

Informal meeting of Ministers responsible for Higher education, Research and Innovation

Stockholm 7-8 February 2023

**Policy debate - Briefing document on strengthening high-quality,
open, trustworthy and equitable scholarly publishing**

The value of open science and open access

The Council Conclusions on the future governance of the European Research Area (ERA) of 26 November 2021 and the Council Recommendation on a Pact for Research and Innovation in Europe of 26 November 2021 recognize that deepening the single market for knowledge is a priority. Actions highlighted include that open science, including open access to, inter alia, scholarly publications, including their reuse, plays a crucial role in fostering the impact, quality, efficiency, and transparency of research and innovation. Open science can also bring research and society closer together, help tackle societal challenges and boost competitiveness and productivity as set out in the European Council Conclusions from 15 December 2022.

To increase the quality and impact of research, research results need to be timely disseminated and easily reused, both within the scientific community and to society in general. For almost 20 years, open access and open science have been a priority in the European Commission's strategies, guidelines and recommendations, and a standard method of working under its research and innovation funding programmes. Under the French Presidency, Council conclusions on Research assessment and implementation of Open Science

were adopted on 10 June 2022. Open science is also prioritized globally, for example through the work of UNESCO and the OECD.

Open science aims to improve research quality, efficiency, and impact by promoting transparency, accessibility, reusability, and trustworthiness in scientific results, with open access to scholarly publications, including their reuse, being one of the core elements of an open science system.

The Covid-19 pandemic demonstrated the value and benefits of unrestricted and immediate open access to scholarly publications and data both for scientific advancement and discovery and for public awareness and knowledge of the global disease.

Research results made open access immediately upon publication leads to more researchers being able to validate and build on previous results, which contributes to maintaining and promoting a high quality of research, and to strengthen trust in research. Open access to research results also strengthens the use and impact of research in society at large, e.g. for industry and the public sector.

Even though the digital revolution has created new opportunities for more efficient and effective ways of scholarly publishing, such as online publishing tools and platforms for a diversity of research outputs, much of the current system is still based on business and operational models inherited from the era of print and paper. The potential of the digital revolution for scholarly publishing has not yet been fully realized, notably in relation to the expanding range of increasingly important research outcomes such as datasets and software.

Scholarly publishing should support essential principles of academic freedom, research integrity and scientific excellence. Accessibility and reusability of research results and the scientific practices for reproducibility, transparency, sharing and collaboration, are important means for achieving a publishing system resilient to the challenges of our modern and digitalised societies.

Ensuring quality and supporting diversity in scholarly publishing

The current system of scholarly publishing includes a diversity of practices and models across disciplines, where research results are being published by

both for-profit and not-for-profit organisations with a variety of financial models, of which many do not entail any fees or costs for authors.

Scholarly publishing is still the primary means of disseminating new research and scientific knowledge. Rigorous peer review is essential to scholarly publishing, with researchers taking responsibility for peer review and providing expert advice in editorial boards. Quality-assured publications and good publication practices build and maintain trust and give recognition to researchers and research institutions. At the same time, questionable research and publishing practices, obstacles to reproducibility and transparency in science threatens research integrity, pose negative impact on the quality and reliability of research and risk weakening trust in science in society at large.

Questions for the exchange of views

In the light of the above, ministers are invited to give their views on the following questions

1. Making scholarly publications rapidly accessible to all contributes to high quality research. It strengthens the use and impact of research in society at large, increases competitiveness, and supports innovation in the public and private sectors. Providing immediate open access to peer reviewed research publications under open licenses should be the default. What do you see as main challenges to achieve this goal?
2. Rigorous peer review, transparency of research processes, accessibility to, and the reuse and reproducibility of research results are essential to excellent science, in line with open science principles. What do you see as main challenges to ensure excellence with open science as the norm, and what actions at national and EU level should be taken to support researchers in their endeavours?
3. In the current system for scholarly publishing, the increasing costs for scholarly publishing associated with certain business models may cause inequality in the scientific communities and may also become unsustainable for public research funders and institutions accountable for the spending of public funds. What measures have already been taken and what other shared actions could be taken at national or European level to avoid situations where researchers, due to financial capacities rather than quality criteria, are limited in their choice of

publication channels, and where they, as well as the broader public, due to paywalls, are locked out from accessing research publications?