Open Science Policy of European Research Area

- Evolving policy context for digitalisation of research

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Research and Innovation

Embracing Open Science as the *modus operandi*

Immediate and **unrestricted** open access to research outputs

Responsible research output management, in line with **FAIR** principles

Early and **open** sharing of research: Methods, data, preprints

Ensuring **verifiability** and **reproducibility** of research outputs

Open collaboration, within science and with broader public and private sector

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Why Open Science?

Improves research QUALITY: Transparent, accessible, reusable methods and outputs - facilitate verifiability and reproducibility of research results - leading to higher robustness and reliability

Accelerates research EFFICIENCY: Sharing and reuse of methods and outputs - enables researchers to build upon others' work more easily and quickly - leading to faster research progress

Enhances IMPACT of research: Research methods and outputs visible and accessible to public and private sectors - facilitate their inclusiveness, valorisation and practical application - leading to enhanced trust in research and increased uptake and use of research outputs

European Research Area (ERA) policy framework

After revamp in 2021

Pact for research and innovation in Europe

ERA Policy Agenda 2022-24

NEW ERA Policy Agenda 2025-27

ERA Governance

ERA Forum (+ subgroups)

Expert group for coordination and implementation of the ERA, together with EU countries, associated countries and stakeholders

ERAC
high-level strategic policy body, providing advice

Council

Decision making
"Owner" of Policy Agenda

ERA Monitoring

- **ERA Policy Platform**
- **Regular reporting:**
  - EU-level report
  - Country reports
  - Performance indicators

Inclusive collaborative approach, fully voluntary

ERA Policy Agenda 2025-2027

New structural policies and ERA actions

ERA structural policies
'long-term ERA policies, which are not confined to individual policy agendas but still have a three-year workplan'

1. Enabling open science
2. Research infrastructures
3. Inclusive and intersectional gender equality
4. Making research careers more attractive and ustainable
5. Research assessment
6. Upscaling knowledge valorisation capacities
7. Global Approach to R&I
8. SET Plan as a key component of ERA
9. Improving the articulation between R&I and higher education within ERA unleashing the full potential of European R&I ecosystems
10. Enhancing trust in science through citizen participation, engagement and science communication
11. Improve EU access to excellence

ERA actions
'which are new and to be completed within the three-year policy agenda'

1. Equity in open science
2. Advancing the European science for policy ecosystem
3. AI in science in the EU
4. Enhancing research security
5. Accelerating R&I investments for Europea's industrial transformation and competititve sustainability
6. Accelerating new approach methodologies to advance biomedical research and testing for medicinal products and medical devices
7. A harmonised and coordinated framework to support integrity and ethics in R&I
8. An new era in research management

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Broader policy framework for ERA

ERA Policy Agenda

- Non-binding instrument: Council Recommendation or Council conclusions
- Encouraging voluntary collaboration and commitments on certain ERA activities

ERA Act

- [Mission letter](#) of Commissioner Zaharieva
- Legal instrument to tackle enduring issues that cannot be solved through voluntary cooperation
- Propose measures to foster the free movement of research, knowledge and technology → 5th freedom of the single market
- Commission's proposal is expected in Q3 2026

ERA in Horizon Europe

- Grant-based funding framework
- WIDERA Work Programme specifically supports the implementation of ERA actions and structural policies

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Structural Policy 1: Enabling open science via sharing and reuse of data, including through EOSC

Objectives

- Open science practices and skills are rewarded and taught, becoming the 'new normal';
- Standards, tools and services allow researchers to find, access, reuse and combine results;
- A federated community-driven infrastructure enabling open sharing of scientific results is deployed and maintained;
- Europe is in the driving seat towards a web of FAIR research data with established links to other data spaces;
- Researchers are provided with better legal conditions and resources to access and reuse publicly funded research results and use publications and data for scientific purposes.

Expected outcomes

- Develop a high-value EOSC federation and increase its uptake;
- increase the amount and productivity of FAIR research data in Europe;
- identify areas for measures and initiatives to enable an EU copyright and data framework fit for research;
- assess the impact of open science policies and practices based on an open science policy intelligence platform.
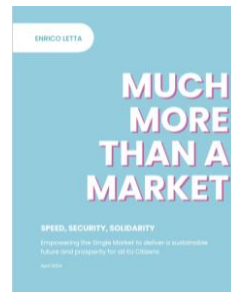
Description

This structural policy aims to achieve a step change across research communities and research infrastructures in Europe. It will seek to create a better EU legal framework for open sharing, seamless access and reliable re-use of research data and other digital research objects used and produced along the research life cycle. Example activities are:

- Promoting the uptake of the EOSC EU Node by the European research community;
- Support the enlargement of the EOSC Federation with several nodes and ensure its
- Scalability through common EOSC Federation standards and use policies, as of 2025;
- Conducting further stakeholder consultations and collecting more evidence on identified policy options to make the EU copyright and data legislative and regulatory framework fit for research;
- Expanding the EOSC monitoring framework with state-of-the-art methodologies to assess the impact of related policies and practices.

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Overarching objectives of framework "fit for research"

- EU Treaty article 179: Striving towards free circulation of scientific knowledge in the ERA

- Enrico Letta report on the Single Market: Fifth freedom - Knowledge diffusion driving societal advancement

- EU copyright and digital legislation is key enabler of knowledge circulation

Targets defined in ERA Policy Agenda 2022-2024

ERA Action 2

• "Propose a EU copyright and data legislative and regulatory framework fit for research"

Outcomes

1) "Identify barriers and challenges to access and reuse of publicly funded R&I results and of publications and data for scientific purposes, and identify potential impacts on research, through an analysis of relevant provisions under EU copyright and data legislation and related regulatory frameworks, and of relevant institutional and national initiatives.

2) Propose legislative and non-legislative measures to improve the current EU copyright and data legislative and regulatory frameworks"

European Research Area Policy Agenda

Overview of actions for the period 2022-2024

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Framework for major study

Objective: Providing comprehensive evidence on challenges, barriers and possible policy measures to improve access to and reuse of research results, publications and data for scientific purposes.

Methodology:

1) Literature review and a comparative legal study identifying areas for possible improvement in the EU copyright, data, and digital legislation.

2) Survey programme targeting researchers, research performing organisations (RPOs) and scientific publishers.

3) Interview programme to gather in-depth insights from legal experts.

Multi-criteria analysis: Evaluation of the social and economic impact of the identified measures.

More information: The study was published in May 2024 and is available here on the Commission's website

The study is prepared for the European Commission, but it only reflects the views of the authors.

Improving access to and reuse of research results, publications and data for scientific purposes

Study to evaluate the effects of the EU copyright framework on research and the effects of potential interventions and to identify and present relevant provisions for research in EU data and digital legislation, with a focus on rights and obligations

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Challenges and barriers identified in major study

- Consequences related to the transfer of rights by researchers and their organisations to publishers (need to obtain subscriptions to copyright-protected material, difficulty to share such material with research partners, difficulties in some cases to obtain rightsholders' permission to publish in open access, possible high costs to make research outputs available in open access).

- Copyright exceptions exist for the purposes of scientific research, but these exceptions are mostly non-mandatory for Members States or have limitations on scope. The study report that this causes fragmentation and legal uncertainty for researchers regarding what they can or cannot do with their own and the works of other researchers.

- Uncertainty among researchers and research performing organisations about who controls access to specific sets of research data, and how it can be used and shared.

- Researchers and research performing organisations find it difficult to navigate in the new data access rights of the EU's data and digital legislation, including the conditions under which large platforms are to share data with them for scientific research purposes.

- Aspects of certain provisions that may lead to uncertainties about their legal and practical implications (e.g. cross-border sharing of TDM datasets in broader research consortia) that pertain to the application of AI in research.

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Economic analysis of identified policy options

- Request from ERA Forum to provide additional evidence on economic impact of SPR and CRR measures

- Large-scale economic study will soon be launched

- Purpose to analyse impact on:

  - Open access and reuse of research output

  - The ecosystem of scientific publishing

  - Competitiveness of EU/EEA and of non-EU G7 countries

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Thank you!