Open Science matters

Position paper of the Open Science SIG

Introduction

The EUNIS Open Science Special Interest Group (SIG) had its kick-off event at the EUNIS 2025 Conference in Belfast and since then continued its activity during regular meetings. Serving as a platform for EUNIS members to coordinate efforts in implementing Open Science principles, addressing common challenges and sharing best practices, the Open Science SIG wants to lay the groundwork by outlining the importance of Open Science in a joint position paper. This position paper describes the SIG's perspective on the purpose of Open Science, its relevance to EUNIS, and the strategies needed to create synergies between openness, digital infrastructures, research practices and institutional policies in light of current geopolitical changes.

What does Open Science entail?

Open Science encompasses a set of values, principles and practices that aims to make the processes and outputs of knowledge production more findable, transparent, accessible, inclusive and equitable. Its objectives include improving the reproducibility and reusability of research, enhancing collaboration and reducing barriers, as well as accelerating the dissemination of knowledge not just within the academic community, but within society as a whole.

On a practical level, the notion of Open Science provides guidance on conducting excellent research, upholding research integrity and balancing the strive towards openness with necessary restrictions. Going beyond principles and practices, the notion of Open Science led to the development and expansion of information infrastructures, be it in the form of university libraries, research data repositories, institutional support systems or digital services. To fully comprehend its benefit, it is worth considering the opposite state: closed scientific efforts may create silos, redundancies, reinforce inequalities and inefficiency, and overall hamper scientific collaboration and discovery.

The EU has spearheaded major initiatives in legislation and infrastructure to develop a robust Open Science ecosystem in Europe. Making Open Science the norm is a core structural policy action within the European Research Era (ERA) for 2025-2027. Bringing the Open Science principles into practice contributes to the ERA goals for a more open, connected, and

competitive research system. Open Science has received a prominent place in the next Multiannual Financial Framework (MFF) 2028-2034 (including the Framework Programme 10) and in the European Strategy on Research and Technology Infrastructures, underlining its importance as a long-term investment in Europe's research and innovation capacity. Open Science is an important enabler for the European Strategy for Artificial Intelligence in Science.

The Open Science SIG embraces the European Commission's guiding principle "As open as possible, as closed as necessary", acknowledging that not all knowledge can be made fully open for different reasons. However, striving towards openness should be considered as the default because key elements of openness (i.e. transparency, findability, accessibility, reproducibility) are integral to the quality and integrity of research. In a time when paper mills become an expanding industry, producing more and more papers on the verge of fraud, and misinformation begins circulating within scientific discourse, science itself is under threat. And while Open Science cannot be considered to be the single remedy, the implementation of its principles promise increasing value for research.

Open Science in the context of EUNIS

For higher education networks like EUNIS, Open Science is not only relevant in the context of open knowledge production and scientific transparency and integrity, but also the openness of science at large. Openness in this sense is a key driver of internationalisation, collaboration, mobility and joint digitalisation efforts. It strengthens research partnerships and facilitates data and resource sharing across institutions, fostering a culture of mutual exchange and cooperation, adding to the deepening of the ERA and the European Education Area (EEA). Furthermore, it can contribute to better interoperability of IT systems and improve the resilience and sustainability of IT infrastructures by promoting and advancing the use of open source software solutions.

It is important to bear in mind that these benefits are not to be taken for granted, but require joint efforts from multiple stakeholders on different levels. On the one hand, Open Science thrives with the presence of successful bottom-up approaches, the development of communities of practice, and an overall cultural shift towards openness that also implies a broader acknowledgement of research contributions. On the other hand, institutional strategies and policies around Open Science can go a long way in making it reality, by demonstrating commitment through an active prioritization at the institutional level.

Objectives of the Open Science SIG

The Open Science SIG perceives itself as a node of both efforts, aiming to promote Open Science holistically and support the systematic implementation of Open Science principles within EUNIS partner institutions and advance all dimensions of Open Science within the EUNIS community. In order to realise this ambition, the SIG…

- **aims to articulate a clear and compelling rationale for Open Science** that highlights its benefits while at the same time acknowledging existing limitations.

- **addresses common and emerging challenges** that raise questions about knowledge security; the need for infrastructures, training and policies; the distribution of roles and responsibilities across different stakeholders (e.g. libraries, computing centres, researchers, institutional leadership); the assessment of cultural change in research; or the findability and visibility of non-traditional research outputs.
- **reflects on the development of Open Science principles** in light of current geopolitical tensions as well as the acceleration of research through artificial intelligence and proposes strategies for adaptation.
- identifies, collects and curates Open Science activities, resources and lessons learned within EUNIS. In doing so, the SIG **will share and promote good practices** within EUNIS, learn from institutional use cases and highlight exemplary initiatives and measures.
- ties together institutional strategies, good practices, useful tools and workflows to **set up local Open Science Hubs**, serving to promote and bundle Open Science efforts at an institutional level.
- intends to engage with other networks, alliances and initiatives, contributes to organising events and **seeks to collaborate** with other EUNIS SIGs where synergies exist – our door is always Open.

Join us!

Scientific openness today must not only be promoted but also actively defended. Worldwide, we are witnessing political and societal developments in which authoritarian and anti-scientific tendencies gain strength, academic discourse is restricted, and academic freedom comes under pressure. In this context, Open Science does not only raise questions about scientific conduct and quality standards of research outputs, but can also be regarded as a matter of principle.

For Open Science to thrive, it requires information infrastructures that cannot be bought or monopolised, and a code of mutual support that connects openness with responsibility. In this sense, the Open Science SIG considers Open Science to be a commitment to forge alliances and to build sovereign, trustworthy, interoperable and resilient infrastructures that can safeguard the integrity and quality of research. And, last but not least, support the ambition of science to benefit society at large.

The Open Science SIG is always looking for new members. To become part of our group and contribute to our discussions, contact laurents.sesink@eunis.org or michael.anger@eunis.org.

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