

This essay is part of a series essays dedicated to Open Data Day, in which we highlight the added value of different open data initiatives.

Open access and open data alone are not enough

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Open access to scientific articles (*open access*) and research data (*open data*) have been important pillars in making scientific knowledge more widely accessible for years. However, researchers often still use closed, paid systems (such as Scopus and Web of Science) to search articles and data, which are inaccessible to people outside scientific institutions.

This is because information on scientific research is often not openly available, at least not in a structured way. This includes, for example, titles and abstracts of articles and the journals in which they are published, descriptions of datasets, information about funding and grants, and information about organizations and researchers. This type of information is also known as *metadata*.

This information often comes from academic publishers, who *can* make metadata openly available (for example via [Crossref](#)), but [in many cases choose not to do this](#). Often, publishers do make these data available to providers of commercial search engines, who can thus maintain an important position: universities pay a lot of money to give their employees access to these systems.

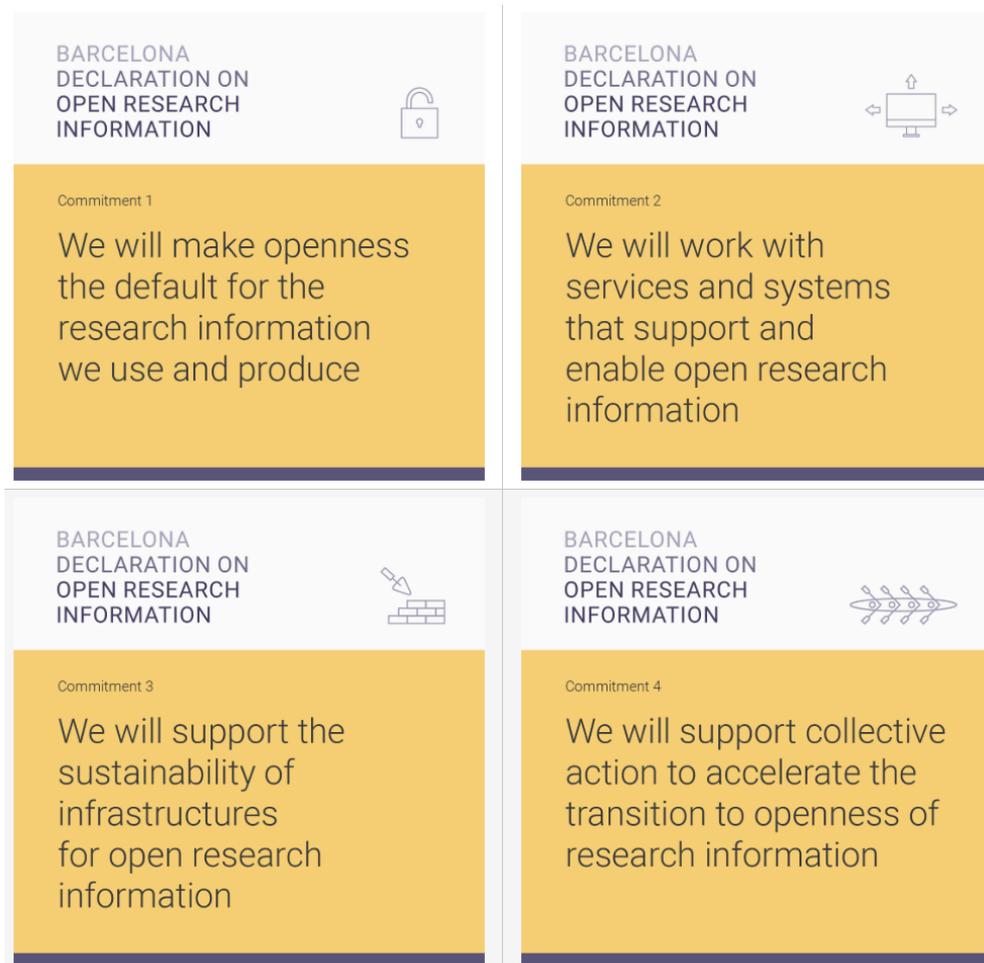
Consequences of closed research information

Research information locked away in commercial systems doesn't just affect researchers (and people outside the academic community) seeking the latest scientific insights. Universities and other research institutions also use these systems to maintain an overview of articles, datasets, and other research output produced at the institution, and to inform decisions about hiring and promotion. The same systems are used by funders in decision making around awarding grants, and to find reviewers for evaluating grant applications.

The lack of open research information causes several fundamental problems. First, it limits the transparency in science, for example, insights is what research is funded by whom. Second, commercial databases are often selective: non-English literature, literature from non-Western countries, and in social sciences and humanities is often underrepresented. Third, the lack of open metadata hinders the development of alternatives to closed commercial databases and innovative new tools for searching and analyzing the scientific literature – which maintains the *status quo*.

Barcelona Declaration on Open Research Information

The [Barcelona Declaration on Open Research Information](#) was launched in 2024 as an initiative to encourage research institutions and research funders to actively contribute to the open availability of research information. The Declaration calls on organizations to (1) make openness of research information the norm, (2) work with services and systems that support and enable open research information, (3) support the sustainability of infrastructures for open research information, and (4) work together to realize the transition from closed to open research information.



The Barcelona Declaration has now been signed by more than 130 research institutions and research funders worldwide. More than 50 organizations offering infrastructure, data, and services related to open research information have joined the Barcelona Declaration as supporters.

In the Netherlands, six universities have signed the Barcelona Declaration (Delft, Leiden, Groningen, Utrecht, Vrije Universiteit Amsterdam and the University of Amsterdam), as have the national research funders NWO and ZonMw and the Taskforce for Applied Research (Regieorgaan SIA).

The Barcelona Declaration has also been signed by the umbrella organizations Universities of the Netherlands (UNL), the Association of Universities of Applied Sciences (VH), SURF, the Netherlands Reproducibility Network (NLRN), and the Digital Competence Center for Practice-Oriented Research (DCC-PO). Other organizations in the Netherlands that have signed the Barcelona Declaration are the National Library of the Netherlands (KB) and the Netherlands eScience Center.



Concrete actions

Signatories and supporters of the Barcelona Declaration are collaborating in working groups on specific types of research information, such as journal article metadata and research funding information, and on shared questions about open research information, such as:

- What does it mean for an institution to switch from closed to open systems for research information?
- What is the current coverage and quality of search engines that are based on open research information?
- How can institutions collaborate to financially support open research information systems?

One of the actions taken by the Barcelona Declaration working groups is to include conditions regarding open metadata in negotiations with academic publishers regarding reading rights and open access publishing. This could significantly improve the open availability of open metadata.

Within the Netherlands, signatories of the Barcelona Declaration have united in the [Netherlands Barcelona Declaration Network](#). They share experiences and expertise in the field of open research information. A number of institutions in the Netherlands terminated contracts for closed databases such as Web of Science or Scopus in 2025, and open research information has become the standard in various evaluation and monitoring processes. The national research funding body NWO developed a [public API](#) to provide programmatic access to information on approved research applications.

At the national level, the universities jointly developed a strategic plan for integrated infrastructure for open science ([SPII](#)), including infrastructure for research information. Open Science NL is [financing a number of projects](#) for infrastructure for open research information in the Netherlands, including [open metadata for open access books](#), a [Dutch hub for open research information](#), and the [strengthening of institutional repositories](#). In addition, SURF and DCC-PO are developing an [open, modular infrastructure](#) for registering, managing, and sharing research information for the universities of applied science.

The future

There are already many providers of open research information and providers of services based on open research information - for example [OpenAlex](#), [OpenAIRE](#), [OpenCitatons](#) and [WikiCite](#) (a [WikiData](#) project). The

more research institutions, research funders, and societal partners choose to use such open sources instead of closed databases, and support these open sources financially where possible, the stronger the open research information ecosystem will become. This also contributes to independence from commercial providers and "big tech." At the national level, this can be further strengthened by developing national infrastructure for open research information.

The Barcelona Declaration aims to support and stimulate these developments to bring about change at technical, operational and strategic levels.

Politics also plays a role in this. In the previous period of government, a [motion](#) was requesting the government "to ensure that publicly funded educational and research institutions use open metadata as standard practice and that metadata applications and information systems from private providers are phased out." The motion was defeated by a narrow margin of three votes, but indicates that developments regarding open research information fit well within the broader political discussion on digital autonomy.