

# Munin Conference

on Scholarly Publishing

## Presentation

How journal submission and hosting systems influence the level of open metadata in Crossref



19 November 2025

<https://doi.org/10.7557/5.8317>

# Who we are and what we did

## Manuscript submission systems and metadata completeness in Crossref: patterns and associations

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### Abstract

The importance of open research information, particularly publication metadata, is widely recognised. Crossref is one of the most important infrastructures for registering open metadata as part of DOI record registration. It is widely known, however, that the metadata of many publications is far from complete, with many publishers making certain metadata openly available, but failing to do so for other metadata elements.

Of course, publishers' ability to register this metadata with Crossref depends on their capacity to capture and retain this data in their production workflows. Manuscript submission systems are an important, yet largely overlooked, factor in the extent to which publishers make metadata available through Crossref.

In this paper, we present the results of an analysis investigating the correlation between the level of metadata that publishers deposit with Crossref and the submission systems that they deploy for their journals. We have looked at the 153 publishers with the largest amounts of publications in Crossref and concentrate on



Hans de Jonge, Dutch  
Research Council NWO



Bianca Kramer, Sesame  
Open Science & Barcelona  
Declaration on Open  
Research Information

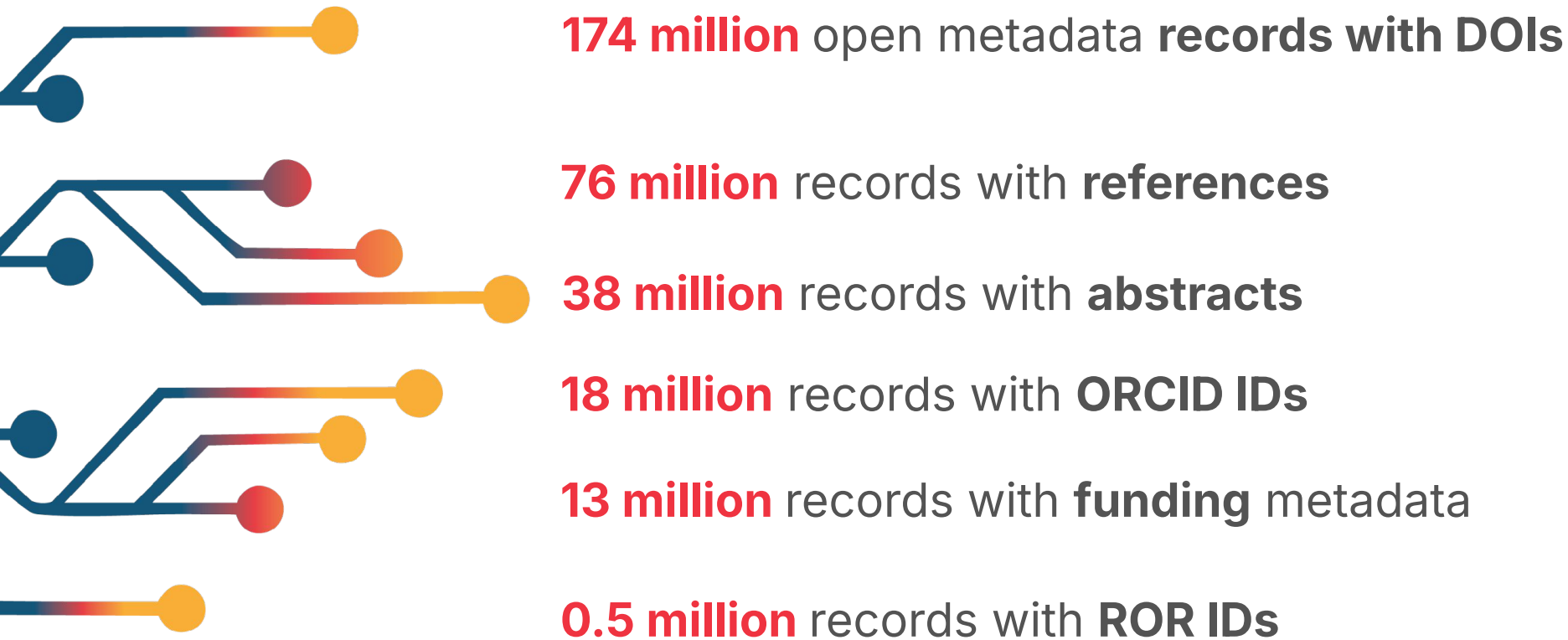


Kora Korzec,  
Crossref

Preprint:

[https://doi.org/10.31222/osf.io/ndx3f\\_v1](https://doi.org/10.31222/osf.io/ndx3f_v1)

## Coverage of key metadata elements in Crossref



# Participation reports: [www.crossref.org/members/prep/](http://www.crossref.org/members/prep/)

Participation Reports



How good is your metadata?

Find a Crossref Member

Richer metadata makes research usable.

Make sure your work can be found.

[LEARN MORE](#)

# Participation reports

## Participation Reports



UiT The Arctic University of  
Norway

**842**

Total registered records

Richer metadata makes research usable.  
Make sure your work can be found.

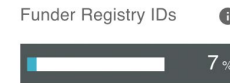
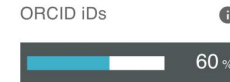
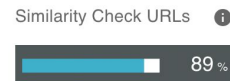
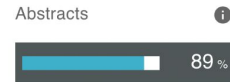
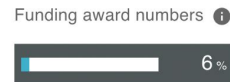
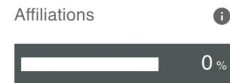
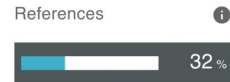
DOWNLOAD GAP REPORT

Select date  
Current records



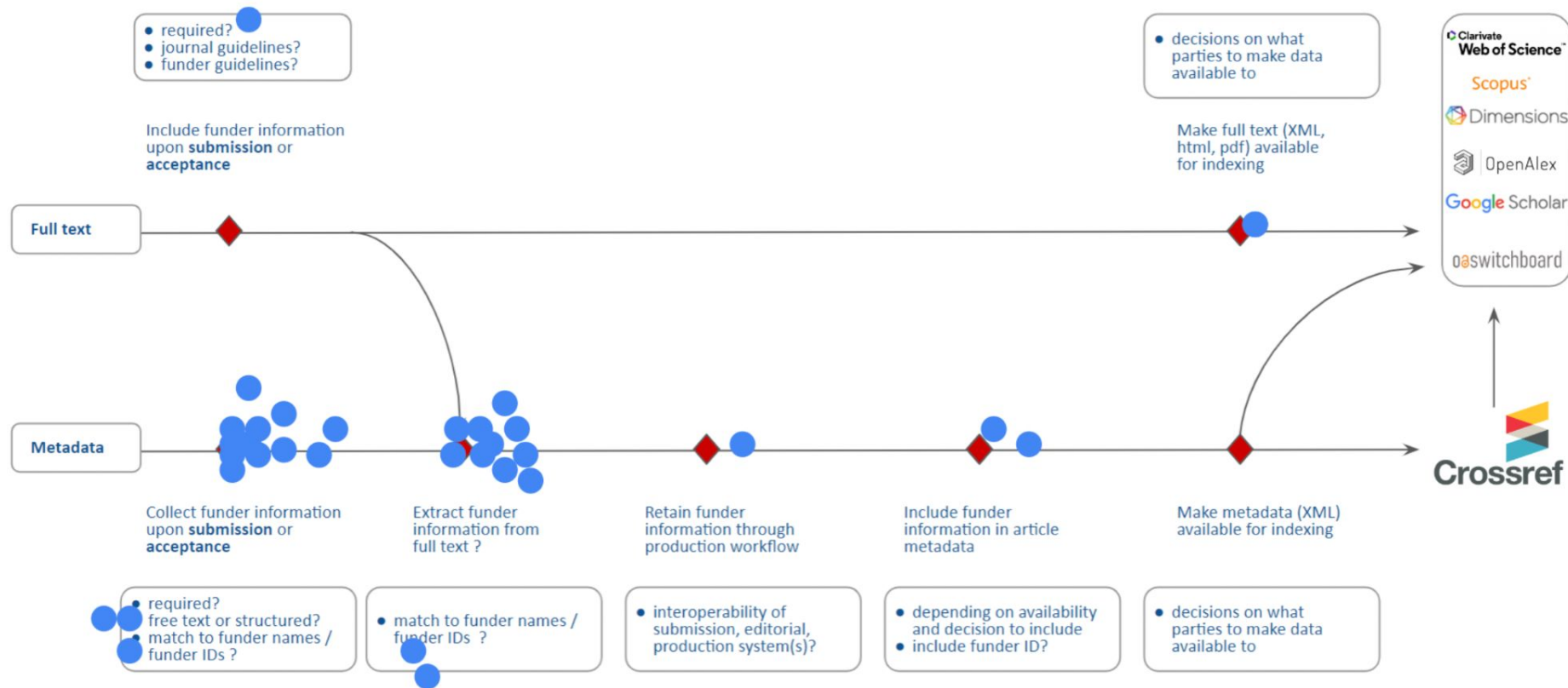
Journal  
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Journal Articles: 842



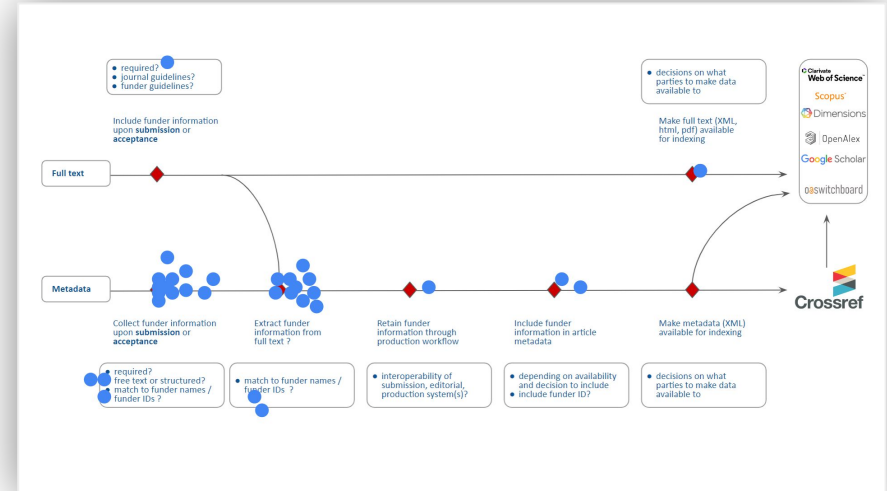


# Publisher metadata workflows



# Publisher workflows

- Technical capacities of publishers play an important role in their ability to submit metadata to Crossref.
- Publishers operate a host of systems in their production workflows, from submission systems to production and hosting platforms
- All important... but
- Manuscript submission systems represent the starting point of the metadata lifecycle by capturing the initial metadata created by authors

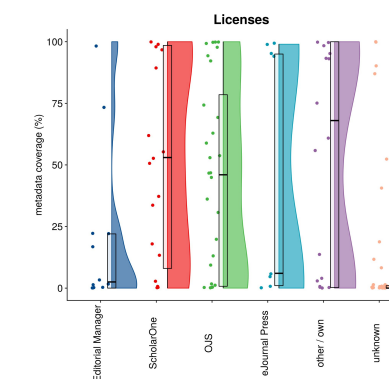
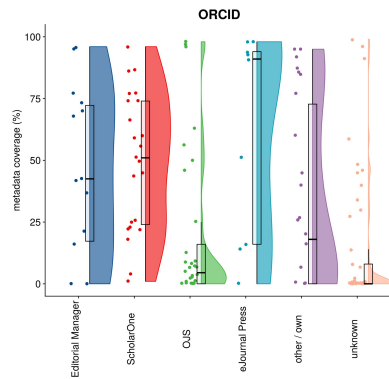
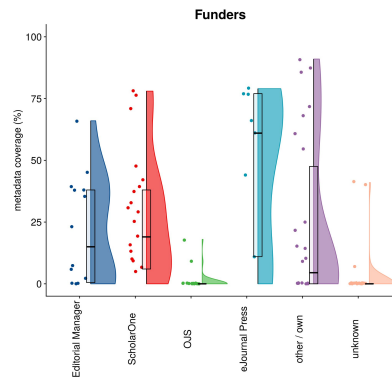
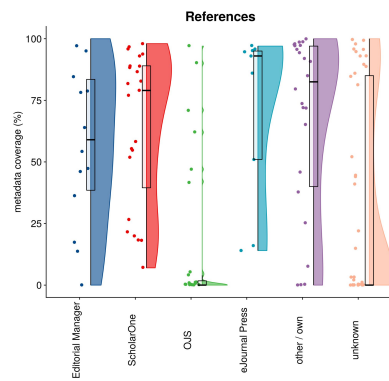
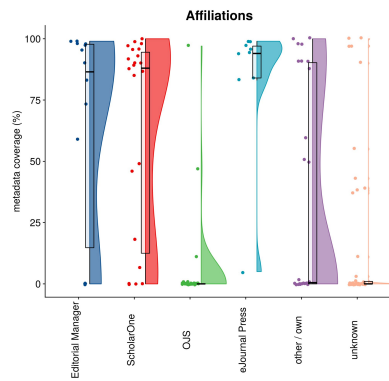
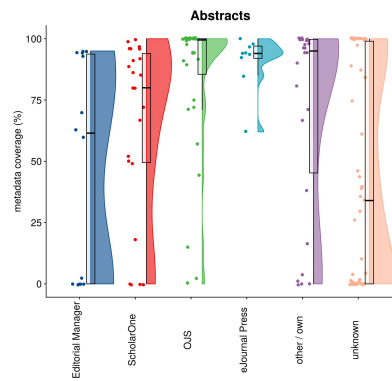


# What we did

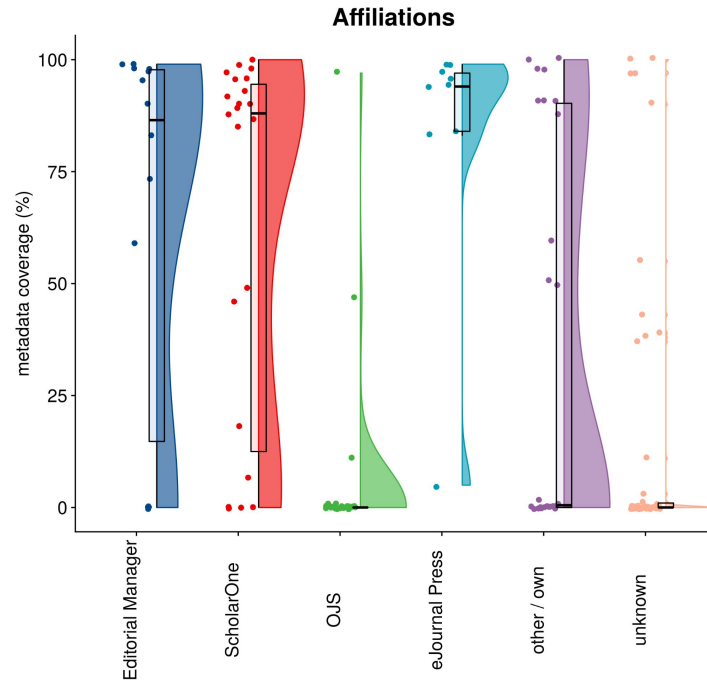
- Collected information about the submission systems of 153 major publishers in Crossref in 2023/2024 (manually and via Crossref survey)
- Looked at six metadata types in Crossref:
  - abstracts
  - affiliations
  - references
  - funding information
  - ORCIDs
  - license information
- And the 4 most used systems (ScholarOne, Editorial Manager, OJS, eJournalPress)

**Question: is there a relationship between the completeness of this metadata in Crossref and the submission systems publishers operate?**

# The results

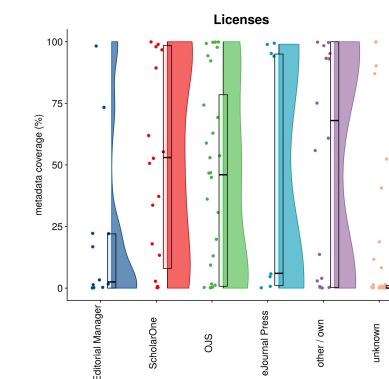
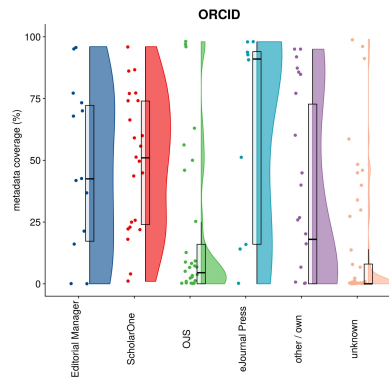
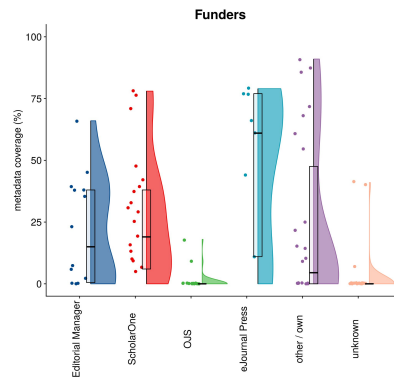
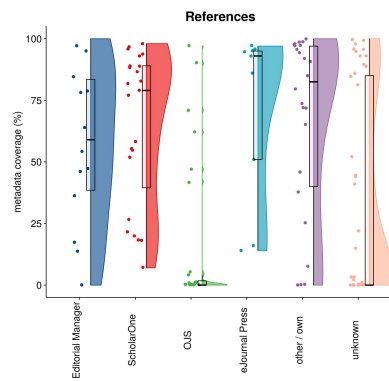
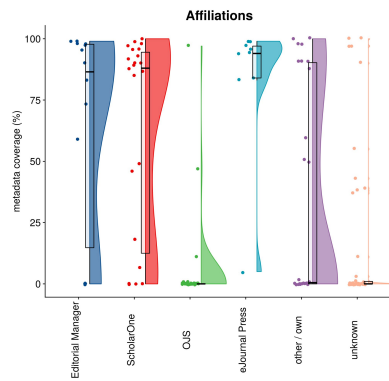
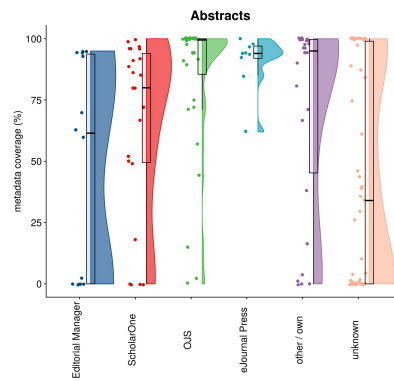


# An example: affiliation metadata



- All systems seem capable of capturing affiliation metadata
- Large difference between publishers using same system
- Possible reasons:
  - Technical: metadata gets lost downstream
  - Implementation: systems are capable but publishers do not ask for information
  - Policy: metadata is collected but not deposited to Crossref

# The results



# Community Round Table on Funding Metadata


From identifying barriers to finding solutions

2 October | 15:00 - 17:00 CEST | Zoom

Organized by

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INFORMATION

25  
Crossref  
CELEBRATING 25 YEARS



25  
Crossref  
CELEBRATING 25 YEARS

# Affiliations Metadata Roundtable 2025

Crossref  
oaSwitchboard

## Data Quality Challenge – Publishers' best practices

### E-LIFE BEST PRACTICE

Capturing affiliations at submission with 'author select'

ensuring that ROR IDs are introduced early and verified before publication, coupled with a quality assurance process during proofing

Data Quality Challenge

ELMS PRESS BEST PRACTICE

Structured from the start:

Capturing metadata via 'manuscript extraction' as early as at submission, and building on globally valid identifiers wherever possible (ROR IDs, DOIs, ORCIDs)

Data Quality Challenge

PENSOFT BEST PRACTICE

AI-ASSISTED EXTRACTION

with human review and in-house metadata validation

Data Quality Challenge

WILEY-INTERSCIENCE BEST PRACTICE

Post-acceptance metadata QA

through automation and expert review

Data Quality Challenge

THE ROYAL SOCIETY BEST PRACTICE

EMBEDDING METADATA

in OA payment and agreement workflows

Data Quality Challenge

ACS BEST PRACTICE

Multi-method PID matching with near-complete coverage

Data Quality Challenge

AMERICAN SOCIETY FOR MICROSCOPY BEST PRACTICE

Combining AI-powered submission tools

with editorial oversight via expert manual checks

Data Quality Challenge

RUP BEST PRACTICE

Maintaining ROR IDs

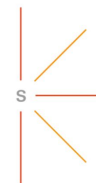
across the full publishing workflow, from 'author select' at submission through metadata deposits upon publication

Data Quality Challenge

## Including open metadata in publisher negotiations

Joint task force on Negotiating Openness of Publication Metadata

open access  
2020



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# Crossref - PKP collaboration

## Crossref and PKP enter new partnership phase to support richer and more inclusive metadata



Kornelia Korzec – 2025 September 22  
In [Community](#), [Collaboration](#), [News Release](#), [PKP](#)

Crossref and the Public Knowledge Project (PKP) have been working closely together for many years, sharing resources and supporting our overlapping communities of organisations involved in communicating research. Now we're delighted to share that we have agreed on a new set of objectives for our partnership, centred on further development of the tools that our shared community relies upon, as well as building capacity to enable richer metadata registration for organisations using the Open Journal Systems (OJS).

Crossref is working towards the vision of a rich and open network underpinning global scholarship, making relationships between works, people, institutions, and actions visible, thanks to the thread of metadata – the research nexus. This vision depends upon participation of research communication organisations coming from all parts of the world, disciplines, and languages. Working with PKP towards making tools for metadata registration more comprehensive, accessible, and easier to use is a big step towards supporting our community to participate in [the research nexus](#).

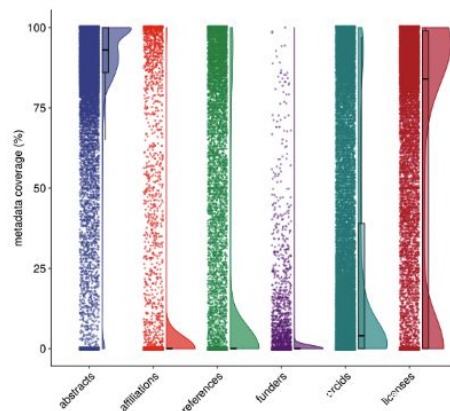
The renewed partnership has three main goals:

- Developments to improve experience and support metadata registration workflows in OJS, bringing relevant functionalities together under the Crossref plug-in, and developing an OMP Crossref plug-in.
- Joint community engagement in support of transitioning OJS users to the future Long-

- Bringing functionalities for metadata registration together under the Crossref plug-in, and developing an OMP Crossref plug-in.
- Joint community engagement in support of transitioning OJS users to the future Long-Term Support (LTS) version of OJS, which will enable richer metadata registration.
- Creation of a PKP School self-paced training course for system administrators.

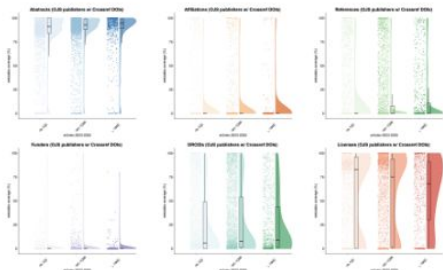
### Metadata coverage for OJS journals using Crossref DOIs

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



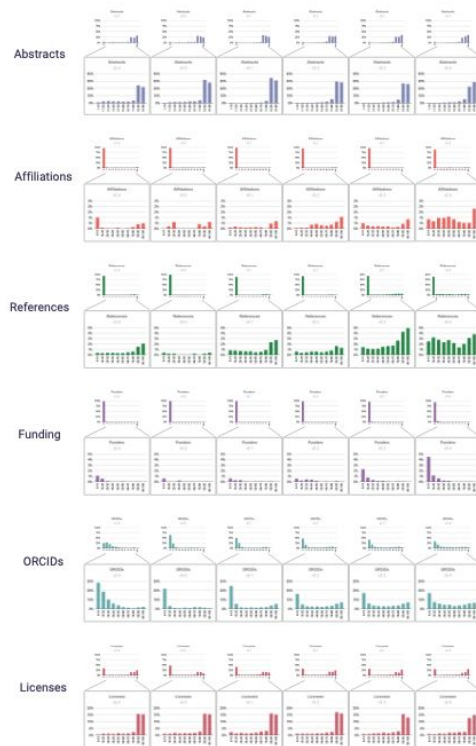
### Metadata coverage by publisher size

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).



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>

# 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 actors, systems and geographies)

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on Scholarly Publishing

## Presentation

How journal submission and hosting systems influence the level of open metadata in Crossref



19 November 2025

<https://tinyurl.com/munin-20251119>