BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION

Bianca Kramer, Sesame Open Science

GraspOS Community of Practice meeting



https://tinyurl.com/20241113-bd-graspos

13 November 2024



Open research information

Why is it important?

Research information

- Research information: (bibliographic) metadata including funding information and information on use and impact
- Used in decision making around strategic priorities, distribution of resources, and evaluation of researchers and institutions
- Used to assess the effect of policies (funders, institutions, government)
- Used by researchers and societal stakeholders to find and assess research results

Research information must be open

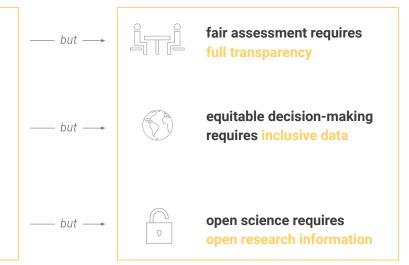
Closed research information

We are assessing researchers and institutions based on **non-transparent evidence**...

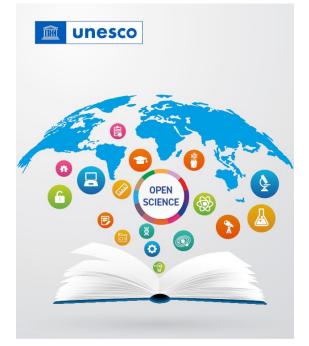
We are making decisions based on information that is **biased against less privileged languages, geographical regions, and research agendas**...

We are monitoring and incentivizing open science using **closed data**...

Open research information



UNESCO Recommendation on Open Science



UNESCO Recommendation on Open Science "The monitoring of open science should be explicitly kept under public oversight, including the scientific community, and whenever possible supported by **open non-proprietary and transparent infrastructures**"

Coalition for Advancing Research Assessment



BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION "Ensure independence and transparency of the data, infrastructure and criteria necessary for research assessment and for determining research impacts"



Barcelona Declaration

barcelona-declaration.org

Barcelona Declaration

- To draft the Barcelona Declaration on Open Research Information, a workshop was organized in Barcelona in November 2023, hosted by SIRIS Foundation
- Over 25 research information experts, representing organizations that carry out, fund, and evaluate research, as well as open infrastructure organizations, participated in the workshop
- Preparation of the Declaration was coordinated by Bianca Kramer (Sesame Open Science), Cameron Neylon (Curtin Open Knowledge Initiative, Curtin University), and Ludo Waltman (Centre for Science and Technology Studies, Leiden University)
- Declaration was published in April 2024

As organizations that carry out, fund, and evaluate research, we commit to the following:



We will make openness the default for the research information we use and produce



We will work with services and systems that support and enable open research information

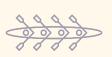
As organizations that carry out, fund, and evaluate research, we commit to the following:



3

4

We will support the sustainability of infrastructures for open research information



We will support collective action to accelerate the transition to openness of research information

Barcelona Declaration - Signatories



Signatories and supporters

• As of today, the Barcelona Declaration has been **formally signed by 94 organizations in 24 countries**; among others, signatories include universities and other research institutions, research funders, and governments



Signatories and supporters

- As of today, the Barcelona Declaration has been **formally signed by 95 organizations in 24 countries**; among others, signatories include universities and other research institutions, research funders, and governments
- In addition, **47 organizations** providing data, services and infrastructure are **formal supporters** of the Declaration
- Many organizations have not yet signed the Declaration but have expressed an **interest in contributing to the transition to open research information**

What are the next steps?

How do we make sure the transition to open research information is truly going to happen?

Paris Conference

September 23-24, 2024 Sorbonne University

130 participants (on site and online)



Report of the Paris Conference on Open Research Information

September 23-24 2024, Sorbonne University, Paris

November 8, 2024 / https://doi.org/10.5281/zenodo.14054244

Paris conference

• Share information and experiences around adoption of open research information and implementation of the commitments

https://zenodo.org/communities/paris_conference_ori_2024

• **Develop a joint road map** of next steps that need coordination and collaboration between signatories and supporters.

https://doi.org/10.5281/zenodo.14054244

Collective actions - joint roadmap

- Journal article medata
- IR / preprint / data repository metadata
- Funding metadata
- Replacing closed systems
- Sustainability of infrastructures
- Evaluating open data sources
- Evidence of benefits

- Working groups, coordinated by signatory organizations
- → Concrete outcomes over 6-24 months
- Collaboration between signatories and supporters

Collective actions - joint roadmap

Things we don't know. How much money? Who is doing this? How?

How does it all fit? Where are the gaps and challenges? What works and where? What can we agree to do together? Where are the places for collective action? How do we deliver change? How do we test progress and hold each other accountable?

Information	Frameworks	Principles &	Implementation
Gathering	& Analysis	Guidelines	& Monitoring
 Surveys Case studies Sharing experiences 	 Develop Populate Quantitative and landscape analysis 	 Develop Shared Commitment Plans for implementation 	 Deliver Monitor Critique, test and refine



Open Science

Sorbonne University unsubscribes from the Web of Science

Sorbonne University has been deeply committed to the promotion and the development of open science for many years. According to its commitment to open research information, it has decided to discontinue its subscription to the Web of Science publication database and Clarivate bibliometric tools in 2024. By resolutely abandoning the use of proprietary bibliometric products, it is opening the way for open, free and participative tools.

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION



Introducing the Leiden Ranking Open Edition

🛗 January 30, 2024 • 🧧 CWTS development • 🏷 8 min read

This post introduces the Open Edition of the CWTS Leiden Ranking, published today by CWTS in collaboration with the Curtin Open Knowledge Initiative, Sesame Open Science, and OurResearch. The Leiden Ranking Open Edition is the first fully transparent university ranking.

Examples



Examples





Supply of Article Metadata upon publication

- (a) The Publisher shall use reasonable endeavours to, within 10 Working <u>Days</u> of publication of each Green or Gold Route Articles:
 - (i) register the article's DOI with CrossRef, and inform all coauthors;
 - (ii) where available populate co-authors' institutional affiliation fields on CrossRef http://www.crossref.org/;
 - (iii) where available populate funding metadata, including the funding body grant number in accordance with the Open Funder Registry taxonomy (http://www.crossref.org/fundingdata) in FundRef http://ftp.crossref.org/fundref/index.html and provide same information via its APIs;

Openness of metadata in publisher agreements

Collective actions - joint roadmap

Things we don't know. How much money? Who is doing this? How?

How does it all fit? Where are the gaps and challenges? What works and where? What can we agree to do together? Where are the places for collective action? How do we deliver change? How do we test progress and hold each other accountable?

Information	Frameworks	Principles &	Implementation
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Collective action - what do we have already?

InformationFrameworksPrinciples &ImplementationGathering& AnalysisGuidelines& Monitoring	Talks from Paris Existing EC work UNESCO Open Science Outlook	ExiUN	sting EC work • ESCO Open	POSI/FOREST Limited landscape analysis	 POSI/FOREST FAIR/CARE CoARA OSMI Barcelona 	 Pioneer institut Testing metada completeness ESAC SCOSS InfraFinder (IOI 	ata
 Surveys Case studies Sharing experiences And landscape analysis Develop Develop Develop Develop Develop Shared Shared Shared Commitment Commitment Plans for implementation 	Case studies • Sharing •	CasSha	se studies • aring •	Populate•Quantitative•and landscape•	Shared Commitment Plans for	MonitorCritique, test	



Get involved

How to get involved?

Does your organization want to sign or support the Barcelona Declaration, or do you wish to know more?

→ Send us an email at contact@barcelona-declaration.org

Is your organization interested in participating in one or more working groups, or, as a signatory organization, in coordinating one of the working groups?

→ Fill out this form: https://tinyurl.com/Barcelona-Declaration-WGs by November 30

We aim to set up a meeting with potential working group coordinators in December 2024, and have working groups populated and starting active work in early 2025.

Bologna Meeting on Open Research Information

The **Bologna Meeting on Open Research Information** will take place in Bologna (Italy) on May 28, 2025

The event will be co-organized with the **Workshop on Open Citations and Open Scholarly Metadata**, a biennial international event aimed at researchers, academic publishers, funders, policy makers and supporters of open science interested in adopting practices for the creation, reuse and improvement of open scholarly metadata

The Bologna Meeting on Open Research Information will offer an opportunity to discuss progress on the various issues on **our open research information roadmap**

Keep informed

Follow our updates on the website:

→ barcelona-declaration.org

Follow our social media channels:

- LinkedIn: www.linkedin.com/company/barcelona-declaration/
- → Mastodon: mastodon.social/@BarcelonaDORI
- → X: x.com/BarcelonaDORI

A dedicated communication mailing list is set up for (potential) signatories as well as supporters

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION

www.barcelona-declaration.org

The Barcelona Declaration on Open Research Information was prepared by a group of over 25 research information experts, representing organizations that carry out, fund, and evaluate research, as well as organizations that provide research information infrastructures. The group met in Barcelona in November 2023 in a workshop hosted by SIRIS Foundation. The preparation of the Declaration was coordinated by Bianca Kramer (Sesame Open Science), Cameron Neylon (Curtin Open Knowledge Initiative, Curtin University), and Ludo Waltman (Centre for Science and Technology Studies, Leiden University). Organizations that would like to know more about the Declaration or that wish to sign the Declaration are welcome to reach out to contact@barcelona-declaration.org



Barcelona Declaration

Full commitments

As organizations that carry out, fund, and evaluate research, we commit to the following:

We will make openness the default for the research information we use and produce

- Openness will be the norm for the research information we use, for instance to assess researchers and institutions, to support strategic decision making, and to find relevant research outputs.
- Openness will be the norm for the research information we produce, for instance information about our activities and outputs, with an exception for information for which openness would be inappropriate ('as open as possible, as closed as necessary').

2

We will work with services and systems that support and enable open research information

- For publishing services and platforms, we will require that research information generated in publication processes (e.g., metadata of research articles and other outputs) be made openly available through open scholarly infrastructures, using standard protocols and identifiers where available.
- For systems and platforms for the internal management of research information (e.g., current research information systems), we will require that all relevant research information can be exported and made open, using standard protocols and identifiers where available.

3

We will support the sustainability of infrastructures for open research information

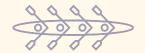
- We take responsibility for supporting infrastructures for open research information, for instance by participating in community building and community governance and by providing fair and equitable contributions to the financial stability and development of these infrastructures.
- We expect the infrastructures that we support to implement good practices for community governance and sustainability (e.g., Principles of Open Scholarly Infrastructure).



4

We will support collective action to accelerate the transition to openness of research information

- We recognize the importance of sharing experiences and coordinating action to promote a system-wide transition from closed to open research information.
- To facilitate this, we support establishing a Coalition for Open Research Information and strengthening collaboration with other related initiatives and organizations.





Joint roadmap

Topics and actions

1. Journal article metadata

- Develop a **framework for open publication metadata** (incl. for books) including a list of the most important metadata elements for journal articles and books.
- Organize a **gap analysis** based on the developed framework
- Develop **principles for community control** over publication metadata (incl. for books)
- Demand in **future negotiations with publishers** the deposition of comprehensive metadata to infrastructure providers (e.g., Crossref, DataCite), preferably using PIDs, and monitor delivery
- Create **affordable ways for poorly-resourced publishers to start using PIDs** (e.g. DOIs) and to start making metadata openly available

2. Metadata in IR, data en preprint repositories

- Share **experiences of giving credit to authors and other staff members** for sharing data/code and improving metadata quality
- Draft guidelines to create and use linked research objects
- Propose **guidelines about human resources** to dedicate to metadata validation/moderation in IRs
- Pilot **implementing a machine-learning pipeline** to detect datasets and software from full-text.

3. Funding metadata

- Organize a **workshop with vendors, publishers and funders** to discuss the **minimum requirements for how the submission system** should support the registration of grant metadata and the progression through the system to registration.
- **Expanding the use of existing systems for metadata management** amongst a wider and more geographically distributed group of funders.
- Produce a set of resources to show how funders are making grant metadata available for advocacy and for improving the use of standards

4. Replacing closed systems

- Develop and distribute a survey, to make an **inventory of user stories**, and all Barcelona Declaration signatory organizations will have the results ready
- Create guidelines that **prioritize research outputs with persistent identifiers** (handle or not handle), encouraging any indexing service to have equal access to these products.
- Set a minimum quality standard for data submitted to PIDs' operators.
- Scientometrics and relevant management teams at signatory organizations have access to required training to support the active use of open research information. Monitor uptake and usage of resources.
- Identify at least 20 organizations that are willing to sign a statement to unsubscribe from the closed data sources.
- **Include currently missing provenance information** in Open Research Information Resources (e.g., source of data, whether it has been reviewed/curated) and make filters available for users.

5. Sustaining infrastructures

- Information sharing on how open research infrastructures and resources are supported yearly
- Survey of signatories to know how much is spent on proprietary tools and resources
- **Produce a model & guidelines** of what they need , want and expect from open research information infrastructure -> how it can translate to supporting
- Adopt and agree on a model guideline of required open research information services/systems
- **Contribute to an endowment pool** over a ten year period with a governance entity that could support infrastructure sustainability
- **Commit to redirecting funding saved** from cancellation of closed services to directly support open infrastructure providers rather than returning savings to institutional overhead

6. Evaluating open data sources

- Agree on a **set of criteria for open research information sources** with a focus on minimal requirements that support adoption
- Develop a **set of reporting guidelines** for evaluations
- Support projects for **developing evaluation tools and methods**
- Implement evaluation tools and methods in a **monitoring framework**

7. Evidence of benefits

- Collect case studies of use of signatories' open research information by the public
- Produce a stakeholder map and a taxonomy of benefits
- Map costs, inequities and other undesirable effects of closed systems
- Engage with journal editors to launch an open call for a **special issue about the benefits of open research information**
- Identify, develop and implement actions to **improve multilingual metadata and other forms of bibliodiversity.**