This template follows up on the debate in the ERA Forum on 25 May, in which Forum representatives agreed on a coordinated approach towards the definition of new actions for the ERA Policy Agenda 2025-2027. It builds on a gap analysis exercise in which the ERA Forum assessed, which parts of the Pact for Research and Innovation are already covered by the Policy Agenda 2022-2024 and where there should be additions.

Action title: *(Please use as a maximum two lines.)*	Enabling open science via sharing and re-use of data, including through the European Open Science Cloud (EOSC)
Description of the action *(Please explain the proposed action in a <u>simple, clear and communicable</u> narrative).*	The action aims to achieve a step change across research communities and research infrastructures in Europe towards open sharing, seamless access and reliable re-use of research data - referring to all digital research objects such as methods, protocols, software and publications - used and produced along the research life cycle. As a key enabler of this transition, the European Open Science Cloud (EOSC) aims to provide European researchers, innovators, companies and citizens with an accessible, trusted and open distributed environment where they can publish, find and re-use each other's data and tools for research, innovation and educational purposes, as well as access to relevant services. The EOSC Strategic Research and Innovation Agenda (SRIA) sets the general, specific and operational objectives and the related action areas of the EOSC European co-programmed Partnership until 2030. It includes the development and deployment of EOSC as a federation of research infrastructures and services for scientists. The planned deployment by the EC in 2024 of an EOSC EU node and its federating services will mark a tipping point towards the expansion of an EOSC Federation which is tangible and reusable by the researchers in Europe. As part of this action, there is a commitment from the Member States, the European Commission (EC) and the EOSC Association to establish a joint mechanism to collect data and contributions related to EOSC and open science in Europe. Outcomes: 1. **Develop a high-value EOSC federation and increase its uptake by research communities.** This includes notably: · Develop the EOSC Federation as a public good for the researchers and ensure its effective uptake by research communities and its expansion and scalability based on common EOSC standards, acceptable use policies and rules of participation;

	· Open EOSC progressively to the public sector and to partners from the commercial sector that are dedicated to open science; · Deploy EOSC as the European Data Space for research and innovation and support its interconnection with other European data spaces; · Ensure the governance and sustainability of the EOSC Platform after 2026. 2. **Advance the FAIR data agenda in Europe.** This includes notably: · Support research data repositories to enable FAIR data quality and long-term data preservation, and connect them to the EOSC Federation; · Reinforce networking and capacity building activities in relation to skills for open and FAIR data practices, including FAIR data stewards; · Accelerate the productivity of FAIR data by all research communities; · Safeguard FAIR data sovereignty and autonomy by the research performing organisations generating the data; · Turn FAIR data principles and metrics into coherent practices across Europe by all research communities. 3. **Propose legislative and non-legislative measures to improve access and re-use of scientific publications and data.** This includes notably: · Address identified barriers in the EU's copyright and data legislative framework and make it fit for research by: 1) Enabling the research community to access and reuse scientific publications and data for research purposes. 2) Enhancing legal certainty and coherence of copyright and data legislations with regard to research. 4. **Assess the impact of open science policies and practices based on an open science policy intelligence platform.** This includes notably: · Expand the EOSC monitoring framework with state-of-the-art methodologies to assess the impact of related policies and practices; · Collect and promote EOSC-related good practices, use cases and demonstrators to enrich mutual learning and to showcase the added value of EOSC and open science to the research process.
Actors *(Please explain who would take part in the action and who would benefit from it).*	A tripartite EOSC governance has been set up in 2021 to advance EOSC implementation and develop wider synergies between the multiple EOSC stakeholders at European, national, community and institutional levels: • The European Commission representing the EU; • The EOSC Steering Board (EC expert group) representing the voice of the participating countries: the Member States and the Associated Countries;

	• The EOSC Association (AISBL) representing the research community and its service providers. The ERA Forum is in a unique position to enhance interaction of Action 1 with other ERA Actions of relevance to open science.
Expected impact *(Please describe the expected impact of the action (including outside the scientific community), paying attention to the fact that it needs to focus on <u>concrete results and reachable deliverables</u>).*	On EOSC, the following objectives should be achieved by 2030: • Ensure that 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 infrastructure under community governance enabling open sharing of scientific results is deployed and sustained. • Europe in the driving seat towards a web of FAIR research data with established links to other data spaces. Regarding the legal framework, a targeted revision of the EU's copyright and data rules should provide better conditions for research to access and reuse publicly funded research articles and datasets.
Why do we need this action? *(Please indicate the need for this action in view of implementing the <u>Pact for R&I and achieving the ERA objectives</u> and explain why its <u>objective cannot be reached through existing programmes/ activities</u>. What is the action's <u>added value</u> at national and European level as well as for stakeholders? How does it <u>make a change</u> and how is <u>co-creation</u> ensured?)*	The amount of data generated or used in public-funded research and innovation (R&I) activities is growing exponentially. Nevertheless, a significant part of these data are not shared openly, are poorly annotated and are not machine-readable and are often locked in behind high paywalls. The cost of not having FAIR[1] research data has been estimated to more than 10 B€ every year[2] for Europe. Consequently, many research experiments producing or based on those data cannot be reproduced, increasing the risk of mistrust in their outcomes. Efficiency and productivity of the research is also reduced. It is only through coordination at European level and the strong involvement by the Member States and Associated Countries to engage scientific communities and research infrastructures in Europe that we can tackle these challenges effectively.
Additional information *(For example, timing and milestones, which already could be envisaged, can be indicated.)*	Key milestones: • 2025-2026: EOSC Track project[3] is fully operational and supports the development of a policy intelligence tool • 2025-2026: Operational EOSC EU Platform • 2025: publication of Horizon Europe work programmes for 2025 and for 2026-2027 (according to current planning)

---

[1] FAIR: Findable, Accessible, Interoperable and Re-usable (www.go-fair.org/fair-principles/).
[2] Cost-Benefit analysis for FAIR research data - Cost of not having FAIR research data, PwC study commissioned by the European Commission in 2018 (http://publications.europa.eu/resource/cellar/d375368c-1a0a-11e9-8d04-01aa75ed71a1.0001.01/DOC_1)
[3] [to add link]

	• 2025: Possible legislative and non-legislative proposals to make the EU's copyright and data rules fit for research. • circa 2026: Commission proposal for 'FP10' Related links: EOSC on Europa EOSC Steering Board EOSC Association EOSC Strategic Research and Innovation Agenda Open science in Horizon Europe