes a "long term strategy to boost European Research Infrastructures"

#### 24 April 2025- 22 May 2025

Formal Call for Evidence for a European strategy on research and technology infrastructures

#### 15 September 2025

Adoption of the European strategy on Research and Technology Infrastructures



### Research and technology infrastructures

Research Infrastructures: equipment or set of instruments, collections, archives and scientific data infrastructures for frontier science; high-quality research data producers and curators; addressing global challenges; enabling deep-tech innovation

**Technology Infrastructures**: facilities, equipment, capabilities and resources to develop, test, upscale and validate new technologies. They can be test beds, pilot lines, cleanrooms, demonstration facilities to validate and scale new technologies; catalysts for Europe's startup ecosystems and industry

Together they form the backbone of Europe's R&I ecosystem



Why are research and technology infrastructures important?

- Backbone of Europe's R&I ecosystem
- 'Poles of attraction' for global talent to
   Choose Europe
- Indispensable producers and curators of high-quality research data
- Enabling deep-tech innovation and supporting Europe's technological sovereignty





### Why a European strategy now?

- Europe's research and technology infrastructures are strategic assets for its scientific, technological and industrial competitiveness, and they are 'poles of attraction' for global talent to Choose Europe
- As major powers disengage from R&I cooperation, these infrastructures are essential to tackle global challenges, while bolstering sovereignty in critical research data.
- Urgent need to improve the channeling of breakthrough research into innovation and economic impact; deep tech startups and scaleups rely on access to research and technology infrastructures for their R&D.
- These infrastructures have the potential to pool resources, share knowledge, and coordinate efforts across the wider European R&I ecosystem



### Challenges to address

- **Fragmented policies and funding** across the EU, especially for technology infrastructures
- Limited collaboration across sectors and borders, reinforcing disparities
- **Complex and costly access** procedures, particularly affecting SMEs and startups
- Skills gaps in technical, scientific and managerial staff
- Untapped potential of digitalisation and Al adoption
- Hampered reuse of data for research and innovation



### Vision and objectives

- Strengthen infrastructures through holistic capacity building and mobilising investments, as well as maximizing the potential of digitalisation.
- Bolster accessibility to continuum of complementary services, bestin-class facilities and data to drive excellence in science and innovation.
- Attract global talent and strengthen career pathways in line with Choose Europe
- Improve governance frameworks to support investment decisions and align priorities
- Increase resilience and autonomy including research data sovereignty while leveraging world class research infrastructures in international cooperation



#### **Blocs of Actions**

Capacities & Investment

Digitalisation & AI

Accessibility

Attracting & Growing Talent

Governance Framework International dimension & Resilience



### Capacities & Investment

- 1. Develop criteria to identify technology infrastructures of European interest in synergy with the ESFRI roadmap. (2025)
- 2. Map and assess capacities, identify priority areas for targeted investments and develop joint roadmaps. (2026)
- 3. Invest in **building and sustaining critical new capacities** to ensure global leadership. (2027)
- **4. Increase EU-level funding** opportunities, pooling public and private resources. (2026)



### Capacities & Investment

- 5. Provide a stable framework for maintaining and upgrading research infrastructures, supporting new technology needs. (2025)
- 6. Promote synergies among regional, national and EU funding instruments, adjusting rules where needed. (2025)
- 7. Revise ERIC Regulation to strengthen joint investments and international participation. (2025)
- 8. Facilitate transnational and multisite collaboration among technology infrastructures. (2025)



### Digitalisation & Al

- 9. Sustain and enhance **EOSC Federation** as Europe's trusted research and innovation data space. (2025)
- 10.Ensure compliance with **FAIR principles** and connections to EOSC and data spaces. (2025)
- **11.Support pooling and development of Al-ready data**, tools and services, contributing to the pilot of RAISE. (2025)



### Accessibility

- 12. Develop an integrated and sustainable scheme for access to stateof-the-art reseach infrastructures ('one-stop-shop') with AI assisted navigation. (2025)
- 13.Implement pilot schemes for startups and scaleups to access technology infrastructures. (2026)
- 14. Test joint research and technology infrastructure transnational access schemes in priority areas. (2027)



### Attracting & Growing Talent

- 15. Develop strategies for attracting global talent in line with Choose Europe. (2026)
- 16. Support training for staff in research and technology infrastructures: (2026)
  - Professionalising managerial and leadership staff training
  - Address evolving needs such as research security and data management
  - Improve entrepreneurial skills for infrastructures
  - Establish mechanisms for staff exchanges between infrastructures and innovation ecosystems.



#### Governance Framework

- 17. Propose an overarching **EU coordination framework** for the research and technology infrastructures **ecosystem**. (2026)
- 18.Implement a governance mechanism with Member States and stakeholders for technology infrastructures. (2026)
- 19.Encourage **ESFRI** to review its methodologies and propose new indicators linked to EU priorities and economic security. (2026)



#### International Dimension & Resilience

- 20. Strengthen the international role of infrastructures in **science diplomacy** and promote reciprocal access for EU researchers. (2025)
- 21. Strengthen Europe's sovereignty in critical research data and develop research security plans aligned with the Protect EU strategy. (2025)
- 22. Support integration of candidate and associated countries, with focus on Ukraine, into the ERA. (2025)



### Links to major initiatives

- Life Sciences Strategy: Develop and streamline European research infrastructures to facilitate multi-country clinical trials
- Upcoming European Research Area Act
- Upcoming European Innovation Act: Further promote access of innovative companies to research and technology infrastructures
- EU Startup and Scaleup Strategy: Develop a Charter of Access for industrial users to research and technology infrastructures including innovative startups and scaleups
- Upcoming AI in Science Strategy: Contribute to RAISE (Resource for AI
  in Science in Europe) by pooling data, tools and services

