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Subject: Council Recommendation on the European Research Area Policy Agenda
2025-2027

COUNCIL RECOMMENDATION ON THE EUROPEAN RESEARCH AREA POLICY

AGENDA 2025-2027

(Text with EEA relevance)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292, in conjunction with Article 182(5) thereof,

Having regard to the proposal from the European Commission,

Whereas:

- (1) Today, the EU faces multiple and unprecedented challenges. The global order is changing and the foundations of our societal well-being and security are being shaken by a turbulent geopolitical context, rising economic competition, an unprecedentedly rapid and transformative technological revolution, and climate change and its consequences. Research and innovation (R&I) are crucial to reduce Europe's vulnerabilities and to unlock its full potential across the European Research Area (ERA) as well as playing a critical role in enhancing the European Union's sustainable competitiveness, societal resilience, prosperity and security. The need to strengthen European leadership and strategic autonomy, while preserving an open economy, in key technological domains has become urgent.

- (2) Developing the ERA is at the heart of our efforts to respond to these challenges. The ambition to create the ERA as a single market for research, technology and innovation was conceived in 2000 and enshrined in the Lisbon Treaty as a specific EU objective under Article 179 TFEU. While significant progress has been made since 2022 under the first ERA Policy Agenda, more needs to be done to further develop a fully functioning ERA where countries come together to coordinate and improve their national R&I policies and ecosystems, and where knowledge, researchers, innovators and technology can move freely. Greater EU-wide coordination through the ERA can help stimulate investments and reforms, contribute to closing the innovation divide with the EU's global competitors and within the EU, as well as play an essential role in fostering sustainable competitiveness.
- (3) The ERA Policy Agenda is key to implement the ERA priorities, as set out in the Pact for R&I in Europe. It underpins the joint efforts of the European Commission, Member States, and, where appropriate, associated countries and stakeholders, to better coordinate R&I policies at all levels. It fosters their sense of ownership and increased commitment and contributes to working on the concept of a “fifth freedom” – the Single Market for R&I. The ERA Policy Agenda for the next three-year cycle (2025-2027) aims to:
- contribute to enhancing EU competitiveness and ensuring the EU's strategic autonomy, while preserving an open economy, by coordinating dedicated investments and reforms in R&I and, where appropriate, pooling resources at national and, where applicable, regional levels, and at EU level which are available in the current Multiannual Financial Framework 2021-2027;
 - strengthen the EU's R&I excellence and impact, its global scientific leadership and attractiveness to global talent by streamlining research career paths, facilitating researchers' mobility and knowledge sharing across Europe, and promoting access to cutting-edge infrastructures; and

- enhance the EU's sustainable development and societal impact by coordinating R&I efforts in industrial transformation, by developing synergies with other policies and by promoting a more circular and resilient economy.
- (4) The ERA has produced major achievements over the past 25 years in core policy areas including research infrastructures, open science, international cooperation, gender equality and inclusiveness in R&I, joint programming, research careers and researcher mobility. Contributing to these achievements, among others the Marie Skłodowska-Curie Actions (MSCA) have funded over 150,000 excellent researchers, notably through excellent doctoral programmes, postdoctoral fellowships and R&I staff exchanges, EURAXESS has supported over 2 million researchers in their career development and mobility across Europe and the Open Science Cloud (EOSC) provides seamless access to quality data and digital services while supporting collaboration across borders and disciplines.
- (5) In 2021, Member States and the Commission agreed on a new vision and policy framework for the ERA, set out in the Pact for R&I¹ and the Council conclusions on the future governance of the ERA². The long-term vision sets out the common values and principles that will guide R&I and identifies priorities for joint action. In the Pact, Member States reiterated their commitment to work together to achieve the ERA objectives to foster cooperation and coordination of their R&I policies, and reduce fragmentation across Europe in scientific research, technology and innovation. In the 2024 Council conclusions on strengthening the competitiveness of the EU, reinforcing the ERA and overcoming its fragmentation³, Member States also stressed that it is essential to continue building and reinforcing R&I ecosystems, and reiterated the need for better coordination and alignment between EU and national policy planning and implementation.

¹ Council Recommendation (EU) 2021/2122 of 26 November 2021 on a Pact for Research and Innovation in Europe, OJ L 431, 2.12.2021, p. 1–9.

² 14308/21.

³ 16179/24.

- (6) The first ERA Policy Agenda 2022-2024 created a solid foundation to achieve the ERA objectives. It translated the Pact for R&I priority areas into a set of concrete actions. 17 actions were jointly implemented by the Commission, Member States, Horizon Europe associated countries and EU-level stakeholders. As part of the new governance, the ERA Forum and its sub-groups play an important role for the implementation of the ERA and its actions. They provide an efficient framework for collaboration between the Commission, the Member States, associated countries and relevant stakeholders in an inclusive and participatory approach. This fosters innovative strategies and a shared ownership of policies to strengthen Europe's R&I ecosystem. As a high-level strategic policy joint advisory committee, the **European Research Area and Innovation Committee (ERAC)**⁴ provides early advice to the Council, the Commission and the Member States on strategic R&I policy issues, including on strategic policy orientation and future trends that require the refinement of Union and national, including regional, R&I policies, including on the current and the next Union R&I Framework Programme and other relevant R&I-driven Union initiatives.

⁴ Council Decision (EU) 2021/2241 of 13 December 2021 on the composition and the mandate of the **European Research Area and Innovation Committee (ERAC)**, OJ L 450, 16.12.2021, p. 143–147.

- (7) The Commission highlighted the achievements of the ERA Policy Agenda 2022-2024 and the new governance in the 2024 Communication ‘Implementation of the European Research Area’⁵. The achievements in addressing a range of R&I needs across Europe under the first ERA Policy Agenda 2022-2024 include, for instance, (1) creating the Coalition for Advancing Research Assessment (CoARA), (2) publishing the ‘Zero tolerance code of conduct on counteracting gender-based violence in the EU research and innovation system’, (3) successfully carrying out the very first Multilateral Dialogue on principles and values for international cooperation in R&I and adopting a ministerial statement, (4) creating the European framework to attract and retain research, innovation and entrepreneurial talent in Europe and launching the Research and Innovation Careers Observatory, (5) stimulating the green energy transformation by implementing the Strategic Research and Innovation Agenda of the ERA pilot on green hydrogen, (6) reinforcing and recognising the importance of research management capabilities, and (7) developing a new ERA monitoring and evaluation framework.

⁵ COM (2024) 490.

- (8) The second ERA Policy Agenda 2025-2027 builds on this approach and is designed to help reinforce the national R&I systems and tackle the complex global challenges Europe is facing. Using the Pact for R&I priority areas for joint action and the implementation outcomes of the first ERA Policy Agenda 2022-2024 as a basis, it sets out 11 long-term structural ERA policies and 8 concrete ERA actions, as defined in paragraph 1 of this recommendation. These are the result of an extensive co-creation process within the ERA Forum, that has focused on the content of the structural ERA policies and ERA actions. Complementarily, ERAC has contributed by providing early strategic advice on the need of an ERA policy narrative, on the structure of the ERA Policy Agenda 2025-2027, on securing the commitment of at least half of the Member States for the implementation of the Agenda, and on the need to better communicate its ambition, targets and priorities. The aim is to start its implementation in 2025. The ERA Policy Agenda 2025-2027 provides continuity on ongoing policies under the first agenda, tackles the ERA's core long-term objectives, and has the flexibility needed to respond to new strategic needs. It should increase the visibility and raise awareness on ERA, its objectives and its actions.

HEREBY RECOMMENDS THAT:

1. The Member States adopt the ERA Policy Agenda 2025-2027 which includes 11 structural ERA policies and 8 ERA actions. ERA structural policies are longer-term activities, embedded in national and European policy and R&I systems, that require efforts beyond the three-year cycle of the ERA Policy Agenda. They have a three-year work plan to ensure implementation of measures towards achieving the expected longer-term impact. ERA actions are concrete, policy-driven and goal-oriented to provide substantive added value for the EU, Member States, associated countries and stakeholders, and they are to be completed within the three-year ERA Policy Agenda. All proposals for ERA structural policies and ERA actions for the period 2025-2027 are outlined in more detail in the Annex.

2. The Member States implement the structural policies and actions set out in the ERA Policy Agenda 2025-2027 voluntarily and on the basis of the variable geometry principle, with the Commission and in coordination, where appropriate, with the associated countries and stakeholders, in line with the four priority areas for joint action identified in the Pact for R&I. These structural policies and actions focus on (i) bringing clear added value at national and European level, (ii) making an impact by producing specific deliverables and tangible outcomes within three years, (iii) building on constant co-creation between Member States, Commission, and, where appropriate, associated countries and stakeholders, (iv) being self-standing with one core activity, and (v) being implemented voluntarily and in variable geometry, allowing for flexibility in the extent to which countries can get involved. The ERA structural policies and ERA actions should secure participation of at least half of the Member States for their implementation.
3. The ERA structural policies and ERA actions, listed by priority areas as set out in the Pact for R&I in Europe, are as follows:

PRIORITY AREA 1: DEEPENING A TRULY FUNCTIONING INTERNAL MARKET FOR KNOWLEDGE

An efficient, effective and well functioning internal market for knowledge, built on free movement of researchers, knowledge and data, as well as brain circulation, are essential to build a more efficient and inclusive European R&I system. It ensures that efforts and investments are used efficiently and creates the critical mass needed to be effective. To strengthen the EU's competitiveness, it is essential to boost the EU's international position and scientific leadership by carrying out pioneering R&I along the whole R&I chain, including fundamental and applied science, and by boosting EU's attractiveness for global talent, retaining talents within the EU, and overcoming the fragmentation of the ERA.

The Commission and the Member States, in coordination, where appropriate, with the associated countries and stakeholder organisations, will continue to work on this priority through the following ERA structural policies:

- Enabling open science via sharing and re-use of data, including through the European Open Science Cloud (EOSC);
- Strengthening sustainability, accessibility and resilience of research infrastructures in the ERA;
- Strengthening gender equality and inclusiveness in the ERA, notably with an intersectional approach;
- Making research careers more attractive and sustainable, and support mobility;
- Reforming research assessment;
- Upscaling knowledge valorisation capacities and activities;
- Implementing the Global Approach to R&I.

The following ERA actions are proposed for the next three years:

- Applying equity in open science;
- Advancing the European Science for Policy (S4P) ecosystem;
- Facilitating and accelerating the responsible use of AI in science in the EU;
- Enhancing research security.

PRIORITY AREA 2: TAKING UP TOGETHER THE GREEN TRANSITION AND DIGITAL TRANSFORMATION AND OTHER CHALLENGES WITH IMPACT ON SOCIETY, AND INCREASING SOCIETY'S PARTICIPATION IN THE ERA

For the ERA to play its part in boosting competitiveness, improve the quality of life for people in the EU and tackle societal challenges such as the green and digital transitions, it should create synergies with other policies to develop holistic approaches. R&I investment should deliver valuable outcomes that are used and deployed by the market, and should enhance scientific progress and impact when addressing societal needs.

The following ERA structural policies have been identified as the core approaches to address this priority area:

- Making the strategic energy technology (SET) plan a key thematic component of the ERA;
- Improving the articulation between R&I and higher education within the ERA, and unleashing the full potential of European R&I ecosystems;
- Enhancing trust in science through citizen participation, engagement and science communication.

The following ERA actions are proposed for the next three years:

- Accelerating R&I investments for Europe's industrial transformation and competitive sustainability;
- Accelerating new approach methodologies (NAMs) to advance biomedical research and testing of medicinal products and medical devices;
- Developing a coherent and coordinated framework for a European approach to integrity and ethics in R&I in the face of emerging challenges.

PRIORITY AREA 3: ENHANCING ACCESS TO RESEARCH AND INNOVATION EXCELLENCE
ACROSS THE UNION AND ENHANCING INTERCONNECTIONS BETWEEN INNOVATION
ECOSYSTEMS ACROSS THE UNION

Research excellence spans all of Europe, across ages, disciplines and sectors. Its full potential has yet to be tapped due to significant disparities in opportunities for researchers and innovators in the ERA.

The following ERA structural policy has been identified as a core approach to address this priority area:

- Improve EU access to excellence.

The following ERA action is proposed for the next three years:

- Empowering R&I: A new era in research management.

PRIORITY AREA 4: ADVANCING CONCERTED RESEARCH AND INNOVATION INVESTMENTS AND
REFORMS

As the EU focuses on key areas for future competitiveness, sustainability and well-being, it would be counterproductive to duplicate, substitute or fragment R&I investment and initiatives. Transnational cooperation boosts efficiency by pooling resources to achieve critical mass and increase the knowledge spillover effects to boost R&I. Ensuring that these investments are efficient and impactful will also require in some instances designing, implementing and monitoring structural reforms in national research and development (R&D) systems. The aim of these reforms is to increase scientific excellence, embed a culture of valorising research results, enhance science-business links and better target policies to support business innovation.

There is no specific ERA structural policy or action proposed under this objective. The European Commission and the Member States remain, however, committed to work closely together using a set of existing instruments. More precisely, implementing the R&I measures under the EU's Recovery and Resilience Facility is expected to boost national R&I capacity, especially in countries that continue to lag behind.

Through the European Semester of economic policy coordination, the European Commission carries out an in-depth analysis of the national R&I systems and issues country-specific recommendations on how to boost each country's innovation potential. The Commission then monitors policy responses by the Member States to assess progress in bridging the R&I gaps identified. To support their efforts to improve their R&I systems through reforms, Member States and, where appropriate, associated countries can receive expert support under the Horizon Policy Support Facility, an instrument that has proved highly beneficial in improving policymaking and identifying reform pathways, and the bilateral Enhanced Policy Dialogue with Member States and, where appropriate, associated countries on commonly agreed topics of R&I.

4. The established collaborative framework within ERAC, giving clear R&I strategic advice and orientations, and within the ERA Forum, responsible for enhancing coordination towards the effective implementation of the ERA Policy Agenda, should be maintained as a central mechanism of ERA governance. Implementation of the next ERA Policy Agenda 2025-2027 should remain an inclusive and transparent endeavour across all levels of governance to foster co-creation and ownership of the agenda. The ERA Forum should continue to identify emerging challenges, outside the activities of the ERA Policy Agenda 2025-2027, that require cross-country collaboration and are covered by the Pact for R&I, such as a follow-up on the freedom of scientific research and strengthening scientific leadership of Europe.

5. ERA structural policies and actions should be implemented by the Member States voluntarily and on the basis of the variable geometry principle, in line with paragraph 2 of this recommendation. Member States are recommended to involve their regions and national stakeholders to support the implementation of the ERA Policy Agenda 2025-2027. Coordinated implementation should ensure the active and broad involvement of EU-level stakeholders across the entire spectrum, from research to innovation and market deployment. The categories of stakeholders in the ERA Forum should be reviewed to explore the optimal representation of the different interests, in particular the private sector and the civil society.
6. Member States and the European Commission should remain supportive of the full involvement of countries associated to the Horizon Europe programme and EU-level umbrella stakeholder organisations in implementing the ERA Policy Agenda 2025-2027.
7. R&I investment in the EU falls short of aspirations and remains below the level of investment in many of the EU's global competitors. Currently, the EU spends some 2.3% of its GDP on R&D, far below the 3% R&D target set in 2002 in the Barcelona Declaration. To meet the multifaceted challenge of reaching the 3% GDP target, renewed political commitment is needed to boost public and private R&D investment within the framework of available means. Further reforms are also needed to improve national R&I ecosystems and maximise the impact of an increase in investment in R&I. In addition to the Pact for R&I priority area 'Advancing concerted R&I investments and reforms', Member States and the Commission should continue their efforts in this direction.

8. The European Commission should continue to implement the ERA monitoring mechanism outlined in the Pact for R&I in Europe and detailed in the ‘Framework for the future ERA monitoring mechanism’ presented by the Commission to the Council on 10 June 2022⁶. The ERA monitoring mechanism will assess progress towards the ERA priorities, as defined in the Pact for R&I. The ERA monitoring mechanism should consist of:

- (1) an ERA Scoreboard to monitor progress towards the ERA objectives both at EU and national levels, updated regularly;
- (2) a triennial ERA monitoring report from the Commission to the Council to review implementation of the ERA policy agenda,
- (3) triennial ERA country reports to review countries’ progress in implementing the ERA Policy Agenda ensuring no additional burden for Member States.

Member States should continue to exchange information on the ERA, in particular by providing data and information via the ERA Policy Platform. Member States should also promote implementation of the ERA structural policies and actions and results relevant in their countries, drawing on the support available.

Done at Brussels,

For the Council

The President

⁶ 9578/22.

ANNEX

Detailed explanation of ERA structural policies and ERA actions

The proposals for ERA structural policies and ERA actions are outlined in more detail in the following order. To the extent *that such policies and actions lead to funding requirements from the EU budget, such funding is limited to available means under the current Multiannual Financial Framework 2021-2027.*

ERA structural policies

- Enabling open science via sharing and re-use of data, including through the European Open Science Cloud (EOSC)
- Strengthening sustainability, accessibility and resilience of research infrastructures in the ERA
- Strengthening gender equality and inclusiveness in the ERA, notably with an intersectional approach
- Making research careers more attractive and sustainable, and support mobility
- Reforming research assessment
- Upscaling knowledge valorisation capacities and activities
- Implementing the Global Approach to R&I
- Making the strategic energy technology (SET) plan a key thematic component of the ERA
- Improving the articulation between R&I and higher education within the ERA and unleashing the full potential of European R&I ecosystems

- Enhancing trust in science through citizen participation, engagement and science communication
- Improve EU access to excellence

ERA actions

- Applying equity in open science
- Advancing the European Science for Policy (S4P) ecosystem
- Facilitating and accelerating the responsible use of AI in science in the EU
- Enhancing research security
- Accelerating R&I investments for Europe's industrial transformation and competitive sustainability
- Accelerating new approach methodologies (NAMs) to advance biomedical research and testing of medicinal products and medical devices
- Developing a coherent and coordinated framework for a European approach to integrity and ethics in R&I in the face of emerging challenges.
- Empowering R&I: A new era in research management

ERA structural policies

1. ENABLING OPEN SCIENCE VIA SHARING AND RE-USE OF DATA, INCLUDING THROUGH THE EUROPEAN OPEN SCIENCE CLOUD (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 FAIR⁷ 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.

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.

⁷ Findable, Accessible, Interoperable, and Reusable

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.

2. STRENGTHENING SUSTAINABILITY, ACCESSIBILITY AND RESILIENCE OF RESEARCH INFRASTRUCTURES IN THE ERA

Objectives

- Strengthened research infrastructure (RI) services, better adapted to user needs, in the context of contemporary and emerging scientific, technological and innovation challenges and EU policy priorities;
- strengthened European RI ecosystem including through consolidation of existing RI and identification of new RI projects filling gaps;
- create more integrated and sustainable schemes to strengthen access to RI and their services, notably for researchers and innovators from across the ERA;
- enhanced impact on research and society and strengthened engagement with industry;
- create better links and, where appropriate, interoperability between different kinds of infrastructures (RIs, technology infrastructures, e-infrastructures, data infrastructures);
- encourage greater involvement of stakeholders in RI activities.

Description

This structural policy ensures the openness, accessibility and security of world-class sustainable RI for researchers and innovators across the ERA, develops further and consolidate RI, their integrative function in the R&I ecosystem and their potential to tackle EU priorities. A long-term strategy will streamline the RI landscape and identify and prioritise the RI services and technologies needed to boost the EU's S&T competitiveness and strategic autonomy and its capacity to solve societal challenges.

- Developing of a long-term strategy on RIs ;
- carrying out clear monitoring of the performance of the different RIs;
- conducting a clear analysis of the financial support to the RIs;
- carrying out a strategic landscape analysis for RIs in Europe.

Expected outcomes

- **From long-term and recurrent activities:** (1) A long-term EU strategy for research infrastructures including a new, strategic approach for EU support to research infrastructures; (2) an ESFRI roadmap 2026 and key elements for the 2028 landscape analysis, (3) monitoring of ESFRI landmarks; (4) stakeholder engagement (event/activity reports).
- **From short-term activities, reports with recommendations on:** (1) financing, including synergies with national and regional funding, EU and other sources, (2) international cooperation, taking research security considerations into account; (3) an impact assessment of ESFRI; (4) resilience and greening of European research infrastructures; (5) further strengthening of ERICs as part of the RI ecosystem.

3. STRENGTHENING GENDER EQUALITY AND INCLUSIVENESS IN THE ERA, NOTABLY WITH AN INTERSECTIONAL APPROACH

Objectives

- Deepen policy dialogue and the coordination of policies and actions among Member States, and, where appropriate, associated countries and stakeholders, on gender equality and inclusiveness, notably with an intersectional approach, in R&I, including institutional/structural changes through inclusive gender equality plans (GEP), integrating the gender dimension in R&I content, ending gender-based violence, and developing gender budgeting;
- advance gender equality and inclusiveness, notably with an intersectional approach, in R&I through the uptake and refining of existing recommendations and tools;
- improve data collection, monitoring and evaluation on gender equality and inclusiveness, notably with an intersectional approach, in R&I to identify successful practices and challenges and any gaps to be addressed by future policies and measures;
- reduce geographical differences in addressing gender equality and inclusiveness, notably with an intersectional approach, among Member States and, where appropriate, associated countries;
- Achieve a higher rate of participation of women and under-represented researchers, improve the quality of working (and studying) conditions ensuring gender equality, gender balance, equal opportunities and inclusiveness for researchers from all backgrounds including under-represented and marginalised groups fairer recruitment, promotion and budget allocation, availability of work-life balance measures, safer gender-violence-free environments, better gender balance in decision-making positions, and unbiased and higher quality R&I outputs.

Description

This structural policy will improve the quality and societal relevance of R&I, help attracting and retaining more diverse talent into Europe's R&I system, and help to ensure that everyone can maximise their potential, demonstrating that the EU remains committed leading at international level in ensuring gender equality and inclusiveness, notably with an intersectional approach, in R&I.

Expected outcomes

- Devise a monitoring and evaluation approach for effective implementation of inclusive GEPs;
- develop guidelines for implementing an intersectional approach in R&I policy, including in the collection, selection and analysis of indicators;
- design a monitoring and evaluation approach increasing the uptake of the integration of the gender dimension in R&I content;
- enhanced gender mainstreaming mechanism for synergies with other ERA actions at the EU and national level;
- implement the Code of Conduct on gender-based violence in R&I developed by Action 5 of the ERA Policy Agenda 2022-2024;
- principles developed for gender budgeting and expenditures tracking in R&I.

4. MAKING RESEARCH CAREERS MORE ATTRACTIVE AND SUSTAINABLE AND SUPPORT MOBILITY

Objectives

- Foster recognition of the research professions, and the interoperability and comparability of research careers across sectors and Member States, in line with the Council Recommendation on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe;
- improve recruitment and working conditions, including aspects related to open, transparent and merit-based recruitment (OTM-R);
- strengthen researchers' skills to foster inter-sectoral and inter-disciplinary careers;
- support better career development and progression and shape new investment pathways to reduce precarity and broaden the spectrum of career opportunities;
- work towards a more balanced circulation of talents, including intersectoral flows;
- ensure effective and reliable data from the Research and Innovation Careers Observatory (ReICO);
- create synergies with other related ERA policy actions and related current and future EU initiatives, particularly those supporting the mobility of researchers within Europe, such as the Commission's skills and talent mobility package.

Description

The structural policy aims to make research careers in Europe more attractive and sustainable, by supporting joint implementation by the EU, Member States, and, where appropriate, associated countries, and stakeholders of all actions stemming from action 4 of the ERA Policy Agenda 2022-2024, and by monitoring the outcomes of implementing these initiatives and reforms on the ground. The action will include exchanges of good practices, the development of guidelines and recommendations, and the contribution to the consolidation of the ReICO.

Expected outcomes

- Co-created guidelines for the implementation of the Council Recommendation on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe, for better quality jobs and a better functioning research labour market;
- a community of practice to share experiences and strengthen research careers at European, national, regional, and organizational level;
- a consolidated ReICO with the involvement of relevant actors outside the R&I community, and jointly eliminating gaps;
- recommendations for better career development and career progression, including European tenure-track like models and related assessment and funding mechanisms;
- co-created investment pathways, joining and coordinating forces and co-designing initiatives to reduce precarity and ease career paths to non-academic research careers.

5. REFORMING RESEARCH ASSESSMENT

Objectives

- Make institutional changes to improve research assessment;
- measure the level of progress made with reforms to research assessment;
- increase knowledge and raise awareness of reforms;
- identify gaps in reforms, any limiting or blocking factors, and further measures needed;
- Ultimately, help raise quality, performance and impact of research and therefore to make research careers more attractive.

Description

The way research projects, researchers, research units and research institutions are currently assessed is still very much based on a limited set of research outputs and activities, mainly publications, and dominated by some inappropriate uses of several indicators and methods gauging the quality, performance and impact of research.

- Identifying and widely-sharing good practices, toolboxes and recommendations, for research assessment;
- organising international dialogues, dissemination and mutual learning events by the Commission, Coalition for Advancing Research Assessment (CoARA) and Member States;
- implementing research assessment reforms in research institutions;
- carrying out a study to identify the changes made to national frameworks, changes implemented by research institutions, and changes expected from the action plans of the signatories of the Agreement on Reforming Research Assessment;
- continued national dialogues between national authorities and research organisations.

Expected outcomes

- Knowledge, awareness, and engagement to research assessment practices and reforms raised by CoARA, research organisations (including research performing, research funding and research assessment organisations), national authorities and EU institutions;
- support, mapping and an analysis of the changes made to in national frameworks and in individual research institutions;
- the identification of any remaining gaps in reforms and of any measures still needed at all levels (institutional, national, and European).

6. UPSCALING KNOWLEDGE VALORISATION CAPACITIES AND ACTIVITIES

Objectives

- Strengthen knowledge valorisation and deployment, skills and professional support;
- Improve the access and use of intellectual assets and data derived from research and innovation;
- Consolidate the culture of knowledge valorisation.

Description

The EU faces challenges in translating research and innovation results into societal use and economic value and in retaining value within the EU, which is vital for the functioning of the internal market. This structural policy will seek to close in the European knowledge landscape by

- Building the capacity of intermediaries to strengthen links between academia, industry and public authorities;
- improving access to and safeguarding of intellectual assets notably through responsible licensing and shared data governance approach;
- strengthening the valorisation capacities and skills of R&I actors including research and funding organisations;
- increasing the uptake of results from multidisciplinary research including social sciences, arts and humanities;
- improving the measurement framework for capturing wider societal value created.

Expected outcomes

- European scheme on responsible licensing principles and shared data-governance approach to facilitate greater cross-sectoral collaboration and benefit for both businesses and society, taking research security considerations into account;
- ‘learning labs for value creation’ to develop skills on knowledge valorisation and entrepreneurship through targeted trainings, peer-learning and contact with role models;
- policy guidance on increasing and accelerating the uptake of R&I results of a multidisciplinary nature in the European Research Area, based on a Commission background study and on work to create a dedicated community;
- a comprehensive measurement framework capturing the broad spectrum of knowledge valorisation activities to monitor the performance of the ERA in this field.

7. IMPLEMENTING THE GLOBAL APPROACH TO R&I

Objectives

- To guarantee that the ERA Policy Agenda 2025-2027 includes the international dimension, as a cross-cutting, long-term and fundamental characteristic of the R&I ecosystem.
- enhancing the science-policy-diplomacy interface;
- tackling global challenges while protecting the strategic interests, values and principles of the Union, its Member States and, where appropriate, associated countries;
- promoting a level-playing field at EU level in international cooperation in R&I;
- deepen knowledge on bilateral cooperation led by MS and, where appropriate, associated countries with non-EU countries.

Description

Against the background of fundamental changes to geopolitical, scientific and technological environment, the EU should become more strategic in using the power of international cooperation in research and innovation, also in promoting common EU principles and values.

This structural policy will be pursued by running activities and discussions of the ERA Forum Standing Subgroup on the Global Approach to R&I:

- recurrent mapping of bi- and multilateral scientific cooperation of Member States, and, where appropriate, associated countries and stakeholders;
- fostering synergies with other EU programmes and initiatives such as Global Gateway;
- coordinating and aligning with the other ERA actions such as the proposed one on research security;
- providing input and guidance on how to strengthen the international dimension of the next framework programme.

Expected outcomes

- European framework for science diplomacy (2025);
- roadmap for multilateral dialogue on values and principles for international cooperation in research and innovation (2025);
- new pilot initiatives of the Team Europe approach, including Latin America and Caribbean in 2025 and India in 2026; and expanding current Team Europe approaches to Africa and China;
- an opinion on how to organise international R&I cooperation activities with third countries under the next framework programme.

8. MAKING THE STRATEGIC ENERGY TECHNOLOGY (SET) PLAN A KEY THEMATIC COMPONENT OF THE ERA

Objectives

- Deeper connections between the R&I community and industry to support to deployment of clean energy innovations, without adding administrative burden;
- form joint approaches to cross-cutting issues, including skills development, research and innovation tailored to societal needs, digitalisation, and market uptake and market accessibility;
- review the current technology scope to propose new relevant clean energy technologies, if needed;
- improve the cooperation between the European Technology and Innovation Platforms and the European industrial alliances.

Description

This structural policy will contribute to overall ERA targets by deepening coordination between clean energy R&I programmes and initiatives at EU, national and institutional level and by increasing the cooperation between actors across Europe, in view of contributing to the overall climate and environment targets. Furthermore, making the revamped SET plan a structural policy of the new ERA Policy Agenda will be a driver for launching and unfolding new key initiatives and better connecting clean energy R&I goal to the broader R&I perspective. For instance, the EU Solar Energy Strategy set out among its actions the preparation of a joint strategic solar energy R&I agenda with the Member States. Additional foreseen activities include:

- setting up of five cross-cutting task forces to issue tools and drafting recommendations on cross cutting issues across the SET plan;
- creating a workstream on hydrogen to implement the 'ERA pilot on Green Hydrogen';

- alignment of R&I priorities between Member States and EU, while fostering cross-border European research centres, universities and industries joint actions.

Expected outcomes

- Alignment of all domain/technology-specific Strategic Research & Innovation Agendas and implementation plans to the new EU priorities and development of Implementation Plans;
- policy recommendations to better include the following areas in the energy R&I framework of SET plan: circularity and materials substitution; R&I for societal needs; digitalisation; skills; market uptake;
- improved monitoring of progress, through the SET plan information system.

9. IMPROVING THE ARTICULATION BETWEEN R&I AND HIGHER EDUCATION WITHIN THE ERA AND UNLEASHING THE FULL POTENTIAL OF EUROPEAN R&I ECOSYSTEMS

Objectives

- Achieve better coherence between strategies, policies, programmes and funding for R&I and higher education. Closer cooperation and dialogue between those two areas at EU, national, regional and institutional levels;
- achieve stronger and more connected regional R&I systems and reduction of European innovation divide;
- improve knowledge, indicators and tools for implementing comprehensive cross-sectoral strategies, aligning innovation with broader societal goals;
- higher level of awareness on and improved complementarity between research and education;

- reduce fragmentation and regional divide within Europe's R&I landscape;
- strengthen cooperation between academic, public and private entities.

Description

This structural policy aims to create a structured and focused exchange within the community to promote a more systematic approach, including in terms of governance and support, and involving both research and higher education representatives. For establishing robust partnerships between education and research & innovation actors, working together to set up new mechanisms and incentives to reduce fragmentation and bridge the regional divide.

Expected outcomes

- Development of recommendations drawn up to design and implement strategies at institutional, regional, national and European level;
- The identification of current legal obstacles at regional, national, and European levels; of principles and main components necessary for the development of the legal framework for establishing the fifth freedom; recommendations for consolidating European HEIs at the forefront of global R&I;
- The identification of policies, mechanisms and incentives to foster more robust cooperation between HEIs and the other R&I actors;
- Ambitions roadmap adopted for ERA/EEA (higher education-related) strategic alignment.

10. ENHANCING TRUST IN SCIENCE THROUGH CITIZEN PARTICIPATION, ENGAGEMENT AND SCIENCE COMMUNICATION

Objective

- Boost public engagement in R&I, citizen science and science communication through commonly developed guidelines;
- develop more effective mechanisms for substantial, inclusive public engagement in R&I;
- strengthen science-society links at national/ regional/ local level;
- increase scientific literacy and science capital through closer links between the scientific community and young people and with people not habitually involved in science.

Description

This structural policy presents a multifaceted approach with a view to enhancing trust in science and by extension democratic governance - building on the achievements of Action 14 'Bringing Science Closer to Citizens' of the ERA Policy Agenda 2022-2024.

Expected outcomes

- Inclusive engagement guiding principles: develop common approaches for public engagement in R&I and science communication;
- activities connecting researchers and young people: innovative ways of effectively and inclusively engaging and involving young people with science, by inviting practitioners to provide best national practices and build on the work to develop handbooks and guidelines under EU funded projects;
- connect science and citizens, organise activities connecting and strengthening local R&I communities with different stakeholders and citizens around the topic of science and its role in society;

- mutual learning exercise on trust in science, consolidating and sharing knowledge on how to build, measure and enhance trust through public engagement;
- a mechanism and funding scheme designed to scale up of best practices of national citizen participation and engagement initiatives to EU level.

11. IMPROVE EU ACCESS TO EXCELLENCE

Objectives

- Improve access to excellence throughout the EU;
- contribute to a coherent and synergetic design and implementation of EU investment in R&I from cohesion policy programmes and the 10th framework programme for R&I;
- forge closer links between regional authorities to initiatives under the R&I programmes, and to provide incentives to launch national initiatives that complement those at EU level.

Description

There are persistent bottlenecks to improving access to excellence across the ERA and to building stronger synergies between cohesion policy, national and regional programmes, and Horizon Europe. The structural policy tackles these bottlenecks by strengthening cooperation between the bodies involved in managing the European Regional Development Fund and Horizon Europe at national and EU-level.

- Continuing the work of ‘RIMA’ subgroup under the ERA Forum, to bring together national R&I authorities and managing authorities of cohesion policy programmes to facilitate the sharing of information on outcomes and practices from EU initiatives.

Expected outcomes

- Recommendations drafted on improving access to excellence and securing coherence and synergies between programmes;
- progress report on implementing of the recommendations from the RIMA phase 1 survey under the current legal framework (e.g., communication, capacity building, long-term planning, data accessibility and data-driven approach, implementation rules, and coordination models between the two communities);
- advice on building stronger synergies in the future between Cohesion Policy, in particular on smart specialisation while using synergies with actions funded under the ‘Widening’ part of the programme, and the framework programme;
- exchanges of best practices to improve access to excellence, in particular national policies, actions and instruments that facilitate access to scientific and innovation networks, and policy suggestions, especially for collaboration across Member States.

ERA actions

12. APPLYING EQUITY IN OPEN SCIENCE

Objectives

- Identify barriers and challenges regarding equity in practicing open science and propose ways forward for policy responses;
- expansion of not-for-profit, open access scholarly publishing models with broad uptake and recognition across disciplines, including in research assessment;

- build capacities in terms of open science skills and equitable access to open science infrastructures for the ERA research community;
- develop EU policy approaches to identify pathways for greater equity in Open Science practices and infrastructures.

Description

Implementing open science requires strong policy support and a significant investment in resources, notably in infrastructures (and access to them), coordination, technological readiness, open science and digital skills, and creating effective incentives and recognition and award systems for researchers. These differ widely among European countries and organisations - but also globally - and create an overall need for more equitable approaches in the ERA.

- Examination of national experiences and policy frameworks in relation to access, coverage and design of infrastructures for open science, scholarly publishing policies and researchers' open science capacities;
- launching a mutual learning exercise on equity in open science in 2025/2026;
- promote skills dissemination and training to tackle inequities in practicing open science;
- running workshops for public authorities to identify recommendations for institutions and policy makers – and to issue a report in 2027.

Expected outcomes

- Stocktaking of equity challenges in open science across ERA countries (reflecting existing diversity in terms of frameworks, capacities, funding etc.);
- policy and funding support to operate high-quality not-for-profit open access scholarly publishing services across the ERA;

- development and dissemination of shared tools, training methods and services to boost capacity in terms of open science skills; in collaboration with stakeholders;
- recommendations for developing an EU policy approach to equity in open science in its different practices.

13. ADVANCING THE EUROPEAN SCIENCE FOR POLICY (S4P) ECOSYSTEM

Objectives

This action has three interlocking objectives:

- further developing ‘Science for Policy’ and improving the cross-cutting integration of knowledge in public policies;
- furthering and strengthening the European S4P ecosystem across all approaches, sectors, and levels of governance;
- promoting collaboration among networks of relevant actors and fostering the identification and exchange of best practices and mutual learning.

Description

In order to support science-policy interfaces across Europe and to tackle the fragmentation in S4P ecosystems, two main milestones will be achieved:

- a network of national science for policy coordinators, bringing together officials working on S4P in national R&I administrations and policy institutions across Europe with the aim to coordinate efforts to mainstream S4P approaches in their administrations at all levels of governance and foster mutual learning across countries;
- a S4P community of practice with the objective to foster strong pan-European and international connections and greater interactions, mutual learning, and collaboration of S4P networks and actors.

Expected outcomes

- Regular dialogue between the network, the community of practice, and other interested stakeholders to explore how to create the necessary conditions to enable effective engagement between research and policy;
- peer learning is fostered, strengthening skills and competences and enabling collaboration on S4P across different sectors and levels of governance;
- an observatory of the European S4P landscape and its practices is created, compiling success factors and common challenges of operating at the science-policy interface.

14. FACILITATING AND ACCELERATING THE RESPONSIBLE USE OF AI IN SCIENCE IN THE EU

Objectives

To design, support, align and coordinate policy measures to accelerate and facilitate the responsible uptake of AI in European science and research, resulting in:

- aligned policies on AI in Science, including common identification of priority areas;
- greater expertise and resource sharing across countries;
- a foundation for collaboration and future involvement, for sharing best practices, and for attracting more like-minded partners;
- closer collaboration and engagement with stakeholders, setting up networks, and building a community.

Description

The action will focus on three key topics stemming from the political priorities of the new Commission:

- strategy for AI in science;
- The set up of a European AI Research Council;
- An agreement on a funding focus for AI in science.

These topics will be discussed and developed in the form of regular meetings, capacity building workshops presenting evidence and policy developments, as well as hands-on workshops to work together on policy alignment, guidelines, and funding agendas.

Expected outcomes

- Update, promote and disseminate the ERA living guidelines on the use of generative AI in research (at least yearly in 2025, 2026, 2027);
- a joint roadmap on AI in science (2025);
- an agreed strategic funding agenda with Member States and possibly also with European funders (2026);
- joint projects if considered feasible/useful by participants (2026-2027);
- an agreed plan for ongoing collaboration and policy development (2027).

15. ENHANCING RESEARCH SECURITY

Objective

- Improve research security in the EU to maintain a strong and open academic environment, taking the Council Recommendation on research security as a basis;
- provide a cooperation space for policy makers to share experiences and implement and develop a national approach to mitigate risks, while respecting academic freedom and institutional autonomy;
- empower the European R&I sector to optimise the opportunities and mitigate the risks of international collaboration and to keep international cooperation open and safe.

Description

Given how knowledge flows across the ERA and the strong international connections in the R&I sector, it is not possible to tackle research security through national efforts alone. Coordinated national and EU-efforts will provide a framework to share best practices and ensuring consistency. In the first year, Member States will be able to assess their state of play and plan next steps to help each other achieve a base level of research security.

Expected outcomes

The action will implement the framework of the Council Recommendation on research security⁸ in the following way:

- work towards a European cooperation space on research security by structural cooperation among Member State experts, research funders and EU-level research and innovation stakeholder organisations as well as explore and assess options for more structural support in this respect, such as through a European centre of expertise on research security, taking into account existing structures and linking it to the one-stop-shop platform;

⁸ Council Recommendation of 23 May 2024 on enhancing research security, *OJ C*, C/2024/3510, 30.5.2024.

- convene policymakers, experts and practitioners around the theme of research security in a biennial European Flagship Conference on Research Security (2025, 2027);
- map, monitor and analyse national and EU level research security measures and initiatives, including through a biennial Research Security Monitor (2025, 2027);
- support information sharing, peer learning and capacity building, notably for the development of national approaches to research security;
- develop guidance and tools for safeguards in national and EU level research funding programmes as well as for risk management and due diligence processes in research performing organisations (i.e: One-stop-shop platform on tackling foreign interference in R&I);
- closer cooperation with international partners on research security approaches and measures.

Given the sensitive nature of the topic, which often involves sensitive or classified information, participation in will generally be restricted to Member States experts.

16. ACCELERATING R&I INVESTMENTS FOR EUROPE’S INDUSTRIAL TRANSFORMATION AND COMPETITIVE SUSTAINABILITY

Objective

- Achieve a greater understanding of industrial needs for R&I results and investments, enabling policy makers and funding agencies to design and implement targeted tools to mobilise R&I investments;
- increase synergies in funding of R&I, notably by industry, for technology transfer, demonstrators, scale-up, validation and technology infrastructures;
- facilitate the path to deployment and use of advanced technologies in industry with a focus on sustainability and societal benefit.

Description

Accelerating R&I investments requires a systematic approach to informing and shaping the R&I agenda by industrial needs and a comprehensive, operational framework for effective transfer of R&I results into industrial applications.

- Integrating current tools at European, national and regional levels, showcasing good practices in their application, facilitating exchange of experience and providing opportunities for Member States and regions to share good practices, and to bring new knowledge;
- Implement the demand-driven European approach to technology infrastructures, including pilot actions and possible funding schemes, as part of the current work on Research and Technology Infrastructures;
- developing, testing and implementing the policy toolbox approach for accelerating decarbonisation of energy-intensive industries and advancing circular economy, ensuring the contribution from the SET plan community.

Expected outcomes

- Mapping of the policy tools supporting industrial R&I;
- 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;
- building and exchanging knowledge and expertise in national industrial technology roadmapping to decarbonise energy-intensive industries;
- contributing to a European monitoring platform for technologies and industrial demonstrators (European Innovation Centre for Industrial Transformation and Emissions - INCITE).

17. ACCELERATING NEW APPROACH METHODOLOGIES (NAMs) TO ADVANCE BIOMEDICAL RESEARCH AND TESTING OF MEDICINAL PRODUCTS AND MEDICAL DEVICES.

Objective

The action aims to accelerate, through an aligned and coordinated approach across Member States and, where appropriate, associated countries, the development, validation/qualification, acceptance, and uptake of new approach methodologies (NAMs) in biomedical research and regulatory testing of medicinal products and medical devices.

Description

Although Member States are bound by Directive 2010/63/EU that calls for the replacement of animal procedures in research, education, and regulatory testing as soon as valid alternative approaches become available, there is no coordination mechanism to ensure the development and validation of NAMs. The ERA action will actively involve all actors by setting-up an EU-wide coordination, consisting of relevant ministries, regulatory agencies, research funding organisations, academia, pharmaceutical and medical technology industry, contract research organisations (CROs), small and medium-sized enterprises (SMEs), and startups, to align national and regional policies for speeding up the development, validation, acceptance, and uptake of NAMs.

This action will be supported by four working groups with the themes: (1) development of NAMs and common European infrastructures, (2) validation/qualification, acceptance, and uptake of NAMs, (3) education and training, (4) openness & awareness.

Expected outcomes

- NAM development and infrastructure agenda identifying where NAMs are most needed and expected to have the highest short- to medium-term impact (Q4 2027);
- Member States and stakeholders identify actions they could jointly support to develop new NAMs and related infrastructures (Q1 2028);
- NAM acceptance and uptake strategy which identifies criteria for using NAMs (Q3 2027);

- Member States and stakeholders jointly supporting the validation and qualification of a limited set of NAMs designed to be accepted and implemented in regulatory testing of medicinal products and medical devices (Q4 2027-Q3 2028);
- NAM education and training plan (Q1 2027) and joint education and training programmes (Q2 2027- Q2 2028);
- Harmonised NAM openness and awareness programme that improves open access to NAMs protocols and results of animal experiments. The programme will provides guidance for ethical committee members, reviewers, and regulators, based on best practices in participating Member States. It proposes concrete actions to increase the confidence of regulators in NAMs including a better understanding of the potential and limitations of NAMs (Q2 2028);
- At least one major conference to raise awareness of civil society and patients on biomedical research, drug discovery and development process (Q3 2028).

18. DEVELOPING A COHERENT AND COORDINATED FRAMEWORK FOR A EUROPEAN APPROACH TO INTEGRITY AND ETHICS IN R&I IN THE FACE OF EMERGING CHALLENGES

Objectives

- Creation of a community of exchanges to facilitate the discussions on a new approach to ethics and integrity in research that is technology-neutral and will facilitate innovation and support excellence, respecting simplification and the ethics by design approach;
- coordination of actions to enhance ethics and integrity, prevent breaches, and address barriers to implementing existing ethical guidelines;
- gradually develop a European network to establish a framework for research integrity and ethics, including a roadmap of actions and performance indicators, taking into account already existing networks and structures;
- create a vision for an ecosystem of ethics advice and support based on trust, enabling science and research to drive responsible innovation aligned with societal interests.

Description

This action aims to anticipate, prevent, tackle, and mitigate emerging challenges and safeguard research integrity in critical technology areas in light of the recent update of the European Code of Conduct for Research Integrity and the Commission's Recommendation on critical technology areas for the EU's economic security.

- Taking a concerted approach to integrity and ethics to facilitate the sector's response to this and other emerging challenges;
- providing a wide range of tools to foresee, prevent, manage, and mitigate novel disruptive challenges to research integrity;
- develop a truly operational, coherent and sustainable European approach to support researchers to address ethical challenges.

Expected outcomes

- Development of a coordination structure (in the form of a European platform) that will bring together the existing European networks on research ethics and integrity;
- a detailed roadmap of actions and performance indicators;
- practical guidelines, operational toolboxes, and standard operating procedures;
- an approach to joint training actions approach on a pilot basis.

19. EMPOWERING R&I: A NEW ERA IN RESEARCH MANAGEMENT

Objective

- Achieve better recognition of the research manager profession as well as attractive and clearer career paths for research managers;
- ensure broad and easy access to educational material and upskilling activities/tools of research managers, including early careers research managers, including guidance on AI tools;

- create a recognised Europe-wide learning and skills development scheme for Research Managers with peer-to-peer learning and mobility components ensuring the integration of ERA priorities and values, e.g., ethics and research integrity, open science and gender equality;
- improve networking with research managers from the public and the private sector resulting in better awareness of schemes for professional development, career path and available training opportunities.

Description

As research processes intensify and the expectations on generating a societal impact grow, specialized support from research managers becomes crucial. This initiative seeks to strengthen the research management profession, still undervalued in the ERA, and provides support for its strategic development. It emphasizes the need for coordinated EU and national policy support to create skilled professionals, better career prospects, improved working conditions, gender equality, training, and mobility.

Expected outcomes

- Launching in 2025 and implementing an overarching and flexible careers and competence framework for research managers; implementing an evidence-based awareness campaign in Member States , the results of which will be published in 2026;
- Co-creating in 2026 a European Charter for research managers, creating a triangle approach of research performing organisations, research funding organisations, and European industry, ensuring recognition across sectors; designing approaches for capacity building; and analysing the role of research management in selected actions funded under the “widening” part to the Horizon Europe to monitor the impact on the overall efficiency and effectiveness of the R&I system;

- Launching in 2027 a centralised online hub, preferably under the upcoming ERA Talent Platform, that collates current and new curricula, educational materials, alongside upskilling tools for research managers, and access to vital training and certification programmes for both current and aspiring professionals.
-