

Munin Conference

on Scholarly Publishing

Panel discussion

Strategies for publishers to make scholarly metadata
openly available



18 November 2025

<https://doi.org/10.7557/5.8155>

Colleen Campbell

OA2020

Anne Gentil-Beccot

SCOAP3 / CERN

Dominic Mitchell

DOAJ

Mike Nason

PKP

Bianca Kramer

Barcelona Declaration on Open Research Information



Munin
Conference
on Scholarly Publishing

Bianca Kramer

Barcelona Declaration on Open Research Information



Open scholarly metadata

Why is it important?

Research information

- Research information: (bibliographic) metadata - including funding information and information on use and impact.



Bibliographic metadata



Metadata on research software, research data, samples, and instruments



Information on funding and grants



Information on organizations and research contributors

Research information

- 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**...

— but —>



fair assessment requires full transparency

— but —>



equitable decision-making requires inclusive data

— but —>



open science requires open research information

Barcelona Declaration

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

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION



Commitment 1

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

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION



Commitment 2

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

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION



Commitment 3

We will support the sustainability of infrastructures for open research information

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION



Commitment 4

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

Publisher metadata in Crossref

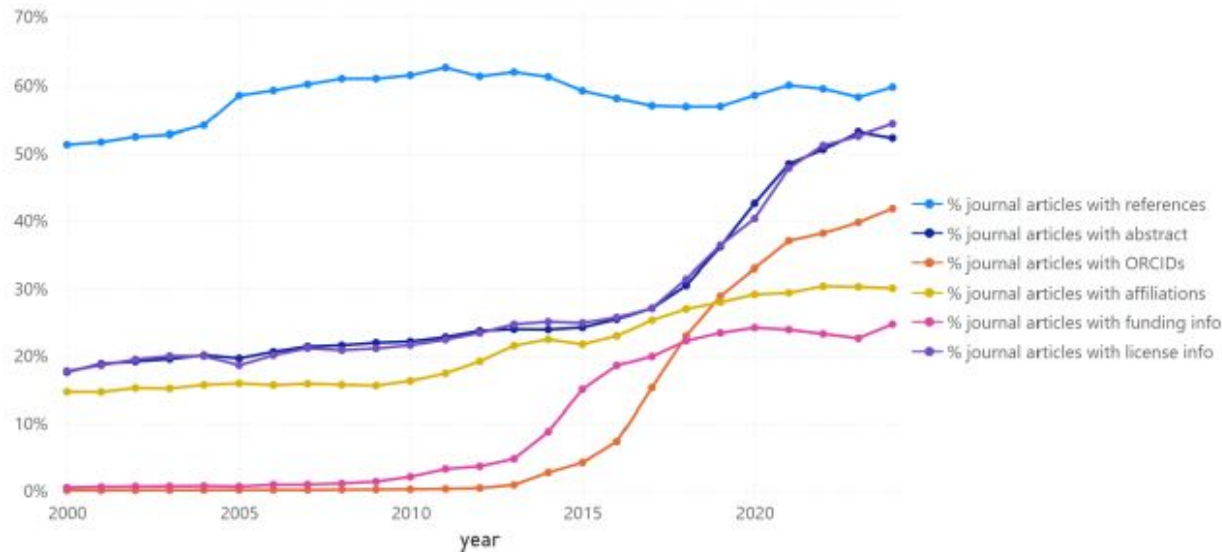
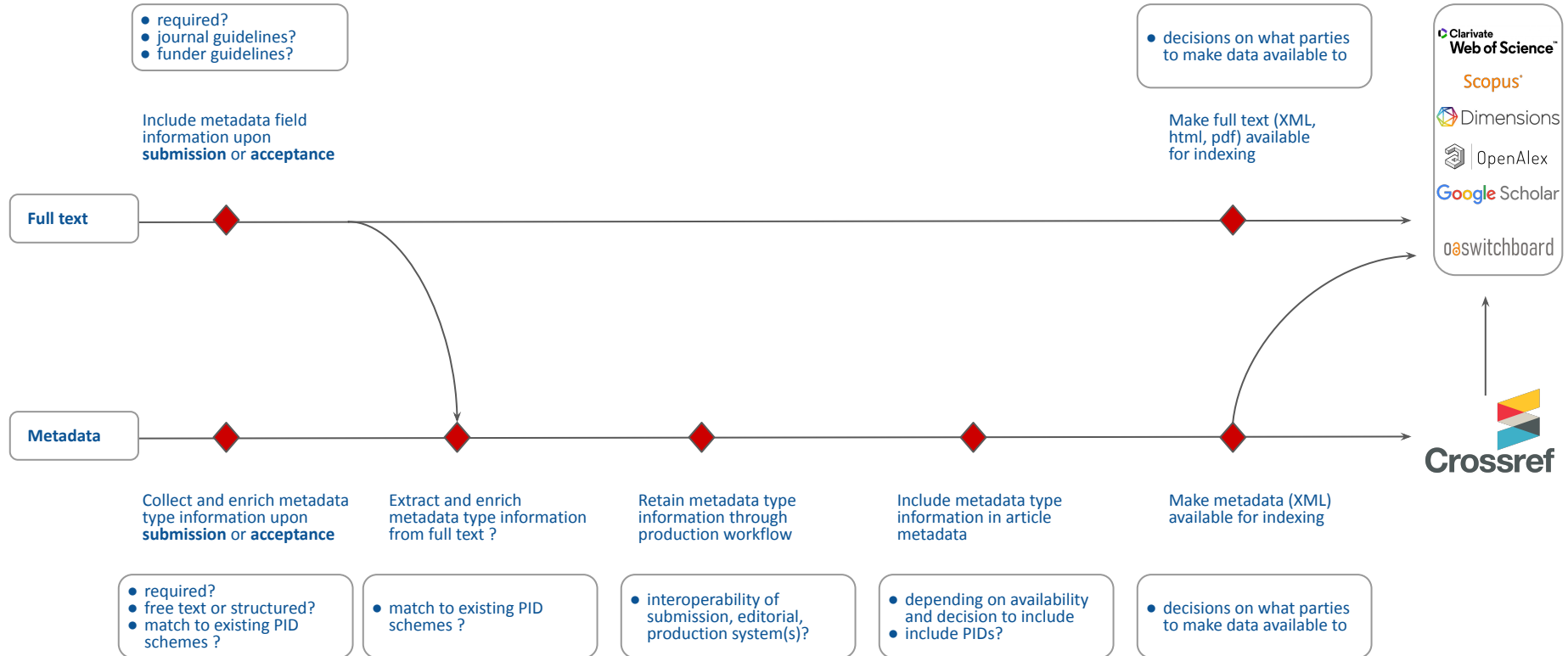
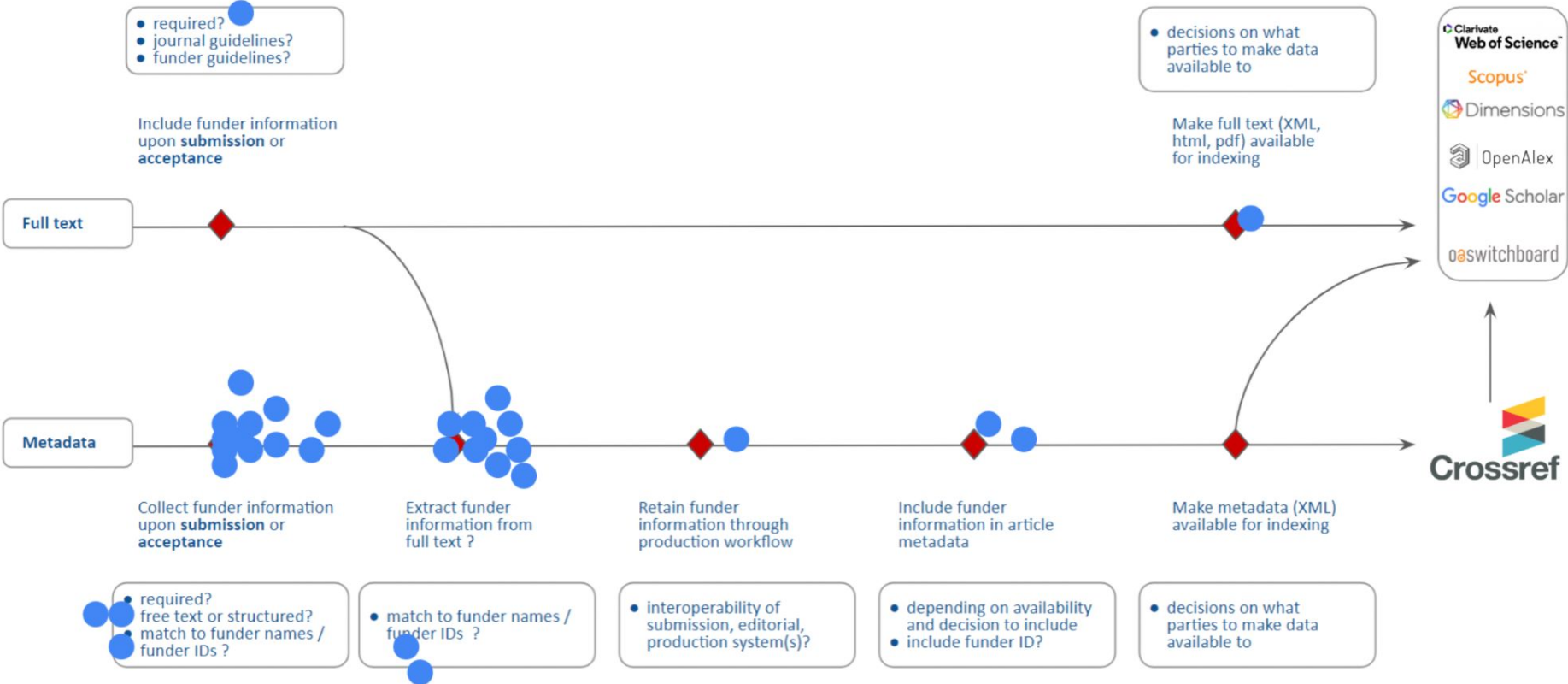


Figure 2. Availability of different metadata elements for journal articles in Crossref.

Publisher metadata workflows



Publisher metadata workflows



Making publication metadata openly available

Support change at **technical, operational** and **strategic** levels

- Including open metadata in publisher negotiations
- Open metadata as part of open science practices
- Supporting technical capacity and community uptake
- Connecting metadata practices (among systems and geographies)



Munin Conference

on Scholarly Publishing

Colleen Campbell

OA2020

Dominic Mitchell

DOAJ

Anne Gentil-Beccot

SCOAP3 / CERN

Mike Nason

PKP



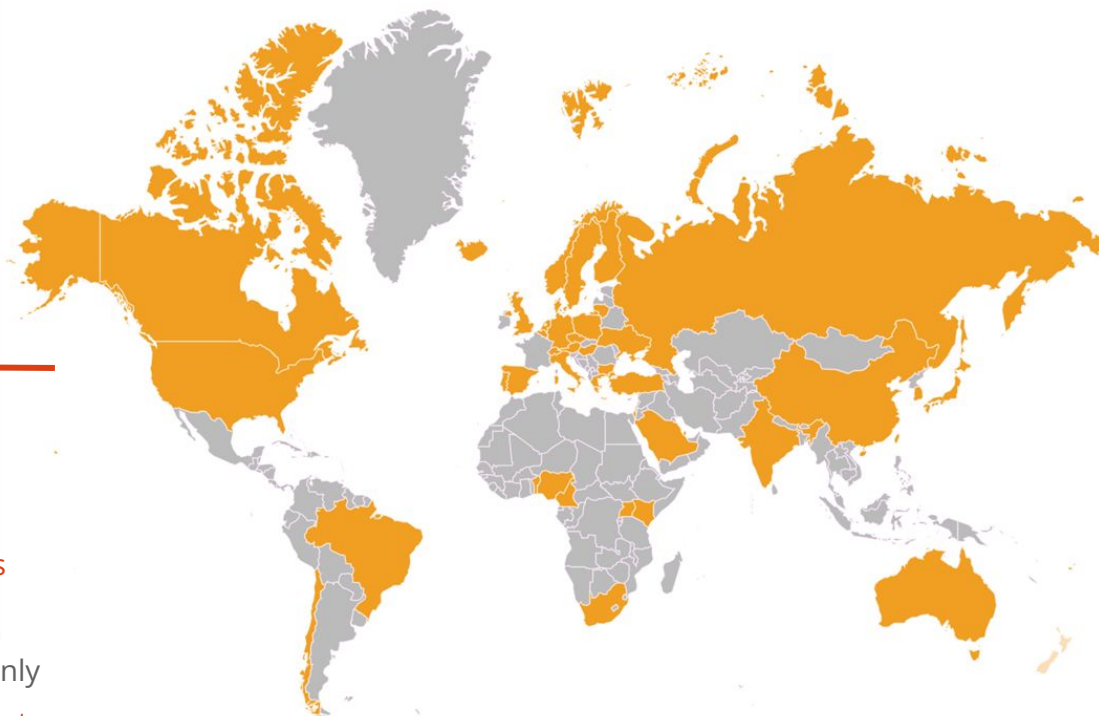
Munin
Conference
on Scholarly Publishing

Colleen Campbell

OA2020

OA2020

As a **global alliance** of library leaders, our mission is to give all researchers the **means and opportunity** to publish their work openly in the **journals they trust**



We negotiate agreements that **realign institutional investments** and **publishing practices** around **open access**—taking concrete steps to make research **open, transparent, and sustainable**, and laying the groundwork for **continued innovation**.

Libraries advancing openness through publisher negotiations

Research article output of Norway by publisher (top 20) based on corresponding authorship



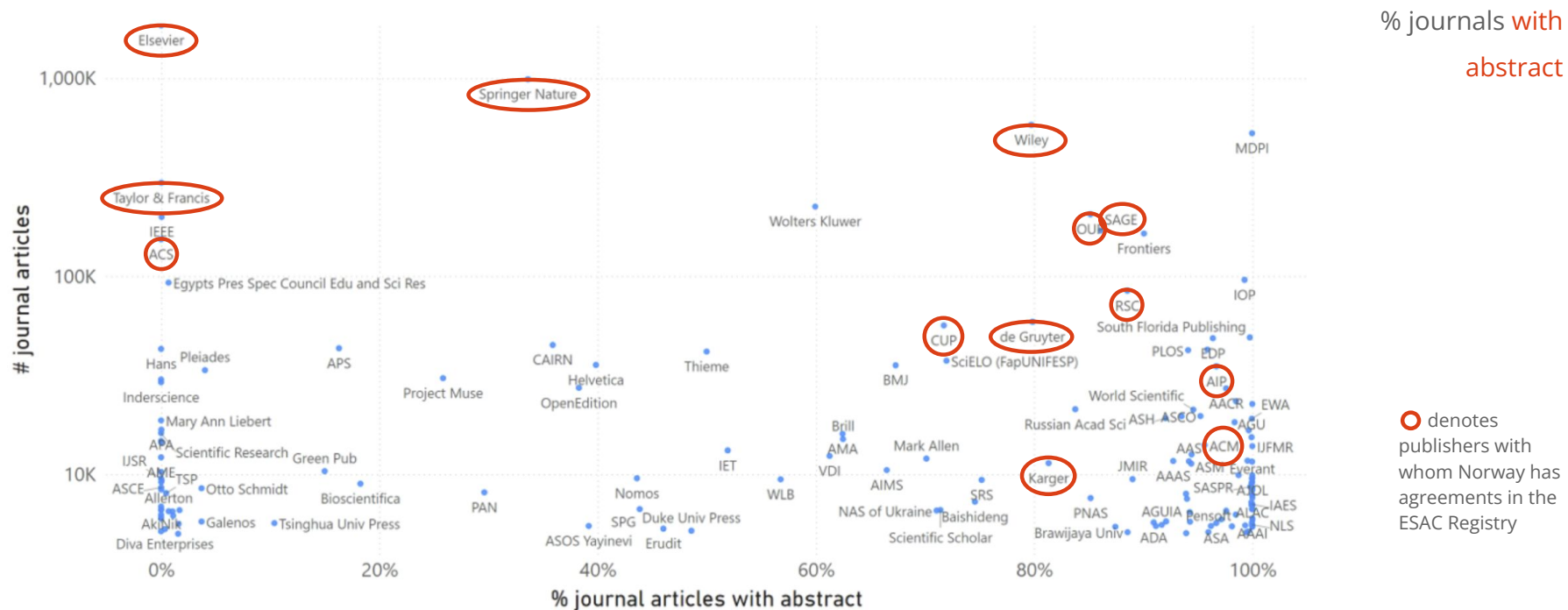
Estimated ratios of articles published immediately OA through TAs, in fully OA journals, and behind subscription paywalls



Source: <https://esac-initiative.org/market-watch/>

Libraries advancing openness

Next frontier in publisher negotiations



Number of journal articles of a publisher in 2023 and 2024 and percentage of journal articles with an abstract
 Source: <https://doi.org/10.5281/zenodo.14931176>

Barcelona Declaration–OA2020 Joint Task Force

Negotiating openness of publication metadata

Joint effort

- BD Working Group on Journal Article and Book Metadata
- OA2020 Working Group on Transparency to Steward the OA Transition
- Ludo Waltman,

Initial focus

- Increase transparency in publishing metadata by developing practical strategies for libraries and consortia engaged in negotiations with scholarly publishers to advance the implementation of open metadata through:
 - Developing a share negotiation framework and model clauses
 - Creating practical tools and templates to support implementation
 - Piloting and refining these approaches in real-world settings
 - Promoting awareness and building capacity across the community



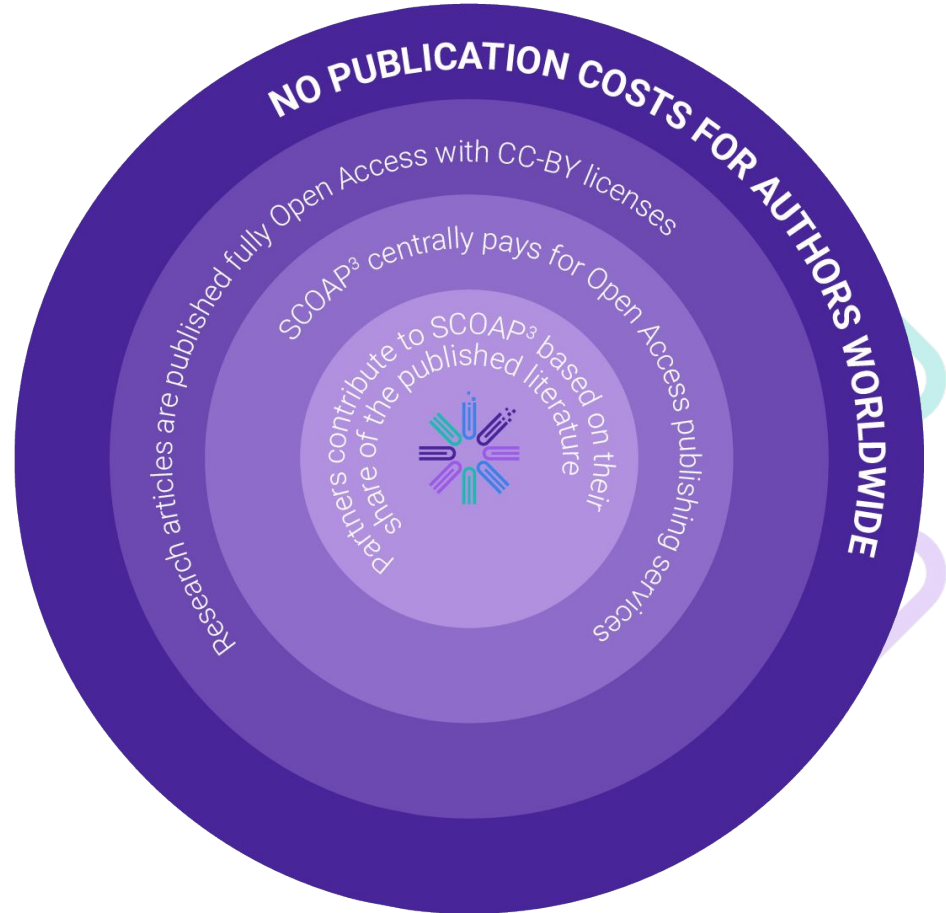
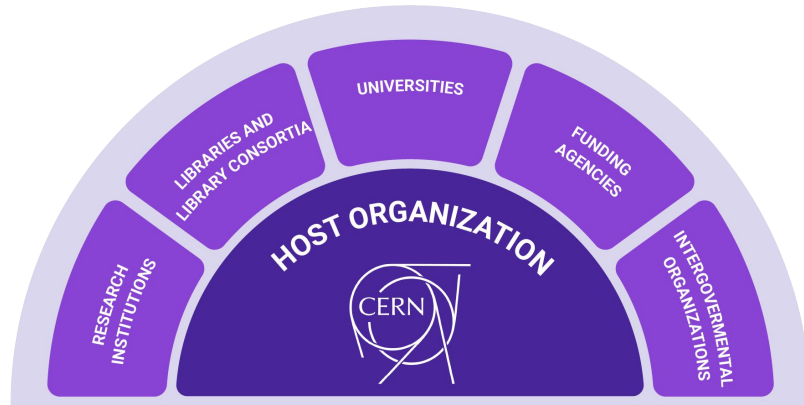
Munin
Conference
on Scholarly Publishing

Anne Gentil-Beccot










SCOAP³ / CERN Open Science

SCOAP³ Collaboration

SCOAP³ centrally supports Open Access to research in high-energy physics, enabling free publishing global access, and re-use.



78,000+ articles funded (90+ % of all HEP)

Publisher	Journal
 Joined in 2018	Physical Review C
	Physical Review D
	Physical Review Letters
 ELSEVIER	Nuclear Physics B
	Physics Letters B
WILEY	Advances in High Energy Physics
 until 2017	Chinese Physics C
	New Journal of Physics
	Journal of Cosmoslogy and Astroparticle Physics
 JAGELLONIAN UNIVERSITY IN KRAKOW	Acta Physica Polonica B
 OXFORD UNIVERSITY PRESS  JPS	Progress of Theoretical and Experimental Physics
 Springer  	European Physical Journal C
	Journal of High Energy Physics


Phase 4 of SCOAP³ (2025-2027): from Open Access to Open Science

- In 2025, new mechanism to financially incentivize publishers on delivery of Open Science Elements that situate publications in HEP more readily for OS future
 - Pioneering OS elements leading to better service quality and innovative compensation mechanism
 - Based on comparative scoring performance with other SCOAP³ publishers
 - Adjustment of financial compensation to publishers
- **Process:**
 - Collect data (SCOAP³ repository and CrossRef, information provided by publishers)
 - Evaluate the data (by SCOAP³ team)
 - Share the data and results with publishers for validation
 - Calculate the final score and adjustment factors
 - Adjust financial arrangement for the respective year

Open Science Elements

Incentivise publishers to improve:


- Persistent identifiers
- Metadata quality
- Innovative Open Science practices
- Accessibility
- Transparency

Open Science Element
ORCID integration
ROR integration
Dataset linking
Software linking
Open/public peer review
Depositing of detailed metadata to 
Excellence in accessibility
Disclosure on SCOAP ³ community values
Total

SCOAP³ community values

- Data Privacy
- Diversity, Equity and Inclusion
- Financial Transparency
- Publication Transparency
- Referee Recognition/ Compensation
- Sustainability

Results 2025

Open Science Element	Max. Points in 2025	Average Points
ORCID integration	5.00	2.63
ROR integration	2.00	1.68
Dataset linking	2.00	1.97
Software linking	2.00	1.97
Open/public peer review	1.00	0
Depositing of detailed metadata to  Crossref	6.00	2.17
Excellence in accessibility	4.00	1.98
Disclosure on SCOAP ³ community values	3.00	3.00
Total	25.00	15.41

- Dialogue with publishers important
- Overall objective create incentives to develop Open Science practices across the portfolio
- Next evaluation: January 2026

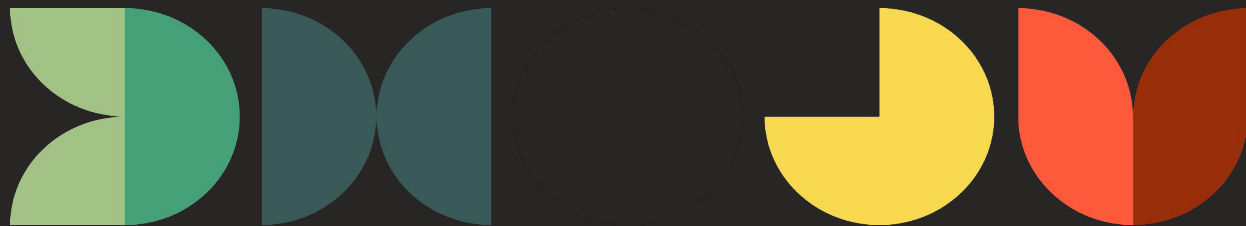
Complete results on
<http://scoap3.org>



Munin
Conference
on Scholarly Publishing

Dominic Mitchell

DOAJ



22,218

journals

140

countries

91

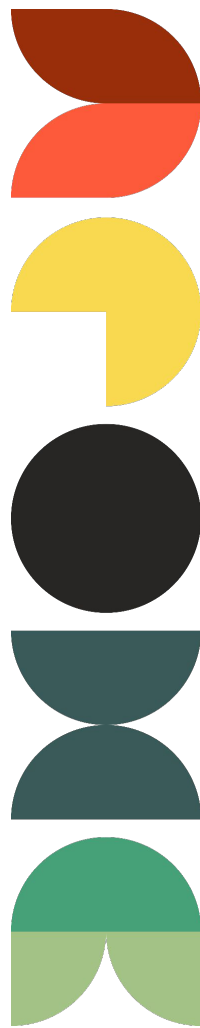
languages



Data collected 18th November 2025

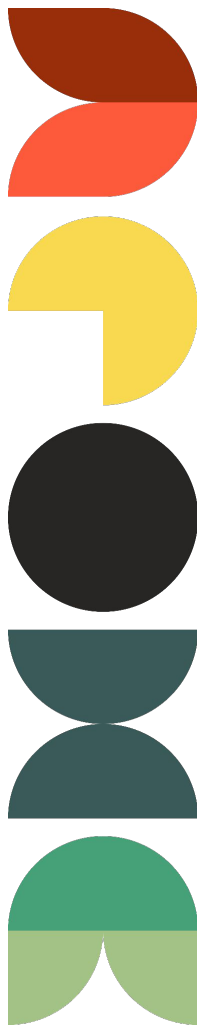
DOAJ: keeping the technical barrier low

- Long tail of very small publishers, with a varied range of technical abilities and access to resources
 - 49.3% of the 22,218 journals in DOAJ are single journal accounts
- To encourage greater provision of metadata, we:
 - keep technical barriers low and requirements to a minimum
 - Provide 4 different routes to upload metadata
 - have no requirements around frequency



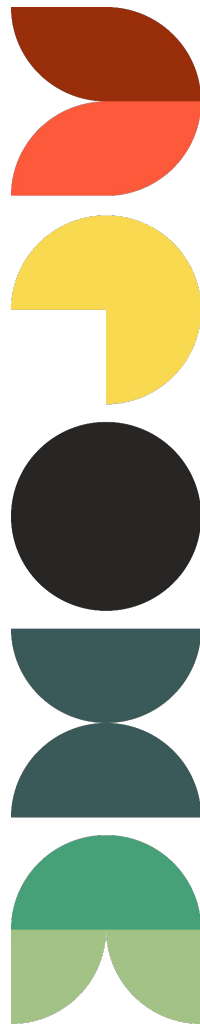
DOAJ: and yet...

- 18% have never loaded any articles to us.
 - 23% have uploaded less than 30 articles.
 - 27% have uploaded less than 50 articles
- 34% of journals haven't sent us any article metadata in the last 24 months.



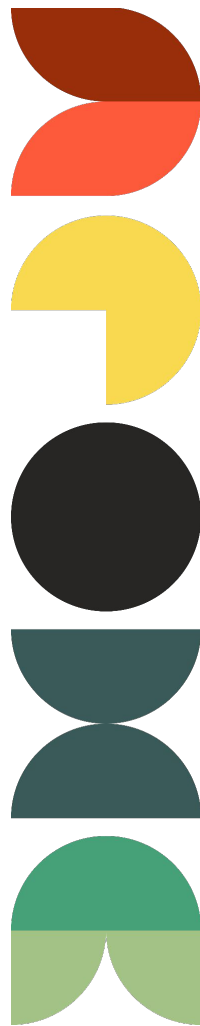
DOAJ: but there is progress...

- Use of PIDs, especially DOIs, has grown exponentially with the number of journals indexed in DOAJ
 - 2013: 55% no use of DOIs
 - 2018: 25% no use of DOIs
 - 2025: 18% no use of DOIs
- Only 17% of all journals indexed don't use any PIDs at all



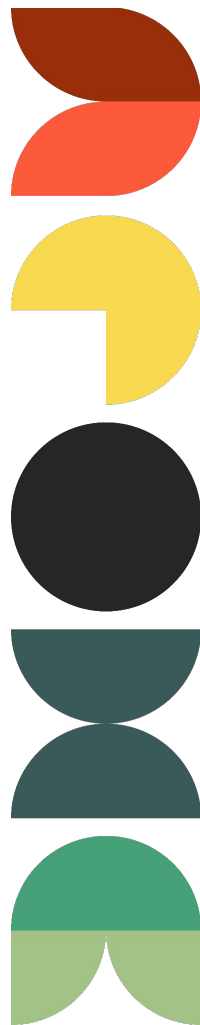
BD Working Group: supporting poorly resourced publishers

- Adam Buttrick (**California Digital Library**)
- Ahmed Moustafa (**Knowledge E**)
- Andrea Mora (**Universidad Nacional**)
- André Luiz Appel (**IBICT**)
- Dom Mitchell (**DOAJ**)
- John Kunze (**ARK Alliance**)
- Ludo Waltman (**CWTS Leiden**)
- Paola Galimberti (**University of Milan**)
- Piero Grandesso (**University of Bologna**)
- Sara Bowman (**Crossref**)
- Susan Veldsman (**ASSAF**)
- Toby Steiner (**Thoth Open Metadata**)
- Vincas Grigas (**Vilnius University**)



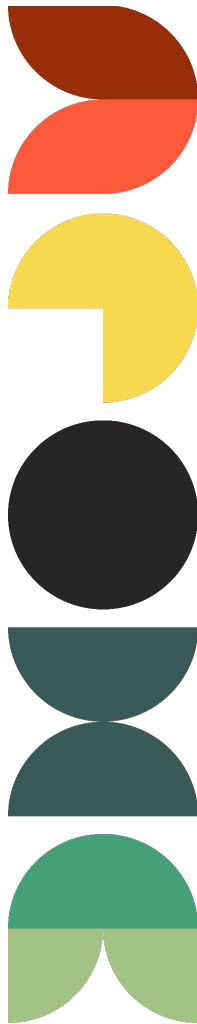
BD Working Group: supporting poorly resourced publishers

- Using our collective experience, produce concrete outputs:
 - EG: build awareness through training and knowledge sharing
 - EG create a list of mandatory and optional metadata
- We must be mindful of
 - our social and cultural subconscious biases
 - different scholarship outputs—books, journals, preprints—have different requirements reflected in the metadata
- Involve our communities



Working group: Supporting poorly resourced publishers

- Don't reinvent the wheel: there are already many great resources out there that have looked at metadata in some detail, eg [Metadata2020](#), or [EDCH Toolsuite](#).
- Results of literature review expected end January 2026
- Outcomes from that work expected in June 2026
- Further deliverables expected at end of 2026
 - Training materials
 - Definitive list of required and desirable metadata





Munin
Conference
on Scholarly Publishing

Mike Nason

PKP

About PKP //

The **Public Knowledge Project** is a software development and research facility at Simon Fraser University.

- We conduct research into issues impacting scholarly communication.
- We develop free and open source software (FOSS) towards a more diverse, inclusive, and accessible model for scholarly publishing.



Our Mission //

Since 1998, PKP's mission has been to research, develop, and support open infrastructure to increase the quality, diversity, and reach of scholarly publishing.

PKP software is developed, maintained, and sustained by a global community of developers, users, translators, financial contributors, and strategic partners.

Our Software //

The Public Knowledge Project develops these three platforms used around the world for scholar-led, community driven publishing of journals, preprints, and monographs.

OJS

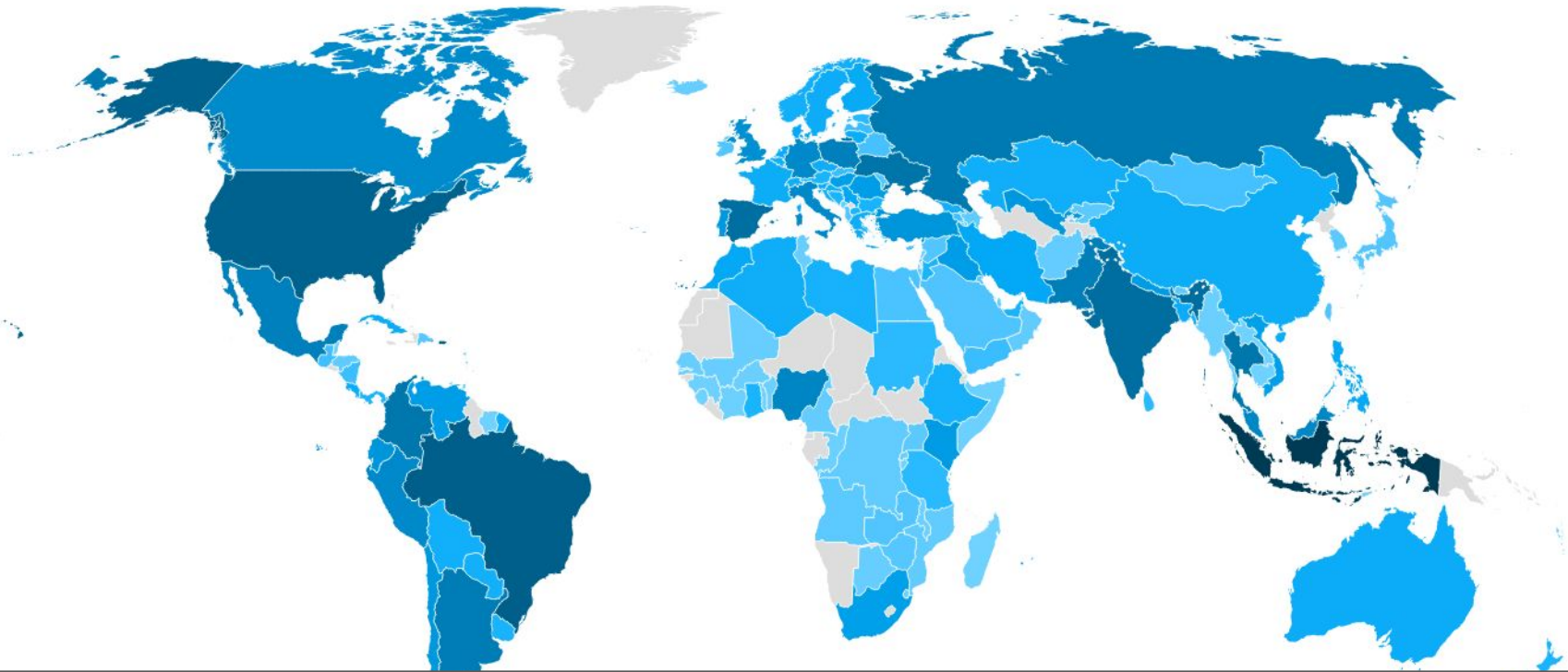
Open
Journal
Systems

OPS

Open
Preprint
Systems


OMP

Open
Monograph
Press



Global use of OJS

- 55,000+ active journals world-wide
- publishing across 150 countries
- journals publishing in 60 languages

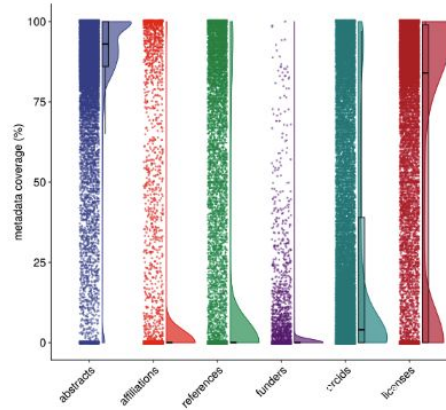


The thing about facilitating an open science revolution where researchers take back control of their work is that you also have to abandon some of your own control over what they will do.

OJS lets users *do a lot of things*. What's more difficult is steering them towards tasks tedious, responsible, or underappreciated (metadata is all three).

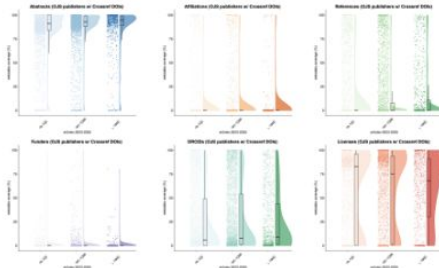
Metadata coverage for OJS journals using Crossref DOIs

Distribution of metadata coverage in Crossref by OJS journal, for selected metadata types



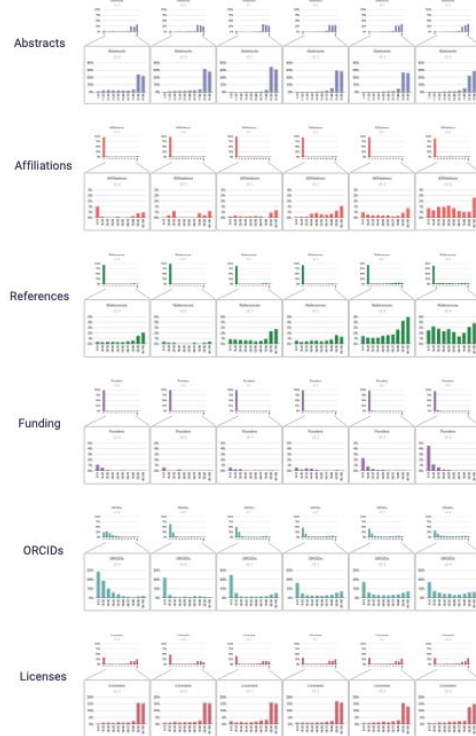
Metadata coverage by publisher size

Distribution of metadata coverage in Crossref by publisher, for different publisher sizes by number of articles 2023-2025




Metadata coverage by OJS version

Histograms showing proportions of journals with specific metadata coverage, for selected metadata types. Full histograms (top) and histograms excluding 0% and 100% coverage (bottom).



Some of you are well versed! (Hi, Bianca)

Kramer, B., & Neylon, C. (2025). Metadata coverage and completeness of OJS journals in Crossref. Crafting the Future of Diamond Open Access - Technical | Social | Political Perspectives of Scholarly Publishing (Craft-OA conference), Göttingen, Germany. Zenodo. <https://doi.org/10.5281/zenodo.17229173>




A big reason we can even talk about the quality of OJS metadata at scale is because the indexing and discovery tools are finally exposing the rough spots for us. As more journals use DOIs or enable ingest into OpenAire... as we look to tools like OpenAlex or slam the Crossref API with big greedy queries, we can finally see where we missed a few spots while painting the mural.

Challenges //

- User literacy (both for publishing *and* the software).
- Balancing *ease of use* with the **complexity** of publishing.
- A diverse user-base running *a wildly divergent* install base that could span any number of patches/releases.
- Facilitating better indexing and discoverability for journals not yet using DOIs.
- Making sure the value of metadata is understood by users and that we're asking them for it in sensible ways.

Meeting those Challenges //


- In our draft prioritization documentation for 3.6 and 3.7, *over half of the big items* are related to metadata.
- We fully refactored DOI registration for 3.4, and we've recently **partnered with Crossref** to work not just on pushing better and more exacting metadata *to Crossref* but also to create more resources to facilitate software upgrades. A lot of metadata issues are more easily solved in newer versions of OJS.



But, we can also put our thumbs on the scale a little more. Rethinking some approaches to default OJS settings, putting more effort into specific configuration recommendations, and leaning into the expertise of our hosting, documentation, library publishing, and user communities. There may be value in making our slates a little less blank.

Sneak Preview //

- **Metadata Quality Improvements and Sharing:**
 - Exposing the right kind of information:
 - Improve quality and exposure of JATS metadata
 - Improve quality and coverage of meta tags
 - Enable entry of References by default, with better display options
 - Expose time to decision and time to review
 - Ship Publication Facts Label with 3.6
- **Rewrite and improve QuickSubmit plugin**
- **Permit file revisions of galley files and XML**
- **PIDs (Open Scholarly Infrastructure Connections via PIDs)**
 - Improve coverage of DOIs to additional entities (e.g. peer reviews)
 - Improve ROR and ORCID integration
 - Improve support for identifiers for users and authors
 - Implement the Crossref plugin for OMP, following the patterns for OJS and OPS
- **Multilingual Form Fields**
- **Create public display option for key journal metadata**



PKP have always strived to enabled good metadata practices. But, we *cannot force* our users to do things.

What we *can do* is encourage them more, and find ways to facilitate quality metadata that don't obstruct or complicate publishing workflows.