Strategic Priority Themes Knowledge Exchange 2023-2025

1. The vision of Knowledge Exchange

Our vision is to enable open science by supporting an information infrastructure on an international level.

2. Our mission

Knowledge Exchange shall increase the impact of the Partner Organisations' activities by creating synergies through international exchange of knowledge between experts in the area of digital infrastructure and services for research and higher education.

Knowledge Exchange builds on the results of the expert exchanges to make an impact on developments in the field of information infrastructure. The information infrastructure that Knowledge Exchange aims to support includes technical as well as organisational, policy and economical aspects. Best practices, solutions and innovative approaches will be exchanged between the partners and where relevant with the partners' communities to push their contributions in support of open science by improving their performance at all levels and creating more effective and efficient solutions.

By all its efforts Knowledge Exchange will support the individual agendas of the Partner Organisations and help to realise steps towards the shared vision.

3. Our strategy

Focus areas

The Knowledge Exchange (KE) will continue to conduct work on themes in the focus areas Open Access and Open Science. While these two areas are closely inter-connected, they will be treated as separate strands of activity.

Strategic Priorities

The Knowledge Exchange initiative is a unique collaboration between six partners that value Open Science and have an important – albeit different for each partner – role in realising, supporting or funding digital infrastructures and services for research and higher education. Once every four years partners reconsider the renewal of the Collaboration Agreement. This moment is used to re-calibrate the strategic priorities for the coming years.

4. KE Open Scholarship Framework

The KE OS Framework brings together three dimensions, i.e. 'granularity' levels (e.g. individual, organisations, national governments), various arenas (e.g. political, economic, social) and research lifecycle phases (e.g. grant, dissemination). The established KE OS Framework is used to outline challenges and opportunities as well as possible activities that experts will work on.

5. Priority themes

For the coming years four themes have been identified that Knowledge Exchange will focus on, within the focus areas Open Science and Open Access and with the economic, technological and social aspects of the KE OS Framework in mind.

Assessing impact in the context of Open Science

KE will work on the theme Assessing Impact in the context of Open Science. Earlier work successfully identified possible solutions for the aspect of open to be included in research evaluation (e.g., Openness

Profile). This activity started from a more economic perspective but touches on social and technological aspects. Next steps could be to broaden the scope on several aspects. First, we would like to raise the awareness of the current possibilities, second, we would like to include aspects of research beyond openness; that touch upon changes in research culture (such as digital sovereignty, responsible use of data and AI and reproducibility of research). As roles within organisations are shifting (e.g. establishment of data librarians, data stewards, research software engineers, etc.), this may have implications in working towards alternative approaches of evaluation of research contributions and impact appraisal.

Additionally, we have an interest in investigating the success and impact of not just publications in research output but a broader range of research components, such as the research infrastructures used. In short; we aim for a more comprehensive understanding of what infrastructure providers and funders could do in the area of evaluation in order to foster Open Science.

Innovation in scholarly communication and publication models of the future
The debate on the best and fastest ways of implementing the transition to full open access is ever present. There is a growing concern as to whether article-processing charges are a sustainable way forward and whether 'transformative agreements' are transforming scholarly communication at the pace that research communities would require. KE partners will track the strategies, developments and implementation plans in the six partner countries, sharing good practice and lessons learned to help increase the speed, sustainability and effectiveness of the transition to open access. We will focus on new publication models (such as diamond open access) and alternative publication platforms which can challenge current economic practice.

FAIR data and software supporting reproducibility of research
Although many organisations focus on FAIR data, we believe Knowledge Exchange can add to the needs in this area. The transition to digital in the sciences and humanities changes the way research is performed, although the main scientific principles do not change. One of these principles is reproducibility, which is due to various reasons often very difficult to achieve, whereas digital technologies in fact should make it easier. Publications, data and software (code) are key to digital research and are not independent from one another, they are rather interconnected. KE has explored current practices, barriers and possibilities in the area of research reproducibility, with a focus on the publication and dissemination stage and how to increase uptake of reproducible approaches at research institutions. Next steps could include exploring more concrete mechanisms of supporting the reproducibility of research, e.g., the potential and challenge of application of FAIR principles to data and software, in all phases of the research lifecycle.

The data science ecosystem
The evolution of the data science ecosystem belongs to the core content of projects and initiatives such as Data Spaces, EOSC and RDA, with KE partners often involved as stakeholders. Partners support integrated infrastructure approaches and acknowledge that the changing science data ecosystem will affect the partners. Within the trusted environment of Knowledge Exchange, partners will proactively keep a close eye on developments, discuss concerns, positions, and strategies.