BRIEFING PAPER THE ERA POLICY AGENDA 2022-2024

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'Briefing on the ERA Policy Agenda 2022-2024'

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INTRODUCTION BACKGROUND

Introduction

This briefing on the European Research Area (ERA) comprises ten short information sheets that present actions and advocacy points by Science Europe in the framework of priorities of the <u>ERA</u> <u>Policy Agenda 2022–2024</u>. It summarises key advocacy points from discussions held with Science Europe's Working Groups, Governing Board, and General Assembly. The points presented are overarching messages as of **April 2024** and do not encompass all the details discussed during the meetings. This briefing on ERA Actions can be seen as 'living' document, with updates when appropriate.



Following a brief introduction to the historical background on the generation of the ERA Forum and the role of Science Europe in its governance, the reader will find the following sections in each information sheet:

- What does the current ERA Policy Agenda propose for this priority area?
- What is Science Europe doing in this area?
- What are the main messages Science Europe is advocating in this area?

The sheets are presented by ERA Action, with the colour coding indicating the corresponding priority area the Action addresses from the <u>Science Europe Strategy Plan 2021–2026</u>:

- Shape European research policy developments
- Contribute to the evolution of research culture
- Strengthen the role and contribution of science in tackling societal challenges

Background

Historical development of the ERA Forum

The European Research Area was first introduced in January 2000 in the Commission Communication 'Towards a European Research Area'. In 2009, the ERA was enshrined in Article 179 of the Treaty on the Functioning of the European Union (TFEU). In its Resolution of 3 December 2009 on 'Enhanced Governance of the ERA', the Council invited the Commission to continue and further develop systematic and structured consultations with Member States and other relevant stakeholders. This led to the creation of the ERA Stakeholders Platform under Commissioner Geoghegan-Quinn. The Platform ran from 2012 to 2017 following the signature of a Memorandum of Understanding between the Commission and stakeholders, including Science Europe.

From 2017 to 2019, the ERA Stakeholders Platform saw very limited activity. Instead, Commissioner Moedas focused on Open Science and established the Open Science Policy Platform, that produced its <u>OSPP Conclusions</u> in 2020. In the same year, under Commissioner Gabriel, the European Commission published a Communication on '<u>A new ERA for Research and Innovation</u>'. Following this, in November 2021, during the Von der Leyen Commission, the EU Council adopted Conclusions on the '<u>Future Governance of the ERA</u>' and the Council Recommendation on a 'Pact for Research and Innovation in Europe'.

On that basis, the <u>ERA Forum</u> was launched in 2021. It has met twelve times in 2022 and eight times in 2023. Participation is open to research attachés from Member States and Associated Countries, and to R&I stakeholders.

The R&I stakeholders in the ERA Forum are clustered around seven categories:

- Universities and Higher Education
 Institutions
- Research Performing Organisations
- R&I businesses and Small and Medium Enterprises
- Individual researchers
- Research Infrastructures
- R&I funding organisations
- Academies of Sciences

The ERA Forum advises the European Research Area and Innovation Committee (ERAC), which provides high-level guidance to the Forum in turn. The Forum has established several sub-groups that deal with specific priority areas.

Participation of Science Europe in the ERA Forum

Science Europe is a member of the ERA Forum in the category of R&I funding organisations, together with the COST Association. Despite this, Science Europe does represent the voices of **its entire membership, comprising both research funding and research performing organisations.**

Additionally, Science Europe is a member of three ERA Forum Sub-groups (see Annex A).

Role of Science Europe in the development of the ERA Policy Agenda 2022–2024

Throughout 2022, the ERA Forum established the dialogue mechanism between Member States and Stakeholders. It started to implement the 20 ERA Actions comprising the <u>ERA Policy Agenda</u> <u>2022–2024</u>, completing the Member State commitment process, and agreeing on implementation modalities. In 2023, it focused fully on the implementation of the ERA Policy Agenda 2022–2024 and started the development of the Policy Agenda 2025–2027.

Through the ERA Forum, Science Europe contributes to ten ERA Policy Actions, selected by its Governing Board in July 2022, together with the High-level Policy Network on the ERA (HLPN-ERA) and the Office (see Table 1). Science Europe develops its positions in collaboration with its Working Groups according to their respective expertise.

This briefing presents the actions and advocacy points by Science Europe in the framework of each of these priorities. Furthermore, in collaboration with several MOs in the HLPN-ERA, Science Europe is contributing to the discussions to set up the new ERA Policy Agenda 2025–2027.



Table 1 – Selected ERA Actions with main Working Group

1	Open Science	WG Open Science
3	Research Assessment	WG Research Culture
4	Research Careers	WG Research Culture
5	Equality, Diversity, and Inclusion	WG Research Culture
6	Academic Freedom	High-level Policy Network
8	Research Infrastructures	High-level Policy Network
9	International and Cross- Border Collaboration	High-level Policy Network
12	Accelerate the Green and Digital Transition	WG Green and Digital Transition
14	Bring Science Closer to Citizens	WG Communication
16	Improve EU-wide Access to Excellence	WG Horizon Europe

Role of Science Europe in the definition of the ERA Policy Agenda 2025-2027

The development of the ERA Policy Agenda 2025–2027 started in 2023 and will be finalised mid-2024. Following national consultations, Member States, Associated Countries, and other stakeholders were invited to propose new ERA Actions. Science Europe proposed two new ones:

- **Greening research activities** is a joint action with the Dutch government, in co-operation with the Dutch Research Council (NWO).
- Assessing and mitigating ethical issues in research is an action for which Science Europe has collaborated with the Ethics and Integrity Sector of the European Commission, which supports it and will assist throughout its life cycle.

The finalised list of ERA Actions will be discussed in the European Research Area Committee (ERAC) and the Council of the EU in 2024.

Following approval by the Council of the list of ERA Actions, the ERA Forum will refine the content of the proposed ERA Policy Agenda and launch a commitment process: EU Member States, Associated Countries, and R&I stakeholders will choose the ERA Actions that they will commit to implementing.

Science Europe has volunteered to be part of the drafting team for the following proposed Actions:

- Equity in Open and Responsible Research and Innovation
- Fundamental research and scientific leadership
- European Science for Policy Ecosystem
- Knowledge security

This section comprises a series of short fiches on the thematic areas that fall within the remit of WGs and the HLPN, which will highlight the relevant developments in the ERA, as well as Science Europe activities and messages. The relevant groups have been consulted in the development of these fiches.

This document will be updated periodically, following significant developments.

Open Science

The current ERA Policy Agenda 2022-2024 includes several

ERA Actions related to open science. Its priority to deepen a functioning internal market for knowledge includes sev-

eral relevant actions, including: enabling the open sharing

of knowledge and the re-use of research outputs, including

through the development of the European Open Science

Cloud (EOSC) (ERA Action 1), propose a EU copyright and

data legislative and regulatory framework fit for research

(ERA Action 2), advance towards the reform of the assess-

ment system for research, researchers and institutions to

improve their quality, performance and impact (ERA Action

3), and promote a positive environment and level playing

field for international co-operation based on reciprocity

Elsewhere in the ERA Policy Agenda, more actions related

to open science include: bring science closer to citizens

(ERA Action 14), and improve EU-wide access to excellence

(ERA Action 9).

(ERA Action 16).



What is Science Europe doing in this area?

Firstly, Science Europe aims to broaden the scope of open science policies: reaching beyond the development of EOSC, this ERA Action should take a comprehensive approach to open scholarly communication, including a focus on not-for-profit scholarly publishing models and public ownership (as specified in the <u>Council Conclusions</u> of May 2023). As part of the evolution of research culture, this ERA Action should be tackled together with other policies, such as research assessment through <u>CoARA</u> (ERA Action 3) and including equity, instead of keeping Open Science separate from other ERA Actions.

Secondly, concerning research data, Science Europe helped create the <u>EOSC</u> since 2016 and now supports its implementation. It also helps to define the future of Open Research Europe (<u>ORE</u>).

In line with this, Science Europe has spearheaded the promotion of Findable, Accessible, Interoperable, and Reusable (FAIR) research data by internationally <u>aligning data management</u> policies and procedures and ensuring the <u>long-term sustainability</u> of research data.

Finally, Science Europe pursues closer contacts between world regions, notably in its <u>support for Diamond Open Access</u>. This resulted in the organisation of the <u>Global Summit on Diamond Open Access</u> (Oct 2023) and will lead to the launch of a Global Alliance for Diamond Open Access in 2024, facilitated by UNESCO.

What are the main messages Science Europe advocates in this area?

- Open Science aims to make scientific knowledge openly available, accessible, and reusable for everyone, to increase scientific collaborations and sharing of information for the benefit of science and society. This is in line with the UNESCO <u>Recommendation on Open Science</u> (Nov 2021) that promotes scholarly knowledge as a public good.
- The end goal of open science is to provide equity of access to scientific information for all. Open Science significantly lowers the barrier to access the processes of scholarly knowledge creation, and communication to societal actors beyond the scientific community.
- Scholarly publications should be free for both authors and readers (such as in the Diamond Open Access communication model). These models are community-driven, academic-led, and researcher-owned. These types of journals and platforms

are essential in preserving the diversity of scholarly publishing, through servicing large-scale as well as small-scale, multilingual, and multicultural research communities.

- The transition to Open Science is intrinsically linked with the reform of research assessment (see ERA Action 3). Both transitions aim at rewarding the intrinsic quality of the research, outputs, and publications rather than appraisals based only on quantitative indicators as proxies of quality.
- The transition to open science is a joint effort and a shared responsibility between partners in policy and practice. All research communities globally should be able to take part in this transition and all segments of society should be able to reap its benefits.

Research

Assessment

This Action aims to reform the assessment system for

research, researchers, and institutions. The overarching vision is for research assessment to recognise the diverse

outputs, practices, and activities that maximise the quality

and impact of research. It coincided with the creation of

the Agreement on Reforming Research Assessment and

the <u>Coalition for Advancing Research Assessment</u>. It aims to foster engagement and participation in CoARA by analysing and improving the national framework conditions

for reform. Without supportive conditions (incentives and support from national authorities, removal of legal and

administrative barriers, and so on), individual organisa-

tions might not be able to implement the Agreement fully.

As some barriers are specific to the national context and

require collaboration among stakeholders and their na-

tional authorities, national dialogues are an effective way

to support implementation. A survey of national legal and

administrative barriers was carried out across Member

States and the results are being used as the basis for na-

tional workshops to raise awareness and find solutions to

identified barriers to reform. Findings from these work-

shops are then shared in further ERA-level workshops

to promote mutual learning and define possible future

actions. ERA Action 3 has been identified as a long-term action and will continue to support and reinforce CoARA

through the actions described above.



What is Science Europe doing in this area?

In its <u>Position Statement and Recommendations</u> on Research Assessment Processes (2020), Science Europe called for broad scope and timely research assessment reform, and contributes to the necessary concurrent shift in research cultures by defining a foundational framework of shared values to guide changes and stakeholder buy-in (Science Europe <u>Values Framework</u>, 2022).

On that basis, Science Europe was a part of the Drafting Team for the <u>Agreement on Reforming Research Assessment</u> (2022) and Interim Secretariat that established CoARA (2023). Science Europe continues to play a central role in the Coalition and is represented in the <u>CoARA Steering Board</u>, and is a partner in the <u>CoARA Boost Project</u>. Science Europe is a Work Package leader within the CoARA Boost Project and leads activities aiming to support CoARA membership growth and the development of synergies with external and international initiatives.

Stronger and more explicit links between ERA Action 3 and the work of CoARA, especially its National Chapters, would be beneficial for meeting the objectives of this priority area. Science Europe members are actively engaged in CoARA. Currently 35 of 40 Science Europe Member Organisations are signatories of the Agreement for Reforming Research Assessment, and an internal form has been established to support members and non-members of CoARA (SE CoARA Forum).

What are the main messages Science Europe advocates in this area?

- Research assessment reform should re-orient policies and practices towards the recognition of a diversity of excellent activities, outputs, and outcomes, which collectively contribute to a broader and more accurate reflection of today's research endeavour. These include outputs such as scientific papers, scholarly books, datasets, software, prototypes, and so on, as well as activities including science communication, reproducibility studies, mentorship, and science-to-policy advice, and so on.
- There is a need to develop assessment criteria, focusing on the quality of research, avoiding inappropriate use of proxies of quality (as stated in the <u>CoARA Commitments</u>). This would allow researchers to be assessed based on the quality of

their research rather than the quantity, promoting diversity, equality, and inclusion (see ERA Action 5).

- Research assessment reform is a global process that reflects the increasingly global and interconnected nature of research systems.
- Research assessment reform requires a shift in research cultures to make sure that the changes proposed are supported and enabled by changes in behaviour and attitudes at all levels. For example, embedding CoARA principles in national and institutional policies for career development. This is to be done by involving and engaging the researchers' communities in the activities that inform the reform process.



4 Research Careers

This Action aims to support diverse and attractive working conditions for researchers through the provision of instruments and services to enable sustainable and attractive career paths and promote research quality and impact. Making research careers more attractive to young talent is a fundamental condition for quality and competitiveness of the ERA.

The objectives of this action are to develop a toolbox of measures to support research careers, diverse career paths, balanced talent circulation, and mobility (in its various forms). This is being done by:

- the development of a comprehensive European Framework for Research Careers
- **2.** supporting the exchange of best practices (using the European Competence Framework for Researchers)
- **3.** offering additional support measures, including an observatory on research careers, and an ERA Talent Platform.

What is Science Europe doing in this area?

In 2023, Science Europe began activities aimed to support sustainable, attractive, and diverse careers in research. These activities will continue in 2024 and will complement initiatives being undertaken as part of the ERA Policy Agenda.

It has provided input to the <u>European Framework for Research Careers</u> and will do the same as the Research and Innovation Careers Observatory takes shape. A Workshop on research careers in late 2024 is being developed, where discussions will partly focus on ERA Action 4 and additional institutional activities and measures needed to support career flexibility and attractiveness.

What are the main messages Science Europe advocates in this area?

- It is central to supporting research quality that talented individuals choose a career in research. Career pathways must be attractive to facilitate this choice and to retain talent. This is a critical element in R&I policies. High competition for limited funds and research jobs have led to researcher precarity. The attractiveness and sustainability of research careers is closely linked to research assessment systems (see ERA Action 3) and underlying research cultures.
- It is vital that all roles in and contributions to excellent research are recognised. Research is ever more complex and requires an increasing array of skills and competencies such as teamwork, mentorship, data/code literacy, communication, knowledge valorisation and societal engagement. These are not currently well recognised or rewarded, yet collectively make up a significant proportion of the work conducted by research professionals and contribute significantly to research quality and impact.
- Research assessment systems have traditionally focused on a narrow set of criteria and have not adequately evolved

to recognise the increasing set of competencies needed in research.

- Mobility is a key element of many careers in research and should be supported in all its forms (geographic, intersectoral, interdisciplinary). This requires a better recognition of transversal skills and the provision of training and career development support mechanisms. Nevertheless, it should be acknowledged that not all roles or positions within the research profession, including researchers, require mobility.
- Flexibility in any general classification of researchers (i.e., R1 to R4 categories) is needed to accommodate the broader skills-based approach to career pathways. Career pathways not only evolve towards managerial positions and senior research roles but also according to increased experience and scholarly expertise. A 'Team Science' approach to research management, governance, administration, and funding can help to recognise better all roles that contribute to knowledge generation and its impact.



5

Equality, Diversity, and Inclusion

This Action aims to foster equality and inclusiveness in the European research ecosystem. To that end, an ERA forum sub-group has been set up to address the following objectives:

- Develop a policy co-ordination mechanism to support all aspects of gender equality through inclusive Gender Equality Plans and policies, and a dedicated EU network on their implementation.
- 2. Set up a strategy to counteract gender-based violence, including sexual harassment, in the European R&I system and to assure gender equal and inclusive working environments through institutional change in any research funding or performing organisation.
- **3.** Create a policy approach to inclusive gender equality, that addresses gender mainstreaming and opening to intersectionality with other diversity dimensions to advance the new ERA.
- **4.** Develop principles for the integration and evaluation of the gender dimension in R&I content in co-operation with national research funding organisations.

In 2023, a task force set up by the sub-group on Inclusive Gender Equality developed a Code of Conduct on gender-based violence and harassment in research. It has been presented to the ERA Forum and will likely take the form of Council Recommendations.

What is Science Europe doing in this area?

In 2021, Science Europe agreed upon six common values for the organisation of research, as part of its strategic focus on 'contributing to the evolution of research culture'. The set of values included 'Equality, Diversity, and Inclusion (EDI)'. Two concepts continue to guide and inform our activities: 1) supporting equality, diversity, and inclusion is an imperative for publicly funded research organisations, and 2) diversity and diverse representation in our research environments improves the quality and impact of research. These points were already highlighted in the 2017 <u>Practical Guide to Improving Gender Equality in Research Organisations</u> and remains highly relevant today.

A newly published <u>Practical Guide to Supporting Diversity in Research Environments</u> explores the understanding of diversity among research organisations, actions they undertake, and challenges faced. Science Europe collaborates with the Global Research Council on this topic, co-chairing the <u>Equality</u>, <u>Diversity</u>, and <u>Inclusion Working Group</u> whose work promotes gender-sensitive research policies and the integration of the gender and sex dimensions in the content and design of research.

What are the main messages Science Europe advocates in this area?

- Broaden the understanding of the term 'diversity' in research environments. Factors such as socio-economic background, sexual orientation, and disability are being recognised by a small but growing member of research organisations as part of their strategic policies. It is vital that organisations continually scrutinise their understanding of diversity, openly communicate about the actions they are undertaking to support it, and share evidence and experience with other research organisations.
- The collection and use of data to support EDI policy and practice remains a challenge. Legal frameworks for gathering data to support EDI should be developed, while openly sharing progress. Existing good practices should be further promoted, from funding programmes targeting under-represented researcher groups, to the generalisation of inclusive language in policy and procedure documents. At the same time, legal frameworks allowing the collection and processing of data for policy should be developed at national and global levels.

Nevertheless, a lack of data should not be a barrier to continued and timely action where needed.

- Adapt and adopt positive action measures towards EDI by learning from successful practices and include interconnections between the diversity factors identified to provide equal opportunities for career development (see also ERA Action 3).
- Continually enforce HR policies that ensure a gender balance and a broader social mix representation in research organisations. This holds true both for research itself as well as for research governance, where diversity in decision-making bodies is key for high-quality and effective decision making.
- ERA Actions supporting EDI must connect with related policy initiatives (i.e. Research Careers, Open Access, etc.) and foster global collaborations to improve equal representation in R&I systems.



6 Academic Freedom

This Action aims to roll out an action plan on academic freedom and provide guidelines on tackling R&I foreign interference. The guidelines are designed to support R&I institutions in their endeavour to protect their fundamental values by safeguarding academic freedom, integrity and institutional autonomy. They aim to:

- Facilitate the development of a policy approach to safeguard the freedom of scientific research in Europe, based on the <u>Bonn declaration</u> on freedom of scientific research.
- Support interested organisations in implementing the recommendations of the guidelines on foreign interference.
- Publish a first European monitoring report on the freedom of scientific research.

What is Science Europe doing in this area?

As stated in the Values section of the <u>Science Europe Strategy Plan for 2021–2026</u>, Science Europe considers scientific knowledge to be for the common good. The promotion of freedom of scientific inquiry and the self-organising nature of the scientific research systems is embedded in all of our activities.

In 2019, Science Europe published a joint statement with the European University Association and European Federation of Academies of Sciences and Humanities. During the drafting of the Bonn Declaration under the German Presidency of the Council of the EU in 2020, Science Europe was consulted. The declaration was <u>adopted</u> during a Ministerial Conference in October 2020.

In 2023, Science Europe provided input to a request for a <u>legislative proposal</u> of the European Parliament – led by MEP Christian Ehler – on protecting academic freedom in Europe. The Commission will develop a response to the European Parliament proposal. The points of advocacy are summarised below.

What are the main messages Science Europe advocates in this area?

- Academic freedom and institutional autonomy exist to empower higher education and research institutions to fulfil their responsibilities. Academic freedom must be framed by rigorous scientific and professional standards, respect for the rights of others, ethical conduct and the awareness of the impact of research on humans and the environment.
- The autonomy of funding decisions by research councils and funding bodies should be guaranteed and driven by scientific excellence. No discipline should be excluded for political reasons.
- It is important to establish common standards and rules to protect the freedom of academic research. It should be clarified how legislative proposals build on both existing EU documents (such as the Bonn Declaration, the ERA Action on Academic Freedom, and initiatives at national level) and on non-EU

policy frameworks (such as the UN Human Rights Committee, Council of Europe, or European Court of Human Rights).

- Researchers should be free to choose research topics and apply the best research methodology within research ethics and integrity standards in full respect of their academic freedom.
- Universities, funding agencies, research performing organisations, academies and other research organisations should guarantee the academic freedom of all researchers, teachers and students. This should be done by fostering an institutional culture in which free expression and the open exchange of opinion are valued, and by shielding the research and teaching community from sanctions for exercising academic freedom.



B Research Infrastructures

The European Research Area was created based upon the success of European-level activities related to research infrastructures such as the European Strategy Forum for Research Infrastructures (ESFRI). This ERA Action consists of activities directly aimed at supporting ESFRI and the European research infrastructure ecosystem.

A number of specific actions, led by ESFRI and EOSC, are being undertaken:

- 1. A strategic analysis of the European Research Infrastructure landscape.
- **2.** A revision of the European Charter for Access to Research Infrastructures.
- **3.** Update of the ESFRI Roadmap and implementation of performance monitoring tools.
- **4.** Promotion of collaboration between Research Infrastructure, e-Infrastructures, stakeholders, and EOSC.

What is Science Europe doing in this area?

As a member of the ESFRI Stakeholder Forum, Science Europe has been involved in a number of consultations, including to the ESFRI landscape analysis and consultation on broadening access. It promotes clearer ties between ESFRI RIs, RIs in general (including high performance computing and technology infrastructures), and EOSC.

Recent activities on the topic of RIs have centred on optimising the use, management, and funding of RIs, nationally and internationally. The long-term collaboration with the OECD-Global Science Forum (GSF) on Research Infrastructures allows Science Europe to contribute actively to:

- EU policy, such as providing input to the revision of the Charter for Access and increasing collaboration with Infrastructures. (Science Europe/OECD Report 2020)
- International discussions on Research Infrastructures, such as the optimisation of national infrastructures and very large research infrastructures (<u>Science Europe/OECD Report 2021</u>), and an ongoing OECD-led activity on RI ecosystems.

What are the main messages Science Europe advocates in this area?

- Research Infrastructures are a vital part of both European and global research systems, offering unique facilities, services, and resources to the research community. A stronger link between EU-funded RIs and nationally-funded RIs is necessary, recognising that closer ties would create improved services, facilities, and resources for research communities.
- To optimise the use of research infrastructures, new and innovative ways to provide access to the services, resources, and facilities should be considered: this may include more and better virtual access, secondary use (open access to data and tools), and clustered access. Such pathways must be supported by appropriate training, service provision, and tools whenever necessary.
- Across the European and global RI landscape, promoting networking of RI facilities and services can foster multi-/inter-/ trans-disciplinarity. This is particularly important for collabo-

rations between RIs and computing infrastructures (EuroHPC) and open science platforms (EOSC), where the added value for the research community is very large.

- Open Science practices must be embedded across all activities and outputs that arise from research infrastructures. The data, software, code, and tools generated from RIs are often unique and highly valuable in both academic (for knowledge advancement) and non-academic terms (societal and technological impact).
- Research Infrastructures should strongly encourage and support users (who are often the owners of the data generated) to develop data management plans for their activities, and to follow the FAIR (Findable, Accessible, Interoperable, and Reusable) principles within a reasonable time after projects are completed.



S International & Cross-border Collaboration

The global environment in which international R&I co-operation takes place has greatly changed over the past decade. Geopolitical tensions are rising, and human rights and fundamental European values, such as academic freedom, are being challenged. Europe should establish its leadership on the basis of shared values and principles.

In response to current global trends, the EU promotes rulesbased multilateralism, pursuing reciprocal openness in R&I co-operation and modulating its bilateral relations in R&I in line with European interests and values. The EU <u>launched</u> <u>a multilateral dialogue</u> on shared values and principles for R&I in July 2022. In February 2024, the EU published a corresponding <u>statement</u>. This approach is implemented through Horizon Europe (for example in modulated possibilities for participation depending on country/calls).

This action has many links with ERA Action 16, on improving EU-wide access to excellence.

What is Science Europe doing in this area?

Science Europe 1) co-ordinates between Member Organisations regarding collaboration with non-European partners, 2) is committed to fostering research excellence, 3) pursues leadership initiatives in European research integration (see Action 16), and 4) actively engages with global research communities. Its <u>2023 High Level Workshop</u> promoted a dialogue on the conditions and policies for boosting international scientific collaboration between Europea, Africa, Latin America, and the Caribbean.

International activity takes place on three broad levels:

Supranational: Engagement with the Global Research Council (*GRC Governing Board, Executive Support Group, Working Groups*); with the OECD, through a long-term partnership with its <u>Global</u> <u>Science Forum</u>, on Research Infrastructures (since 2019); with UNESCO, on Open Science and Diamond Open Access; with the UN through an application for observer status in the <u>UNFCCC</u> in the annual Conferences of the Parties (COP); and, contributing to the Science Summit at the UN General Assembly (2023 and 2024).

Intra-European: Participation in the ERA Forum Sub-Group on the Global Approach to Research and Innovation; monitoring

initiative to fund and support excellent international research projects (*Science Europe supported 12 of its Member Organisation in this process*).Bilateral: Engagement in structured collaboration with the Na-

Bilateral: Engagement in structured collaboration with the National Natural Science Foundation of China (NSFC) since 2020 in the areas of Covid-19, research assessment, interdisciplinary research, talent development, and data sharing; institutional strategic dialogues with other individual research organisations such as NSF (USA), JST (Japan), and NSERC (Canada).

Cross-Border Collaboration; through Weave, a cross-European

What are the main messages Science Europe advocates in this area?

- Work with all global partners (North and South America, Africa, Asia, Australia) to support co-operation that is mutually beneficial. Recognise indigenous knowledge and expertise of Global South researchers, institutions, and communities on equal footing with those of the Global North.
- Address discrimination, inequalities, and biases affecting researchers from the Global South within their processes and activities. Implement new measures granting quicker visa access and work permits for researchers or to organise events in Global South countries. Advocate programs for increased global mobility (such as Erasmus).
- Global scientific networks can bring long-term opportunities for researchers. Networks could take the role of informing

researchers in developing countries of opportunities abroad and change organisational research culture (for example by bringing diverse perspectives to peer review panels).

- Mobilise scientists from different disciplines towards addressing societal challenges. Communication with ministries and other policy makers should also be enhanced as a means of harnessing scientific outputs to create positive social change.
- Safeguard equitable access to research outputs, knowledge, and data, including through reform of the scholarly publication system, and improvement of access to scientific infrastructures.



12 Accelerate the Green and Digital Transition

The 2022–2024 ERA Policy Agenda includes a Priority Area on 'Taking up together the challenges posed by the Twin Green and Digital Transitions and increasing society's participation in the ERA'. Within this priority area, two ERA Actions are thematically related to Science Europe's Working Group on the Green and Digital Transition:

- Action 11: An ERA for green energy transformation.
- Action 12: Accelerate the green/digital transition of Europe's key industrial ecosystems.

These ERA Actions were conceived with a strong industrial focus, covering challenges like circular economy, energy transition for the business sectors, and policies for start-ups in the 'green economy'. Although, this ERA Action is mainly targeting industrial actors, the research sector has a role to play.

What is Science Europe doing in this area?

In 2021, Science Europe set up a new priority in its Strategy Plan to "strengthen the role and contribution of science in tackling societal challenges." In line with the United Nations' <u>Sustainable Development Goals</u>, a <u>Call to Action</u> (2021) for the Net-Zero Transition of research organisations was published. A study on interdisciplinary research among Member Organisations led to the report '<u>Interdisciplinary Research for the Green and Digital Transition</u>' (2022), exploring existing funding instruments and performing platforms, as well as recommendations to enhance the contribution of scientific research to tackle societal challenges.

A study on '<u>Science-Policy in Action: Insights for the Green and Digital Transition</u>' (March 2023) mapped Member Organisations' activities on science-informed policy making. This report was associated with a multimedia publication on '<u>How to Become an Effective Science-Policy Advisor? 16 Lessons Learned</u>', aimed to engage researchers interested in this area. These mapping exercises provided the basis to develop the <u>Guidance on Science for Policy Activities</u>, published in April 2024.

Science Europe is refocusing towards supporting Member Organisations to reduce the environmental footprint of research activities. It has also applied to be an official observer to the United Nations Framework Convention on Climate Change (<u>UNFCCC</u>) (decision expected June/September 2024) to raise the voice of the research community in the Conferences of the Parties (COP).

What are the main messages Science Europe advocates in this area?

- Invest in inter- and multi-disciplinary research to tackle societal challenges: the climate crisis, biodiversity losses, and digitalisation are complex challenges that cannot be addressed with mono-disciplinary perspectives.
- Research organisations should support the experimentation of doing new forms of doing inter-/transdisciplinary research and mobilise researchers from all scientific disciplines with their theoretical and methodological approaches to address the systemic changes needed.
- The engagement of stakeholders (national/local government, NGOs, citizens, and so on) is crucial for research related to societal challenges. Co-design and co-production approaches allow for the alignment of agendas and facilitate knowledge exchange.

- Reduce the institutional ecological footprint and climate-harmful impacts related to research activity. Common principles, methods and standards across all stakeholders including higher education institutes, research funding organisations, and research performing organisations should be established.
- Science for Policy activities can support decision makers dealing with societal challenges. Successful initiatives require an institutional mandate, commitment to the values of quality, integrity and transparency, long-term resources (funding and expertise), and dialogue between policy and research communities. Science for Policy activities should be better recognised and rewarded.



14 Bring Science Closer to Citizens

The ERA aims to empower citizens and local communities to promote their engagement, trust and interest in science. Education, training activities and regular citizen science campaigns are some of the key instruments implemented to achieve this objective. Additionally, this ERA Action also promotes co-creation and collaboration with citizens in view of ensuring the societal uptake of the developed solutions and results.

What is Science Europe doing in this area?

Science Communication emerged as a thematic area within Science Europe's strategic priority to "strengthen the role and contribution of science in tackling societal challenges." Since 2021, the Working Group on Communication has sharpened its focus on the action to "strengthen the voice of science in and for society", starting a reflection on the importance of science communication and addressing several topics such as fake news and disinformation, and trust in science.

In 2022, Science Europe outlined a vision for science communication as an essential element of the research culture we want to build in its Position Statement <u>Science Communication for Greater Research Impact</u>. It also collects and promotes hallmark activities on science communication from Member Organisations: the <u>2022 campaign #TalkingScience</u> showcased and promoted to the larger public a wide range of science communications activities carried out by our members, with a particular emphasis on research ethics and integrity. The <u>2023 campaign #TalkingScience</u> focused on international collaboration initiatives.

The high-level conference on science communication under the Belgian Presidency of the EU in March 2024 provided an opportunity to raise political awareness on the need to make science communication an integral part of research programmes. This aims to enhance the communication of science to society. <u>Strategic conclusions</u> from the high-level conference have been published.

What are the main messages Science Europe advocates in this area?

- Science communication is essential to delivering the message that funding scientific research is an investment, not an expense. It is necessary to integrate science communication initiatives strategically from the outset of research programmes and projects to showcase the value of research investments, while also improving the understanding of the research process itself.
- Science communication is key to research-informed policy making, improving the relationships with stakeholders in education, policy, industry, and civil society. Research institutions should share scientific knowledge to foster democratic debate, involving researchers in the development of communication outputs where possible.
- Create pan-European opportunities to develop awareness, enhance relevance, and build trust in science. This includes different forms of science communication and knowledge

transfer, such as social media campaigns, events etc. Similarly, it includes partnerships with science communication, stakeholders and intergovernmental bodies, addressing misinformation and fighting fake news.

- Develop institutional tools for researchers to better communicate research (creating toolkits, guidelines, training activities) and acknowledge scientists for their communication work. Incorporate or update communications plans into the strategic plans of institutions, research groups, and projects.
- Recognise science communicators as professionals who apply evidence-based approaches, and science communication as a distinct field of expertise. Collaborations between researchers and communicators are pivotal to improve understanding of the scientific process within different audiences.



16 Improve EU-wide Access to Excellence

Disparities in R&I performance among countries and regions of the EU remain along the years, and this calls for further mobilising research and innovation capacities. To improve access to excellence, this Action focuses on promoting and monitoring access to excellence of researchers and institutions throughout Europe. The workstream revolves around synergies between Horizon Europe and cohesion programmes, support to member states in R&I integration, and measures supporting skills for excellence.

What is Science Europe doing in this area?

In addition to <u>Weave</u>, (see ERA Action 9), one key initiative in this regard was the 2022 Position Statement '<u>Towards Strengthened</u> <u>Research and Innovation Systems across Europe</u>'. This position presented six main factors that should be tackled to address the existing R&I discrepancies (see messages below).

As a follow-up, Science Europe is conducting a structural dialogue with its members through the creation of a forum, to identify particular strengths and weaknesses of R&I systems in the so-called 'Widening' countries.

What are the main messages Science Europe advocating in this area?

- Europe must reinforce its position as a top knowledge hub and enhance its competitiveness and ability to address societal challenges. There are high-quality research and researchers in all European countries.
- Increase national investments in R&I through clear and ambitious national strategies and related investments. Capacity building among all actors involved in European R&I is key to boosting performance across the EU.
- Trigger changes in research culture. Important factors for mobile researchers in the decision to leave or stay are often considered to be: a static or conservative research culture, the lack of longterm perspectives, and the behaviours, values, attitudes, and norms of the research system.
- Attract and retain talent: invest in nurturing existing scientific talent, and in developing talent with the next generations. Excellent research, mobility plans, access to top-level research infrastructures, and academic freedom are crucial for an attractive research environment. EU institutions should provide adequate support to member states in reforming their R&I systems for talent attraction and retention.

- Strengthen capacity for R&I. Beyond researchers, the so-called 'support functions', are also crucial for a well-performing R&I system. The selection, training, and coaching of highly-skilled project co-ordinators, data specialists, research administrators, facilities managers, funding managers, and so on, are key to developing and implementing high-quality research, and to apply for available funding.
- Enhance mutual learning and networking opportunities. Promoting integration of researchers in networks is a strong asset to learn, develop partnerships, and to launch or join collaborative projects. Available instruments should be used to the fullest and new tailor-made initiatives should be encouraged.
- Promote diversity as a key to success. To promote high-level research and technological development and to stimulate innovation across European countries, it is necessary to encourage diversity and to emphasise the added value of diversity at all levels of the research process.

SCIENCE**EUROPE**

ANNEX A

Annex A Science Europe Membership of ERA Forum Sub-groups

Science Europe is a member of the following three ERA Forum Sub-Groups:

Inclusive Gender Equality

ERA ACTION 5

This group met six times since March 2023. It has published a Zero-Tolerance Code of Conduct on Gender Based Violence in academia on 18 September 2024. Overall, it focuses on the following issues:

- gender-based violence
- the gender dimension in research
- the development of a policy co-ordination mechanism to support all aspects of gender equality
- a policy approach to strengthening gender equality that addresses gender mainstreaming to advance the new ERA.

Global Approach to Research & Innovation

This group deals with a series of issues related to international collaboration, particularly knowledge security, collaboration with non-European countries, and science diplomacy.

It also organises the Multilateral Dialogues on Values and Principles, which bring together European and non-European representatives (from governments, stakeholders, and public administration) to discuss issues of shared priority.

Access to Excellence and Widening

ERA ACTION 16

This group has met three times since June 2023, most recently in September 2024. It seeks to take forward the recommendations of the Court of Auditors on building synergies between Horizon Europe and European Structural and Investment (ESI) Funds. Discussions will focus on creating synergies between ESI Funds and research funding and building capacity at the EU, national, and regional levels to enable these synergies.

Science Europe AISBL

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Science Europe is the association of major research funding and research performing organisations in Europe.

Our vision is for the European Research Area to have the optimal conditions to support robust education and research & innovation systems.

We define long-term perspectives for European research and champion best-practice approaches that enable high-quality research for knowledge advancement and the needs of society.

We are uniquely placed to lead advancements to the European Research Area and inform global developments through participation in research initiatives where science is a strong and trusted component of sustainable economic, environmental, and societal development.

More information is available at www.scienceeurope.org

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