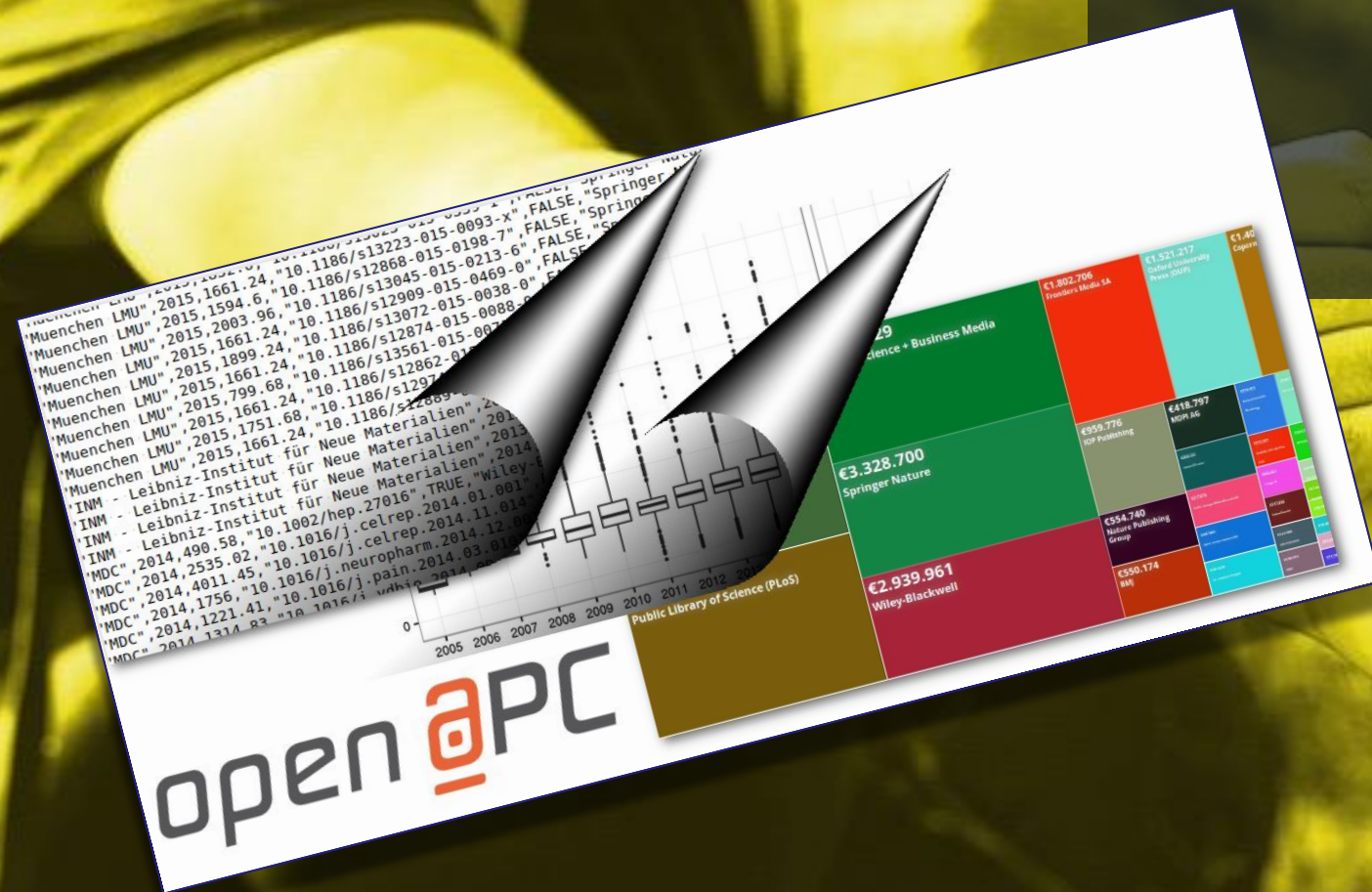


NEXUS

Open minds towards transparent publication fees



Andreas Czerniak
Christoph Broschinski
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Bielefeld University Library



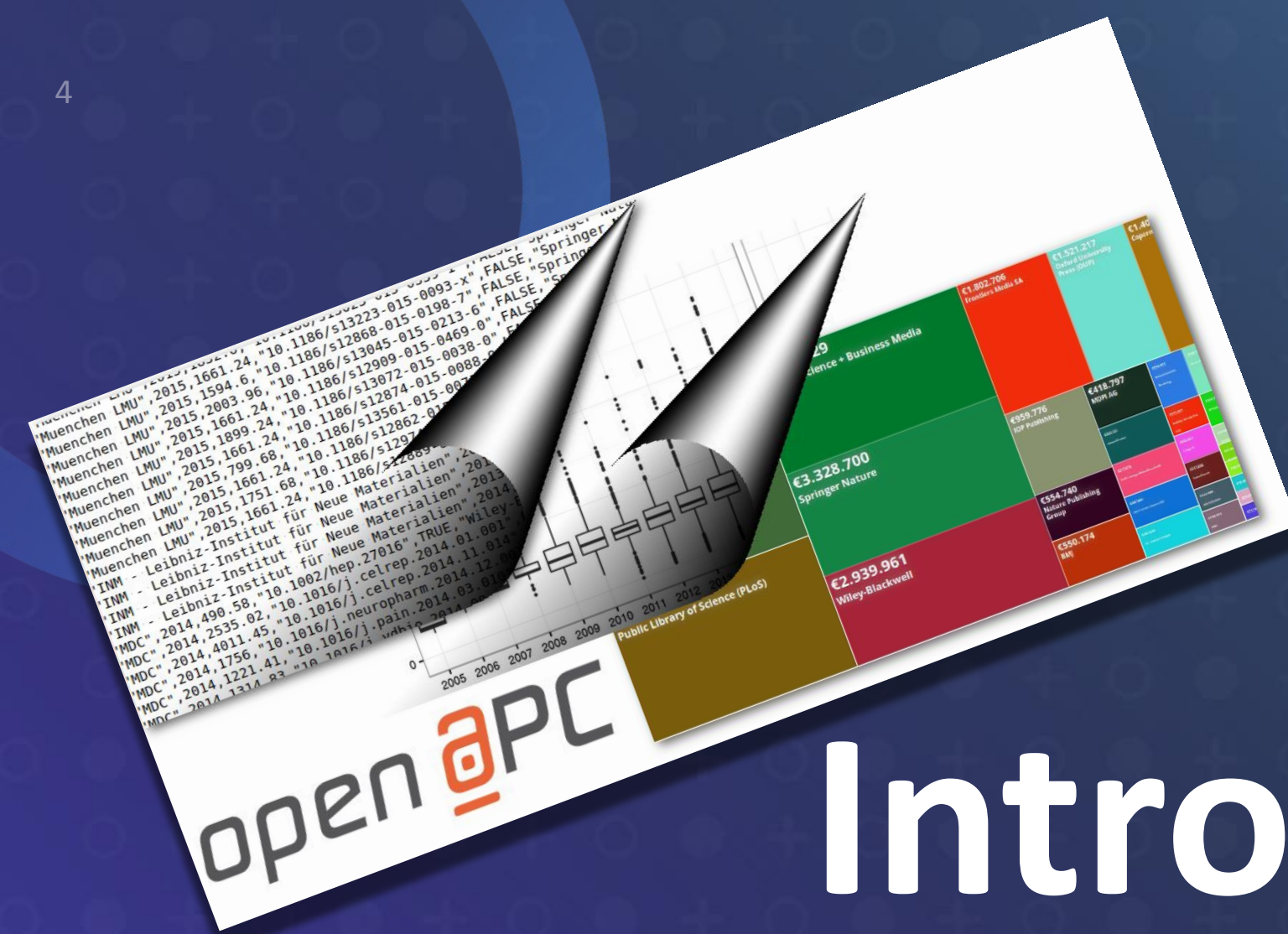
Agenda

- Introduction about APC, BPC, and Transformative Agreements
- Overview of OpenAPC
- Participation
- OpenAIRE & European Open Science Cloud
- Conclusion and Discussion



The team at Bielefeld University Library

- Christoph Broschinski ; Lead architect and developer
- Julia Bartlewski ; co-lead
- Dirk Pieper ; co-founder and project coordinator
- Jochen Schirrwagen ; advisor
- Sabeel A. Shah ; OpenAIRE Nexus/EOSC Future team member
- Andreas Czerniak ; OpenAIRE Nexus service manager



open @ APC

Introduction

APC, BPC, and TAs

Article Processing Charges

What are APCs?

- APC: Article Processing Charge.
- One-time fee to be paid to a publisher to have an article published in a fee based (OA) journal.
- Can either be mandatory (for fee based Gold-OA journals) or optional (for hybrid journals).

Why are they important?

- APCs are paid by academic institutions, funders, authors, libraries.
- APCs allow transparent reporting and cost monitoring for publications in journals.
- [Horizon Europe General Model Grant Agreement](#): “Only publication fees in full open access venues for peer-reviewed scientific publications are eligible for reimbursement.” (Article 17, p. 109).

Book Processing Charges

What are BPCs?

- BPC: Book Processing Charge.
- One-time fee that authors pay to a commercial publisher for the immediate OA publication of a scientific book publication.

Why are they important?

- Allow authors especially from the HSS to publish OA.
- Market is developing, cost transparency and reporting at the beginning.
- Horizon Europe allows also the reimbursement of BPCs.

Transformative Agreements

What are TAs?

- TAs aim to transform subscription based journals to OA and spendings for subscriptions into OA publishing.
- TAs still incorporate historical subscription expenditures (“read & publish agreements”, “publish & read fee”).

Why are they important?

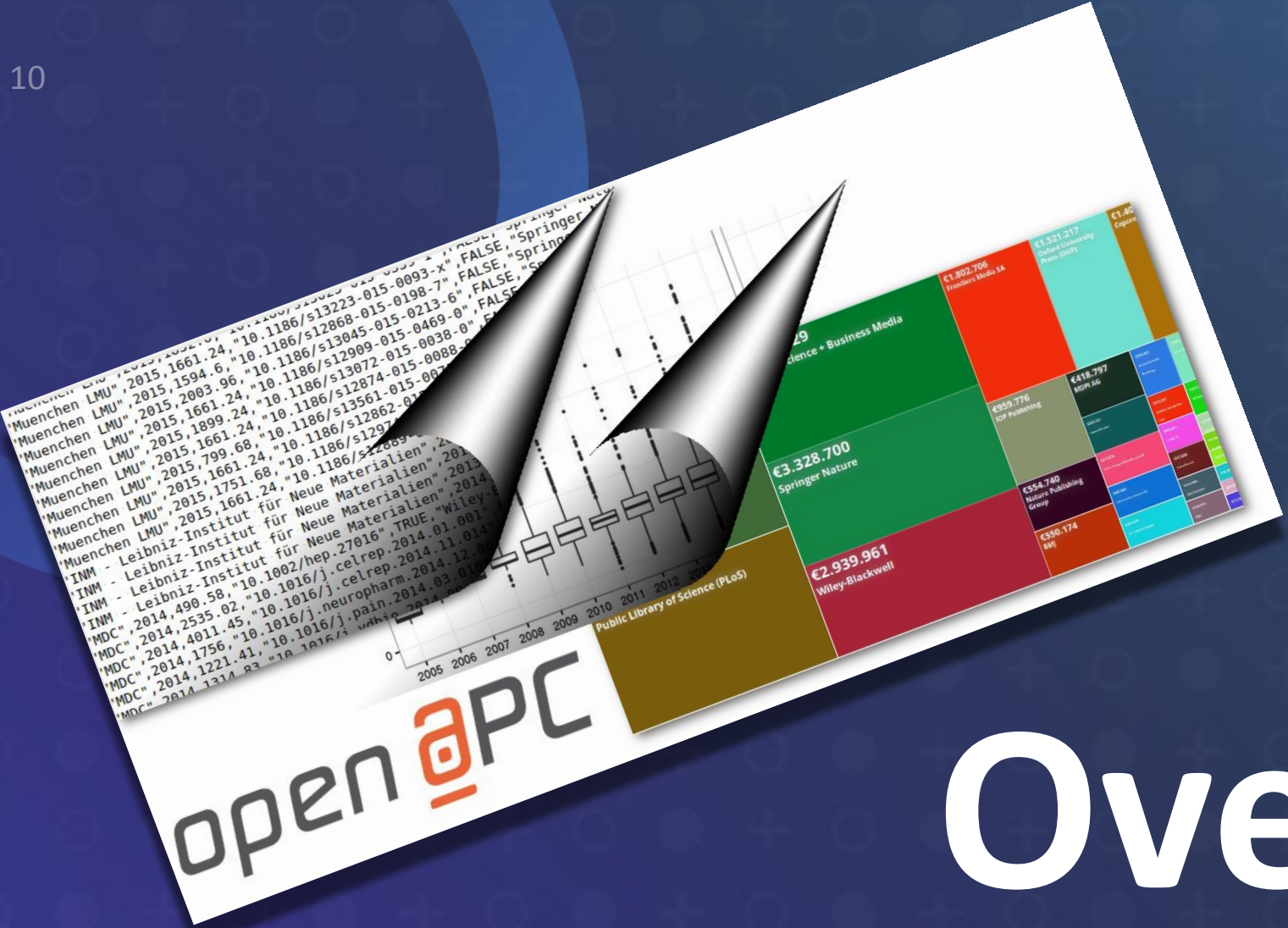
- TAs transform large numbers of articles in hybrid journals into OA.
- During transition, average costs per article are hard to calculate, but needed (“equivalent APCs”).
- Coalition S funders allow reimbursement for articles in hybrid journals within TAs until 2024 ([Plan S](#)). Exception: EC (Horizon Europe 2021-2027).

Why is transparency useful?

- Transparency of publication costs contributes to the open access transformation → Comprehensible cost allocation
- Enables an overview of the APCs charged by different publishers and may counteract publisher-driven price increases → Cost comparisons
- Provides an overview of payments from scientific institutions to publishers

What are your benefits?

- As Institutions / Organizations
 - Enables cost comparisons with other institutions
 - Overview of distribution of costs
 - Useful when applying for funding
 - Foundation for budget administration
- As Consortium / Research Infrastructure
 - Cost transparency improves negotiating position against publishers
- As Funder
 - Monitoring aspects: which funding amount was paid for which article / to which publisher

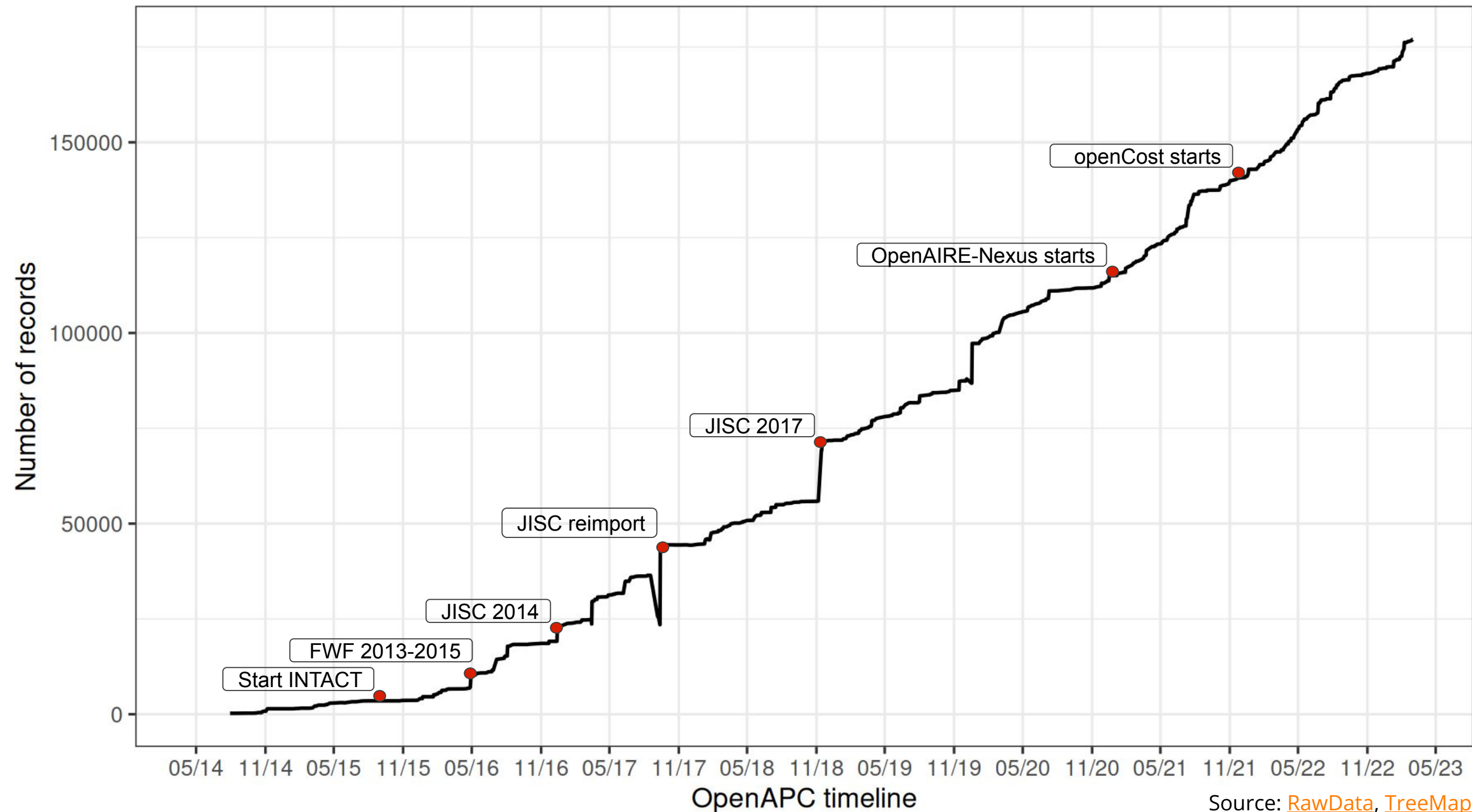


Overview of OpenAPC

Introduction

- Open Data project, which is aggregating, normalizing and disseminating data on fee-based OA publishing.
- Established at Bielefeld University Library 2014.
- Aim 1: To release data sets on fees paid for OA publishing by universities and funders under an Open Database License.
- Aim 2: Enable transparent and reproducible reporting for institutions and funders and create cost transparency and comparability.

Overview - APCs



Source: [RawData](#), [TreeMap](#)

Current data sets

APCs

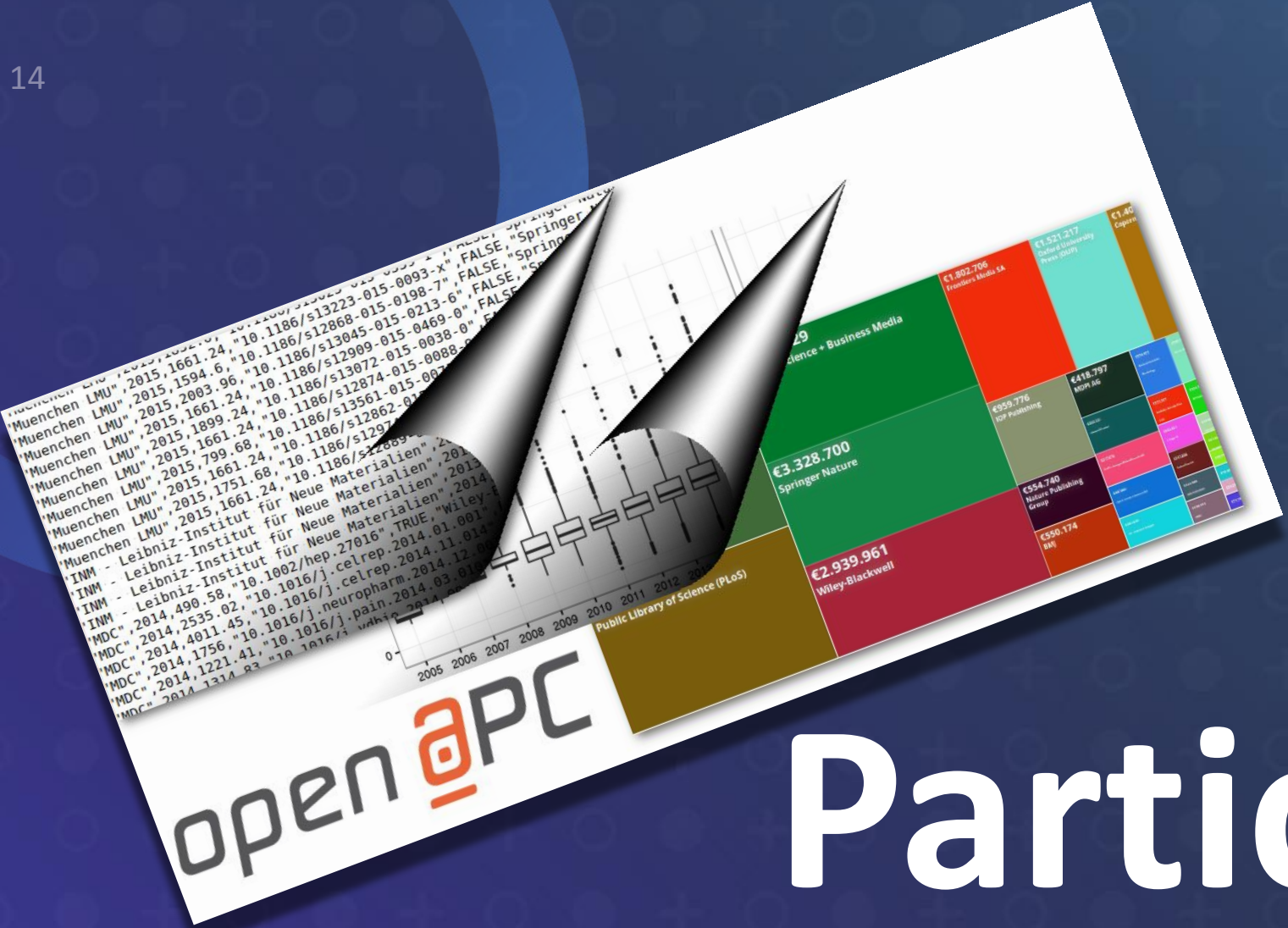
- 178,873 articles
- 393 Contributing Institutions/Organizations
- 345,2 Million EURO
- average 1,930 EUR

BPCs (since Mid-2020)

- 1,577 books
- 34 Contributing Institutions/Organizations
- 10 Million EURO
- average 6,407 EUR

TAs (since 2016)

- 66,837 articles
- 327 Contributing Institutions/Organizations
- 54 Transformation Agreements



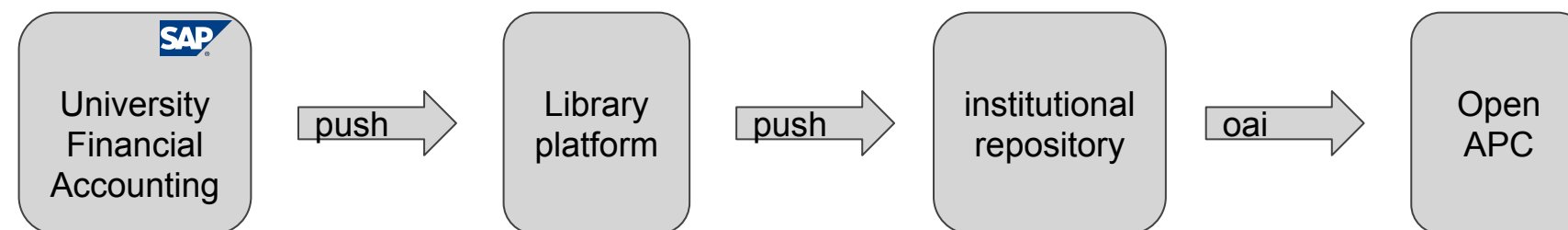
open @ APC

Participation

contributions to OpenAPC

Data submission handout

- Handout defines minimal requirements for participation.
- Definition of costs.
- Submission: Email, GitHub pull request.
- Metadata harvesting via OAI-PMH from Institutional Repositories.



Data submission

- Single institutions, national aggregators, national library consortia, national and international funders, ...
- OA publication expenditures often managed centrally, in universities e.g. by libraries.
- If not managed centrally, cost data can be analysed from institutional financial systems.

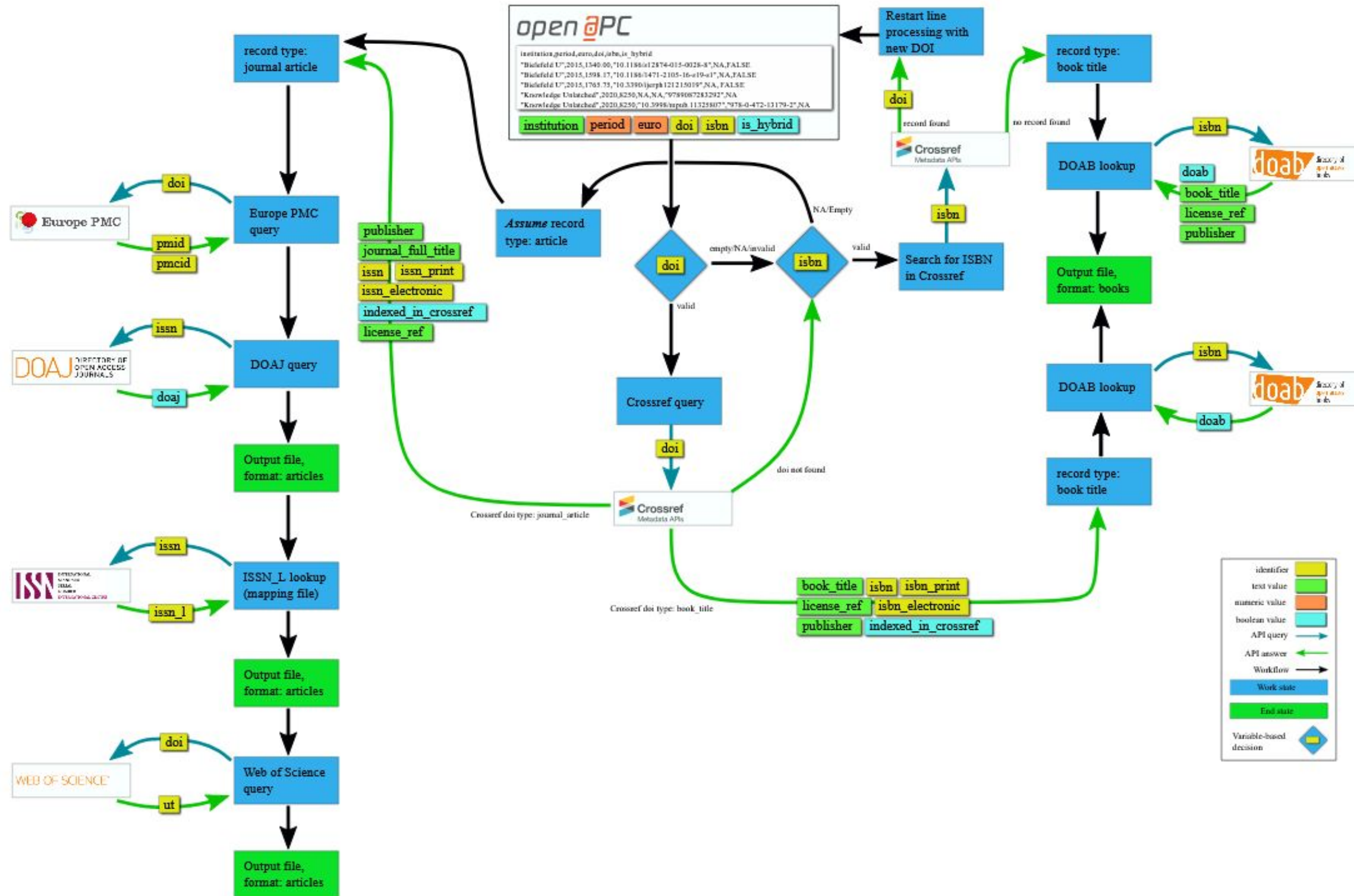
Participating with APC data

- APC data is reported and stored in a simple table format (CSV)
- 18 data fields, only **5 are mandatory** when reporting data to OpenAPC
- Remaining metadata is automatically imported from external sources

institution	period	euro	doi	is_hybrid	publisher	journal_full_title	issn	issn_p	issn_e	issn_l	license_ref	in_crossref	pmid	pmcid	ut	url	doaj
Bamberg	2013	1372	10.2147...	FALSE	Dove Medical...	Journal of...	1178-7090	NA	1178-7090	1178-7090	http://creative...	TRUE	2378...	PMC3...	ut:00020...	NA	TRUE
Bamberg	2013	960	10.3389...	FALSE	Frontiers...	Frontiers in...	1664-1078	NA	1664-1078	1664-1078	NA	TRUE	2376...	PMC3...	ut:00033...	NA	TRUE
Bamberg	2013	960	10.3389...	FALSE	Frontiers...	Frontiers in...	1664-1078	NA	1664-1078	1664-1078	NA	TRUE	2384...	PMC3...	ut:00033...	NA	TRUE

Reported by institution Crossref Europe Pubmed Central ISSN Organisation Web of Science DOAJ

Workflow



Reports - APCs

Cost data

The updated data set provided by the CSC covers publication fees for 817 articles published between 2018 and 2021 by 10 different institutions, replacing the previous CSC data. Total expenditure amounts to 1,283,013€ and the average fee is 1,570€. The CSC also provided some BPC data for OA monographs (not shown here).

	Articles	Fees paid in EURO	Mean Fee paid
Elsevier BV	261	353126	1353
MDPI AG	238	315698	1326
IEEE	68	107482	1581
Springer Nature	55	104626	1902
Frontiers Media SA	27	60655	2246
Wiley-Blackwell	26	80109	3081
Informa UK Limited	16	34865	2179
IOP Publishing	16	30757	1922

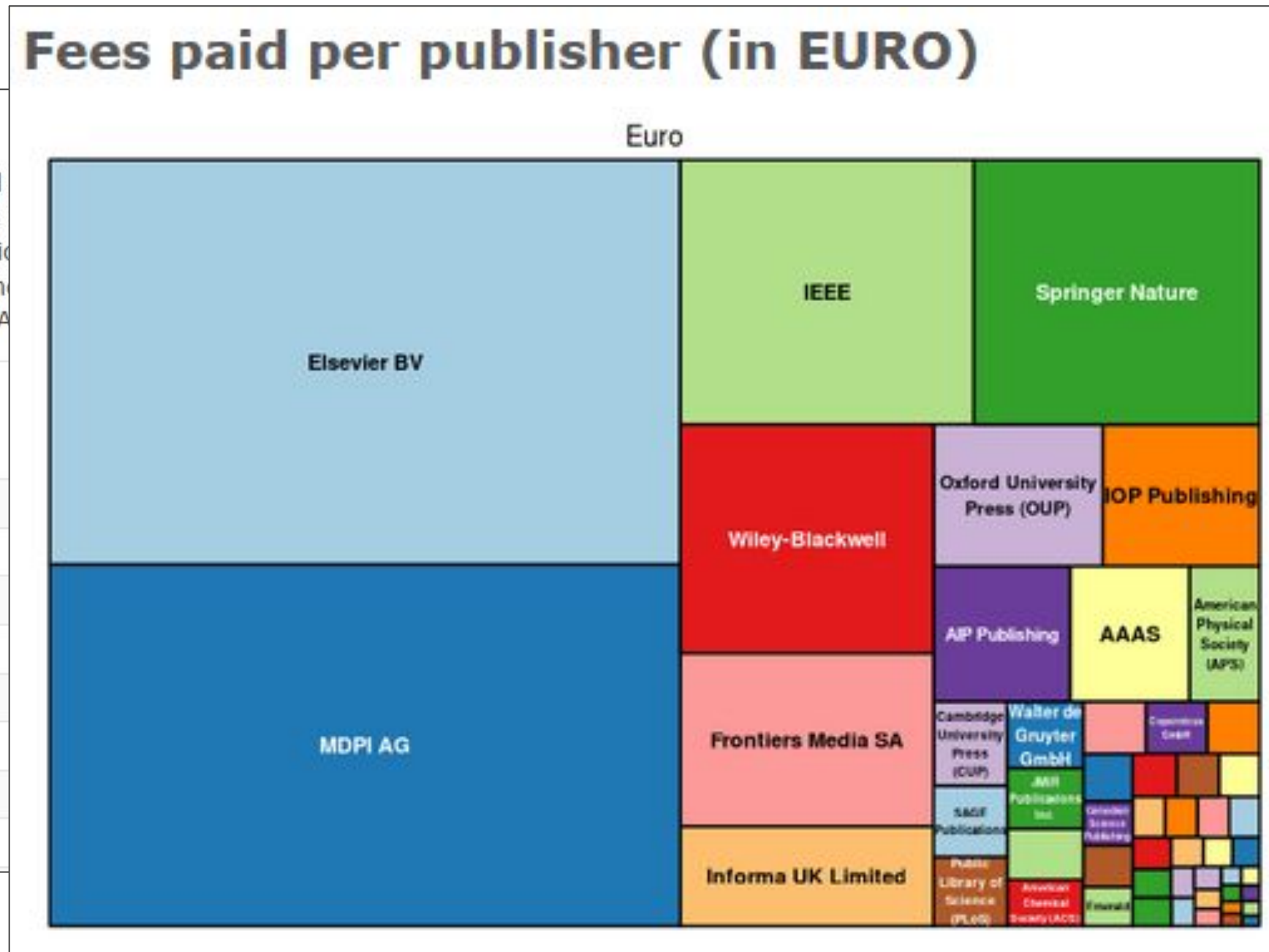
<https://openapc.net/general/openapc/2021/08/11/csc/>

Reports - APCs

Cost data

The updated data set provided 817 articles published between institutions, replacing the previous amounts to 1,283,013€ and the provided some BPC data for OA

Elsevier BV
MDPI AG
IEEE
Springer Nature
Frontiers Media SA
Wiley-Blackwell
Informa UK Limited
IOP Publishing



<https://openapc.net/general/openapc/2021/08/11/csc/>

Reports - APCs

Cost data

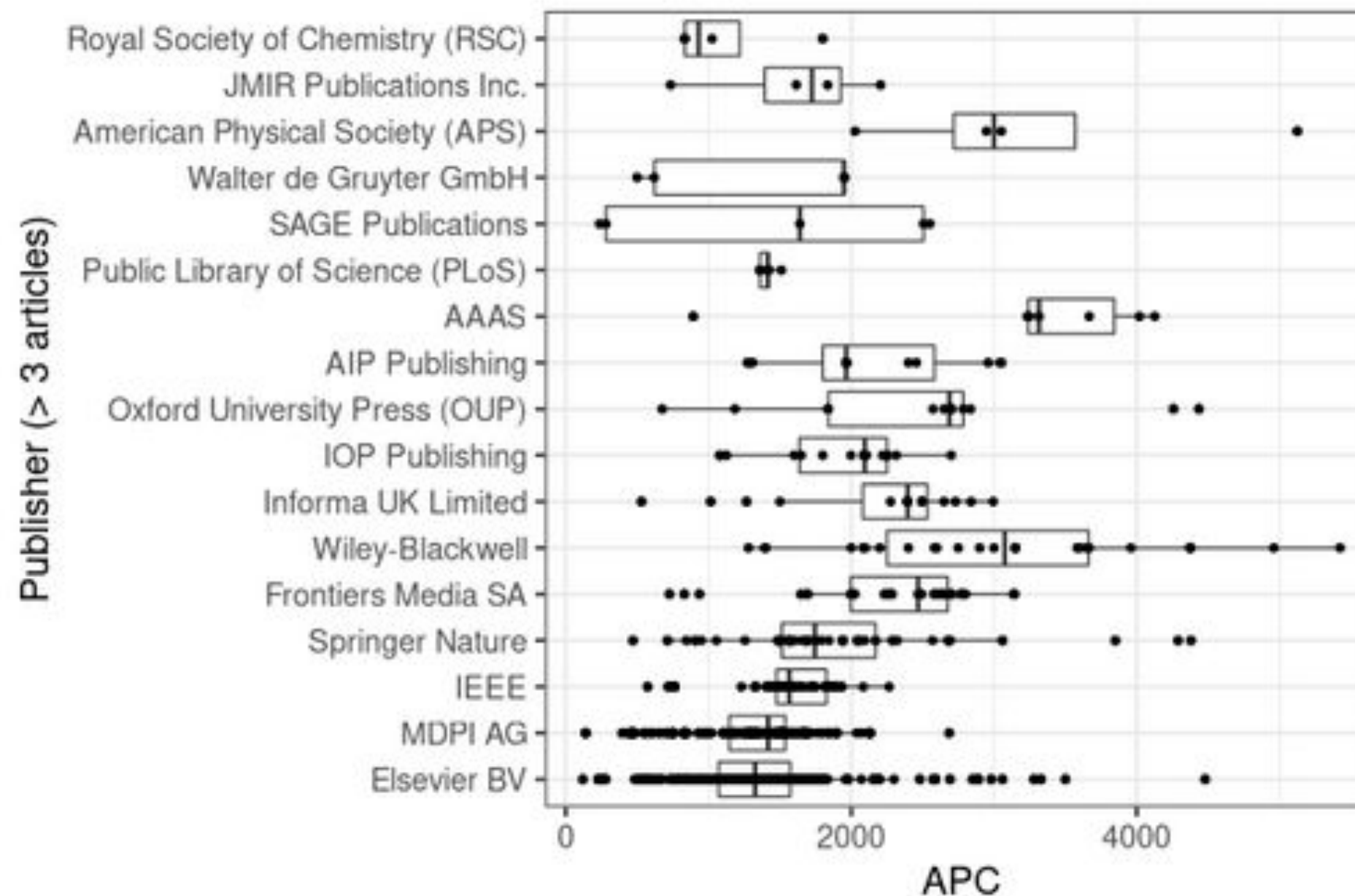
The updated data set provided 817 articles published between institutions, replacing the previous amounts to 1,283,013€ and the provided some BPC data for OA

Elsevier BV
MDPI AG
IEEE
Springer Nature
Frontiers Media SA
Wiley-Blackwell
Informa UK Limited
IOP Publishing

Fees paid per



Average costs per publisher (in EURO)



<https://openapc.net/general/openapc/2021/08/11/csc/>

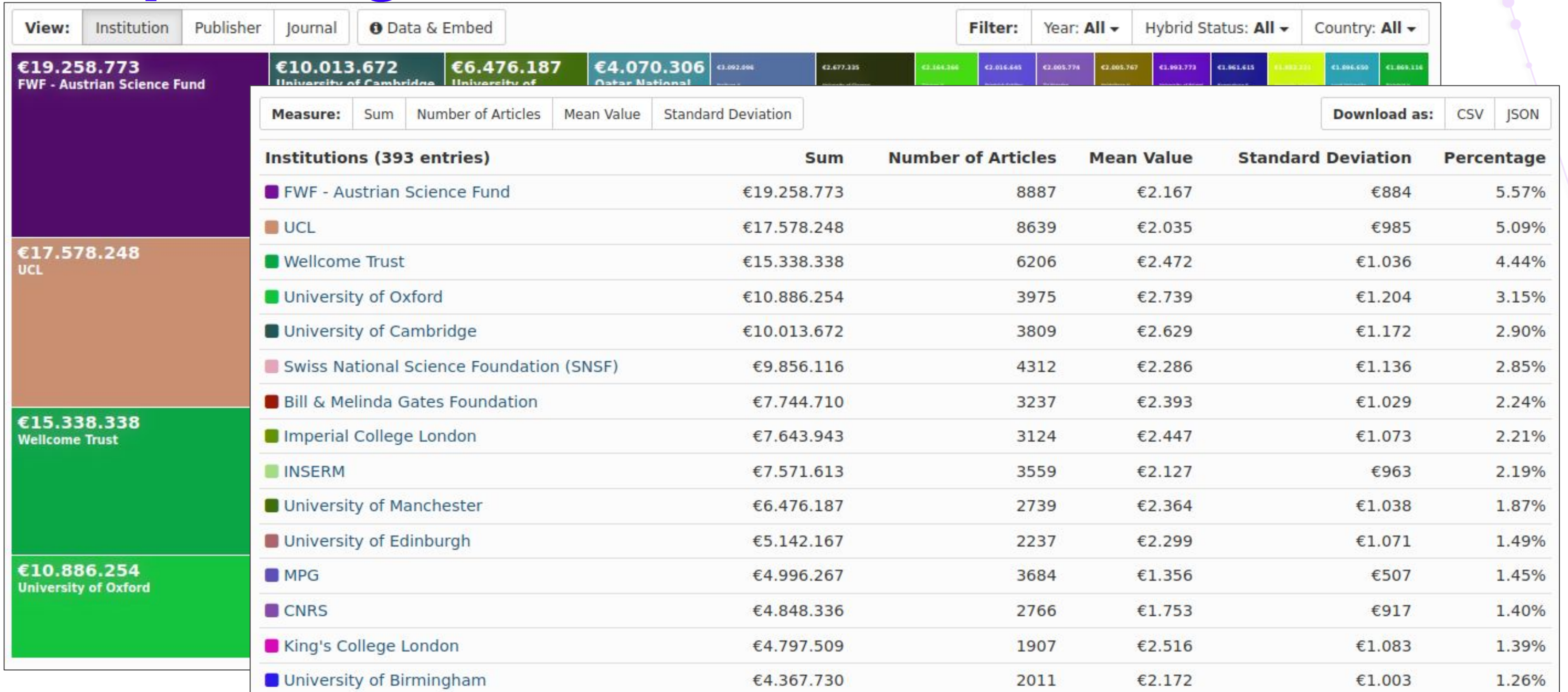
Reporting feature

<https://treemaps.openapc.net/apcdata/openapc/>



Reporting feature

<https://treemaps.openapc.net/apcdata/openapc/>



Participating with BPC data

- BPC data is also reported and stored in a simple table format (CSV)
- 13 data fields, only **5 are mandatory** when reporting BPC data to OpenAPC
- Remaining metadata is automatically imported from external sources

institution	period	euro	doi	backlist_oa	publisher	book_title	isbn	isbn_print	isbn_electronic	license_ref	in_crossref	doab
■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■

■ Mandatory ■ Mandatory if DOI isn't available ■ useful

Participating with TA data

- Same requirements as for APC data, but due to the complex calculation of OA article costs, most data providers don't submit institutional cost data per article in hybrid journals.
- Bibliographic data without cost information are also useful, but ...
- OpenAPC developed workflows with participating institutions of the German [DEAL agreements](#) to report cost data within a TA.

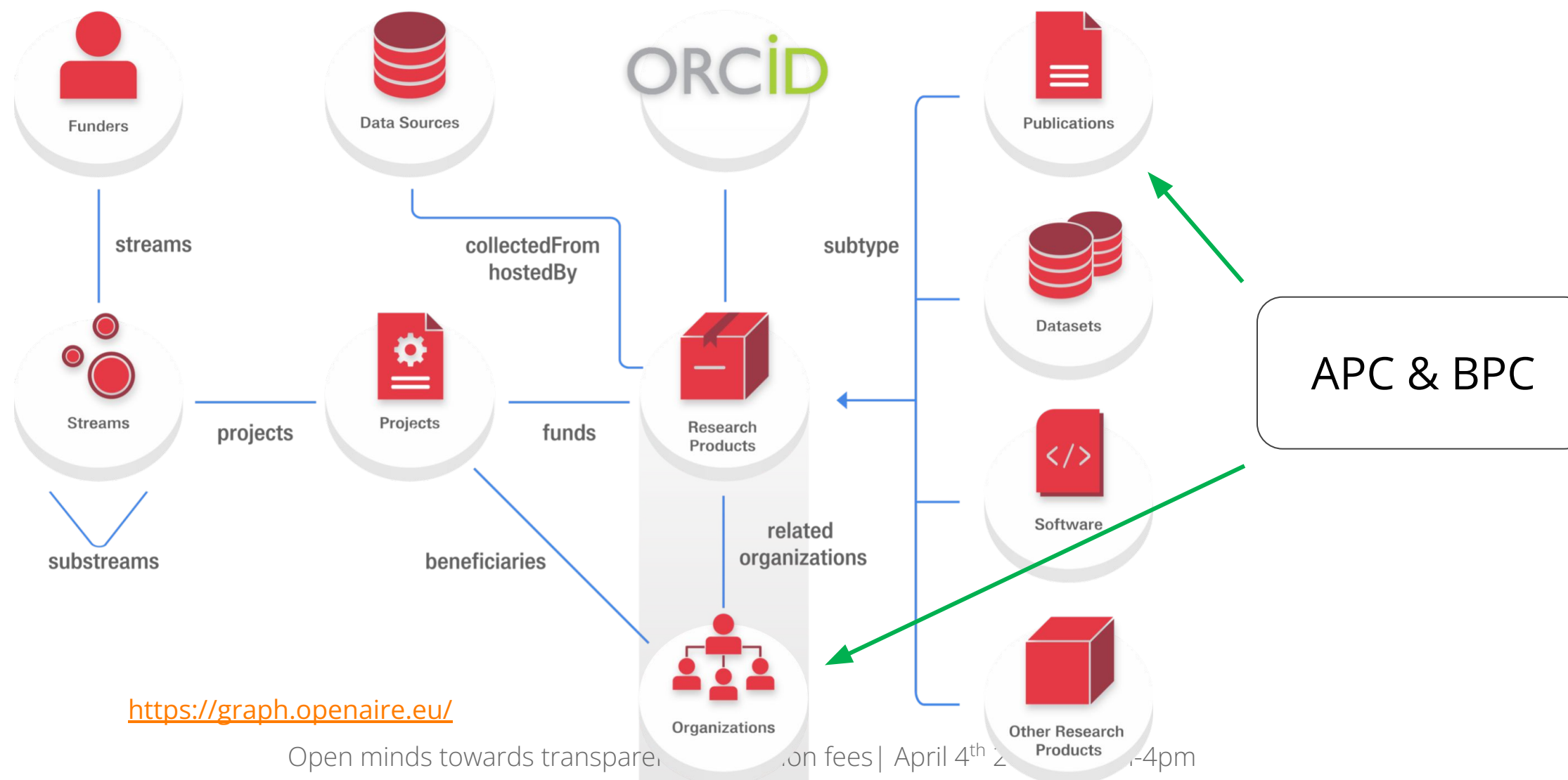


OpenAIRE and European Open Science Cloud - Services

OpenAIRE Research Graph

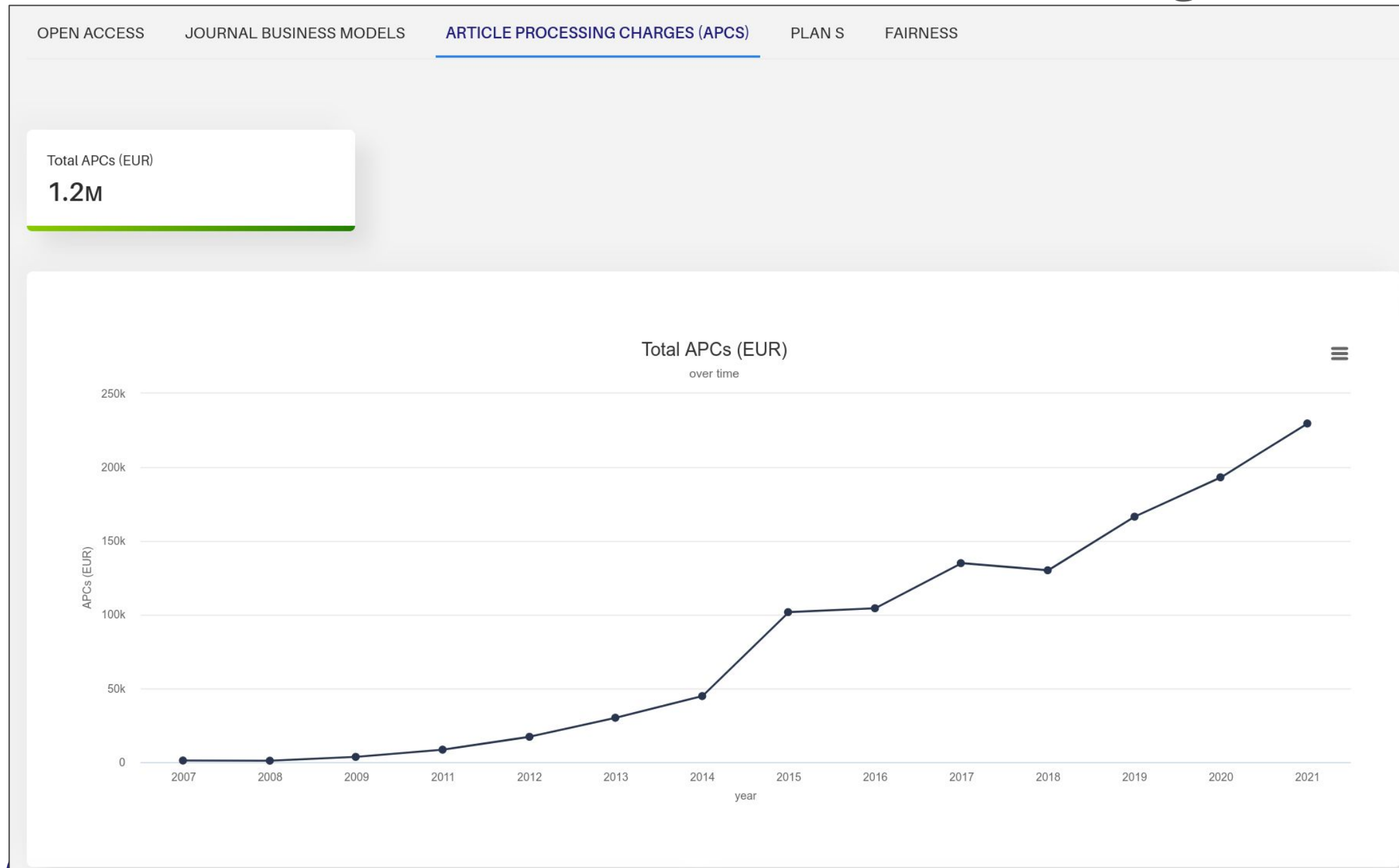


- APCs and BPCs are a part of *OpenAIRE Research Graph* and integrated in the *OpenAIRE services*
- APC and BPC data is enriched with organization identifiers (ROR, GRID) and integrated



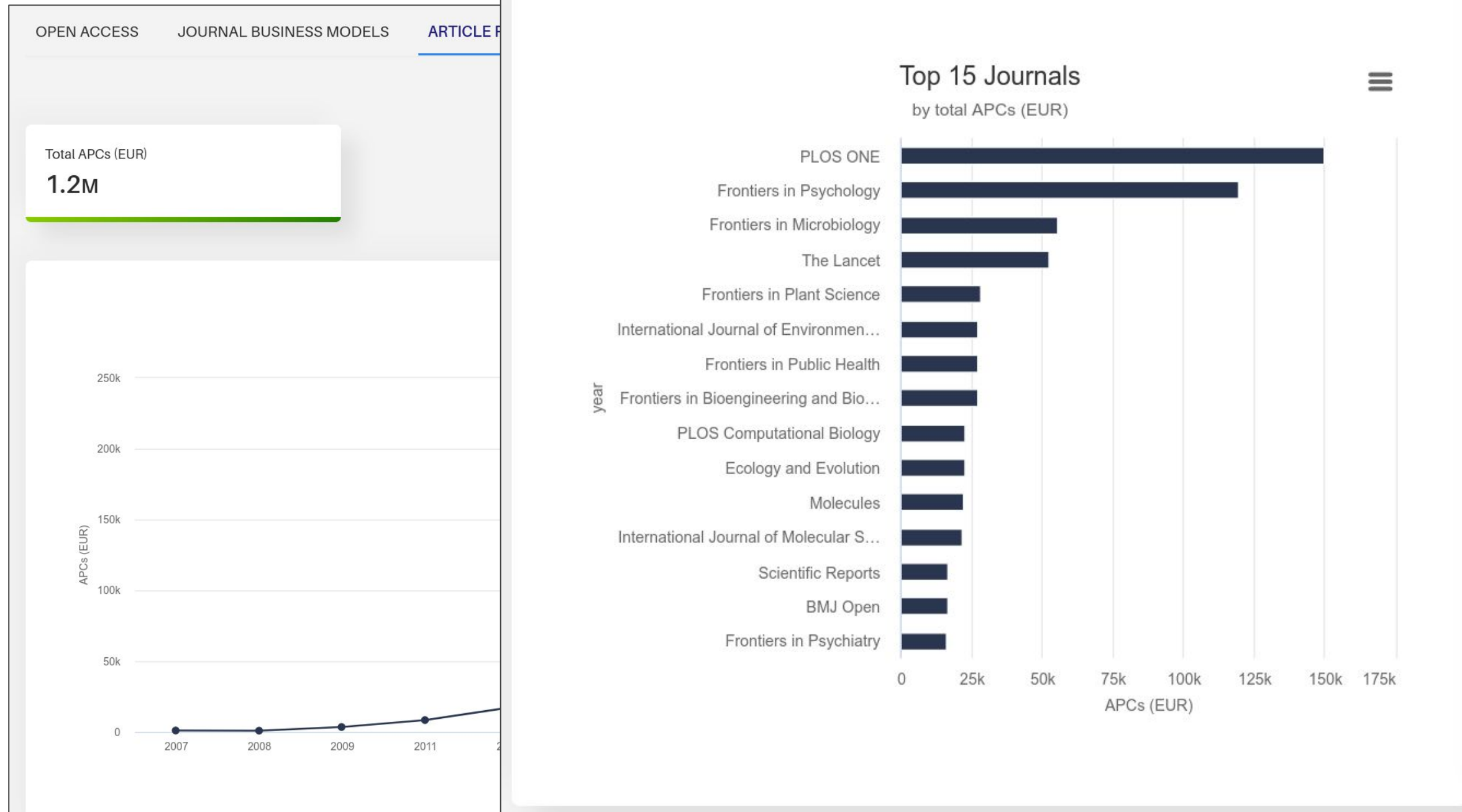
OpenAIRE service - MONITOR

- APC data is available in different services, eg.



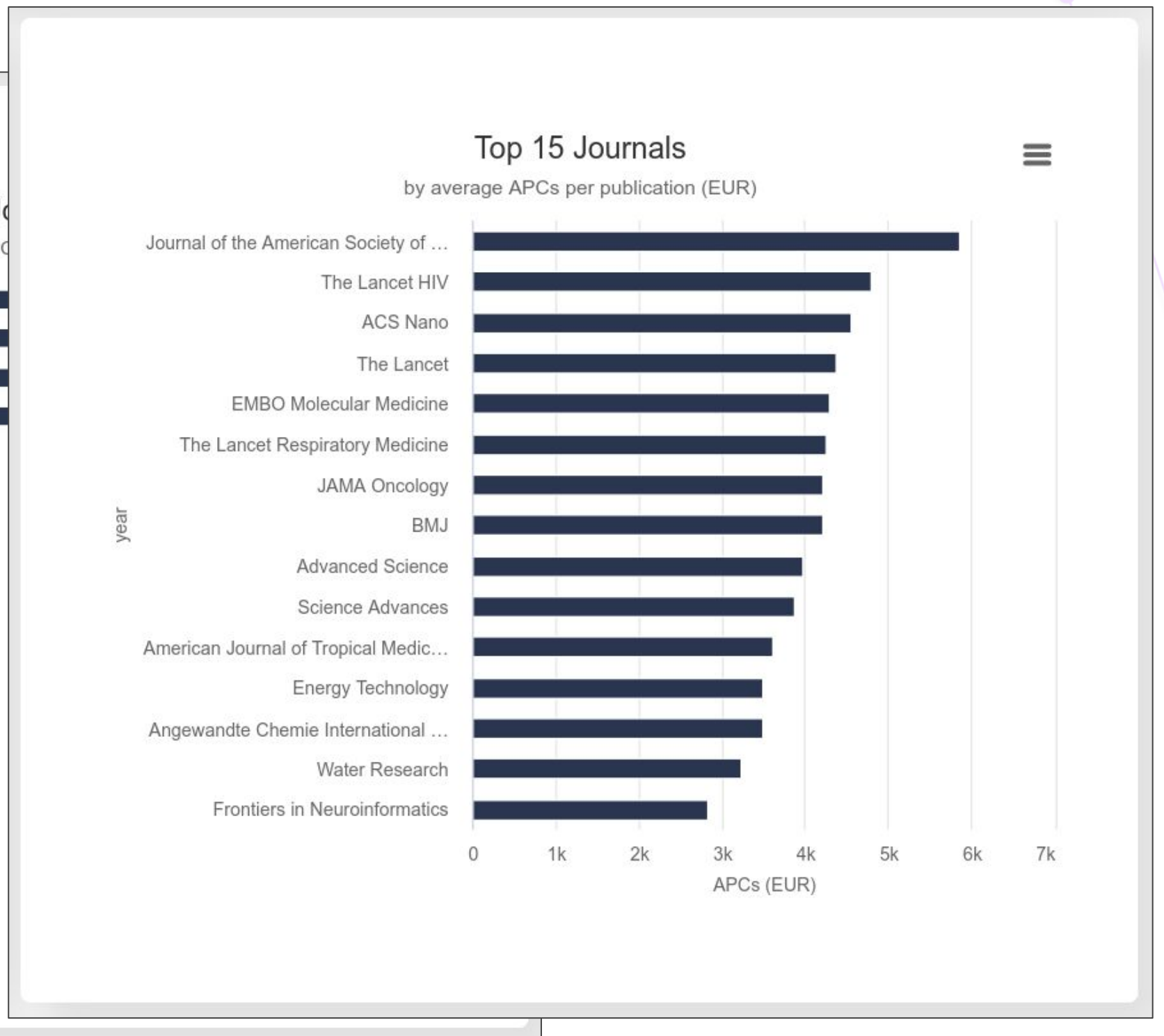
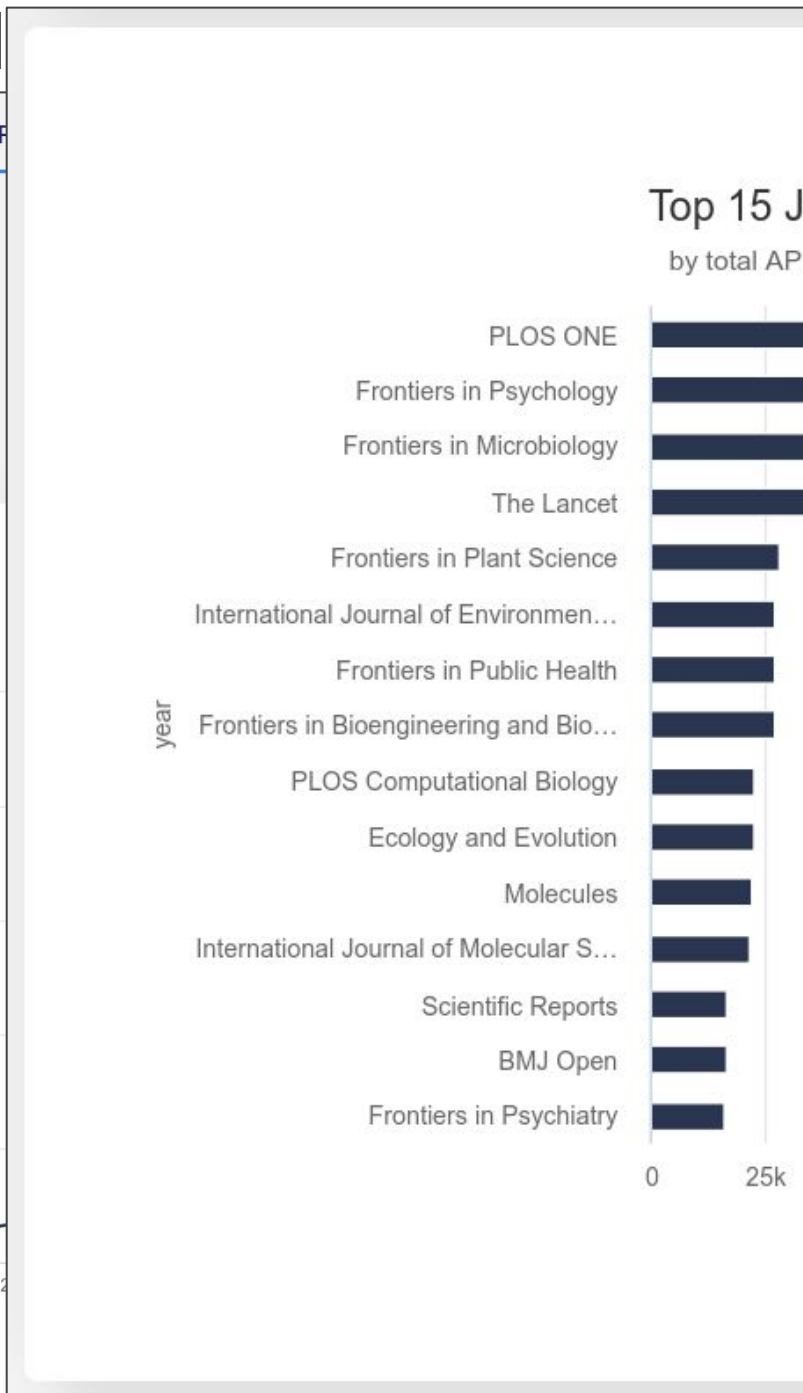
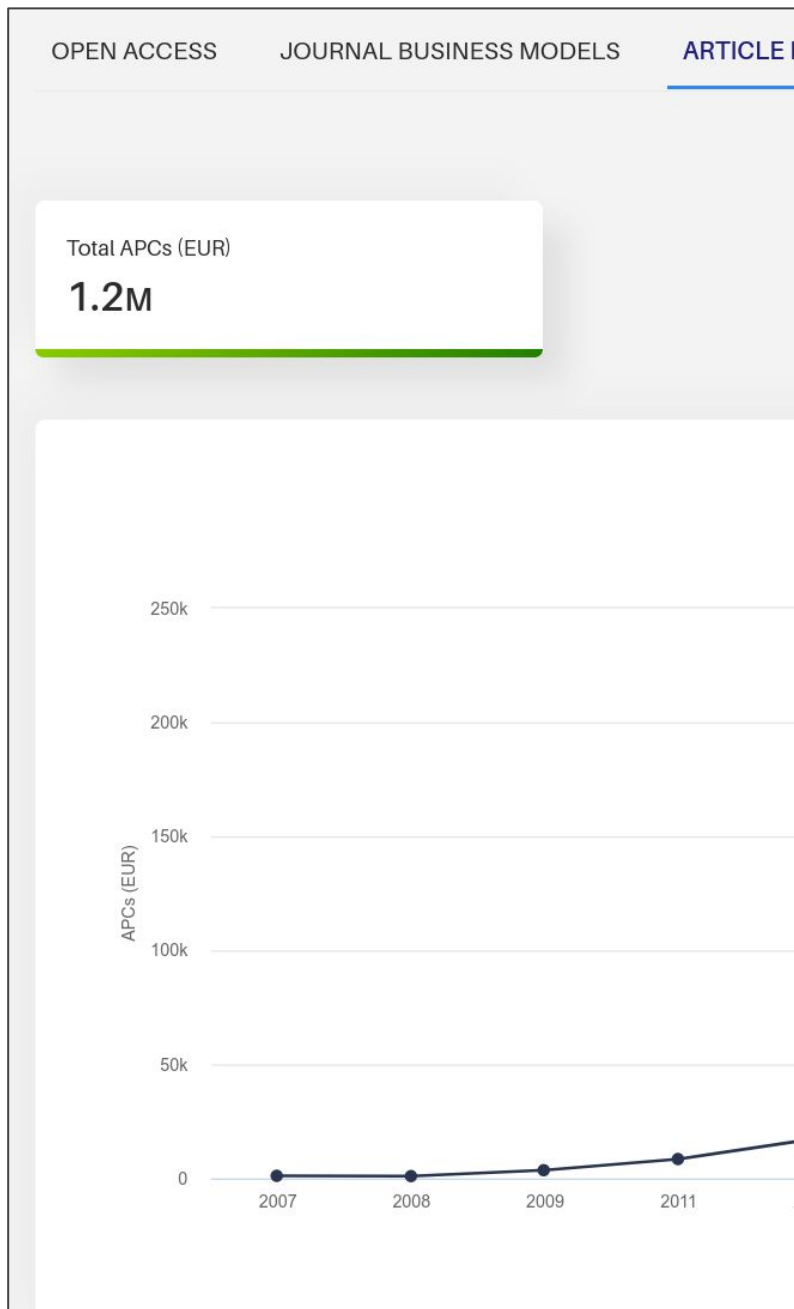
OpenAIRE service - MONITOR

- APC data is available



OpenAIRE service - MONITOR

- APC data is available

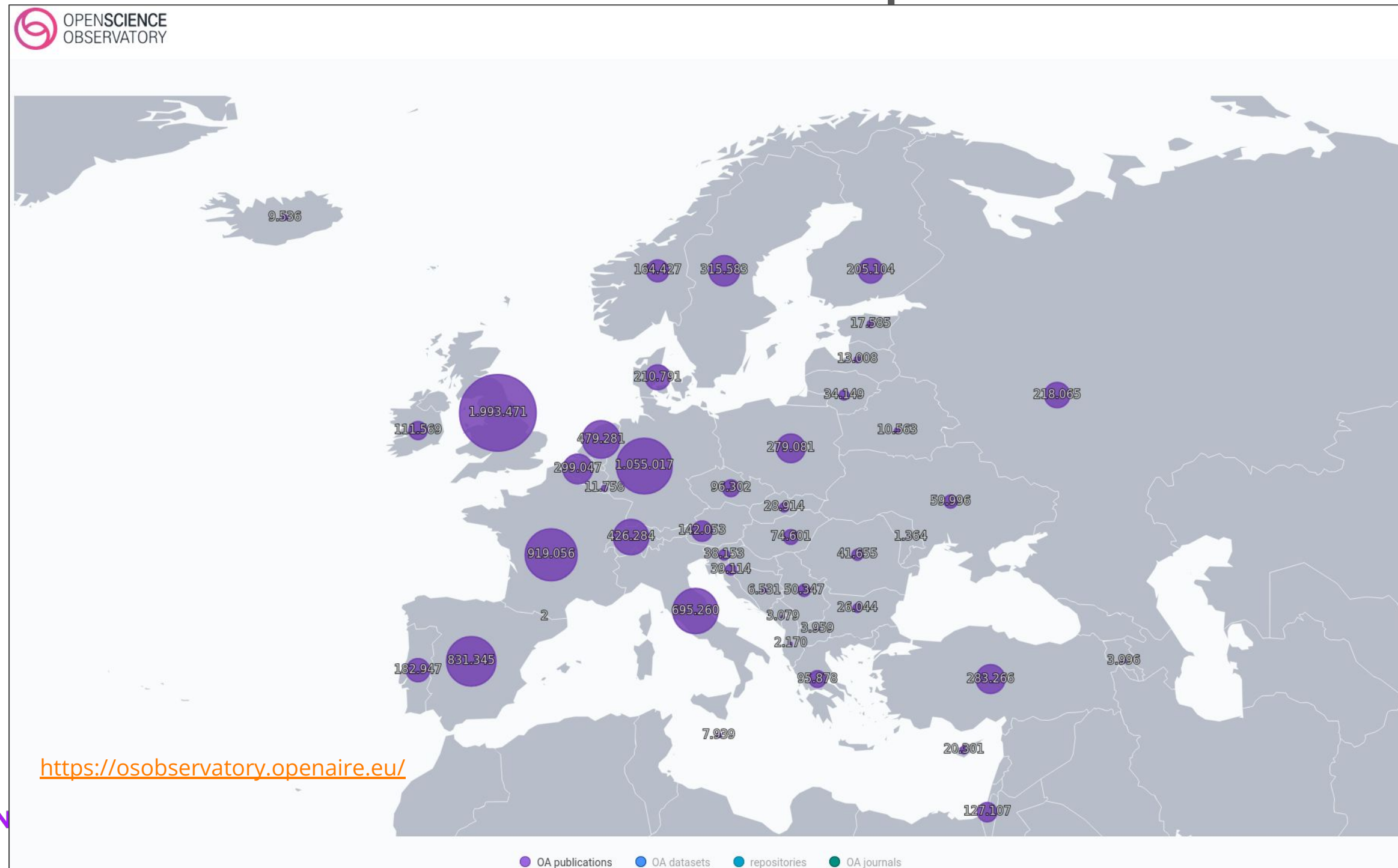


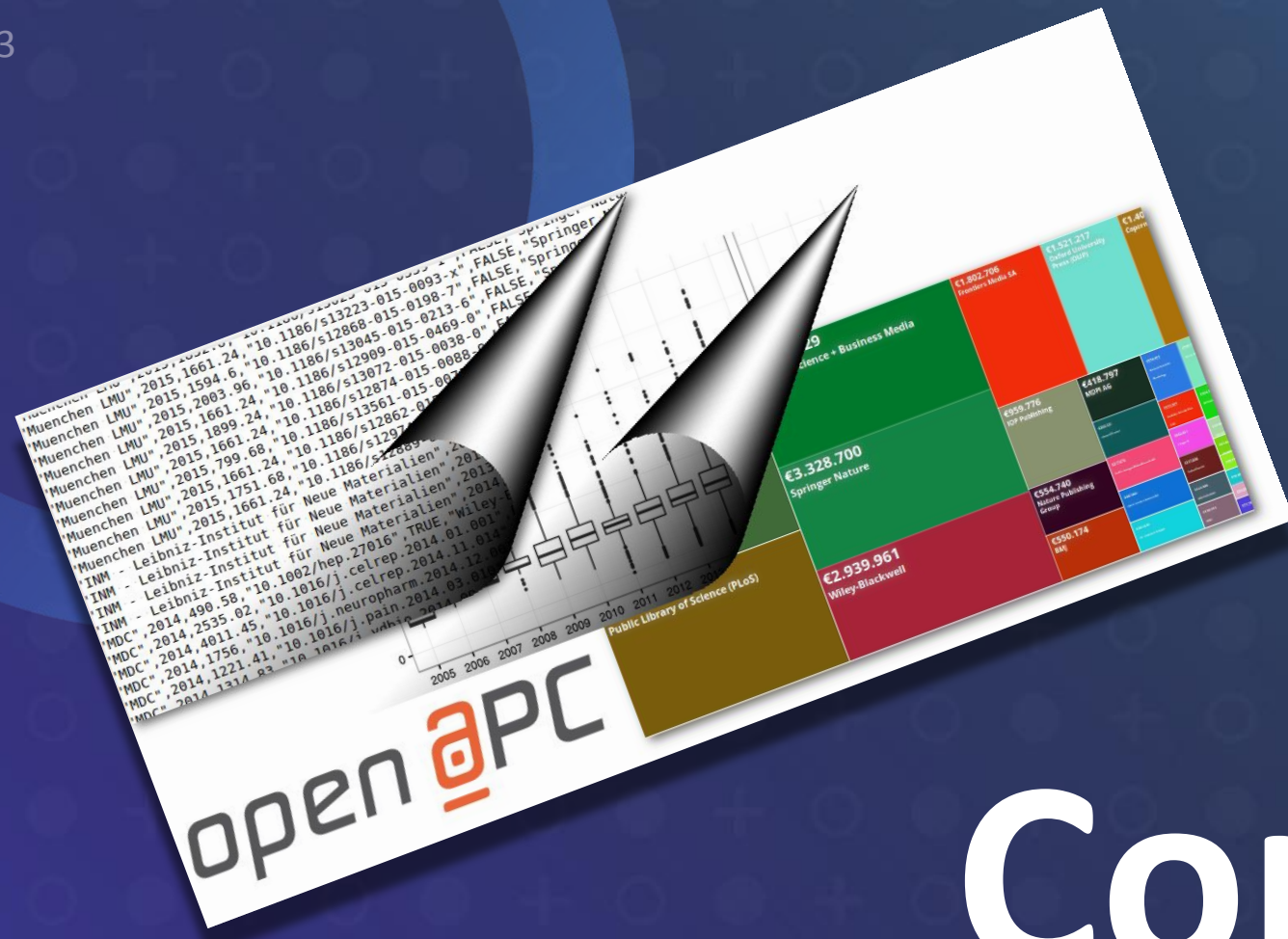
EOSC

- **Aim is to create an environment which is**
 - trustworthy, virtual, and federated
 - for interdisciplinary scientific collaboration
 - in a FAIR manner.
- **To achieve with steps of**
 - Cost estimation for OA publishing for research funders
 - Estimating the costs of publishing research results for researchers

EOSC service - OpenScience Observatory

- APC data will be made available in different OpenScience/EOSC services, eg.





Conclusion

Conclusion

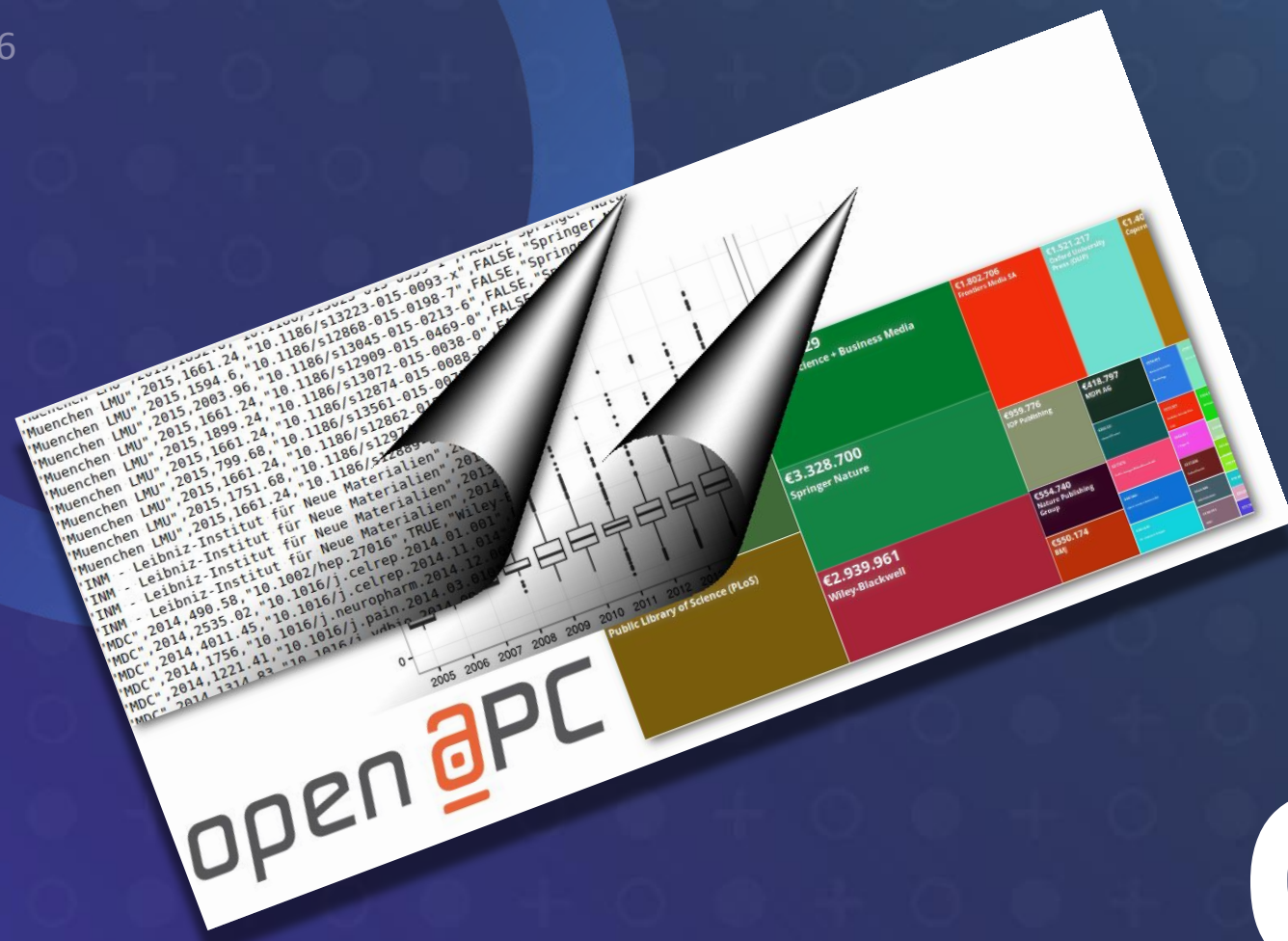
- OpenAPC is compliant with [FAIR principles](#), fully transparent, and community driven
- Data are disseminated via [GitHub](#) (raw and enriched data), [treemaps visualisation](#) and the [OpenAPC blog](#)
- OpenAPC provides price and cost transparency, used by libraries, consortia and funders to prepare for OA transformation
- Data sets are used for e.g. [institutional reporting](#), [funder reports](#) or [bibliometric studies](#)

Conclusion

OpenAPC becomes more valuable for everyone, the more institutions contribute their data.

Every data set counts, become part of the community!

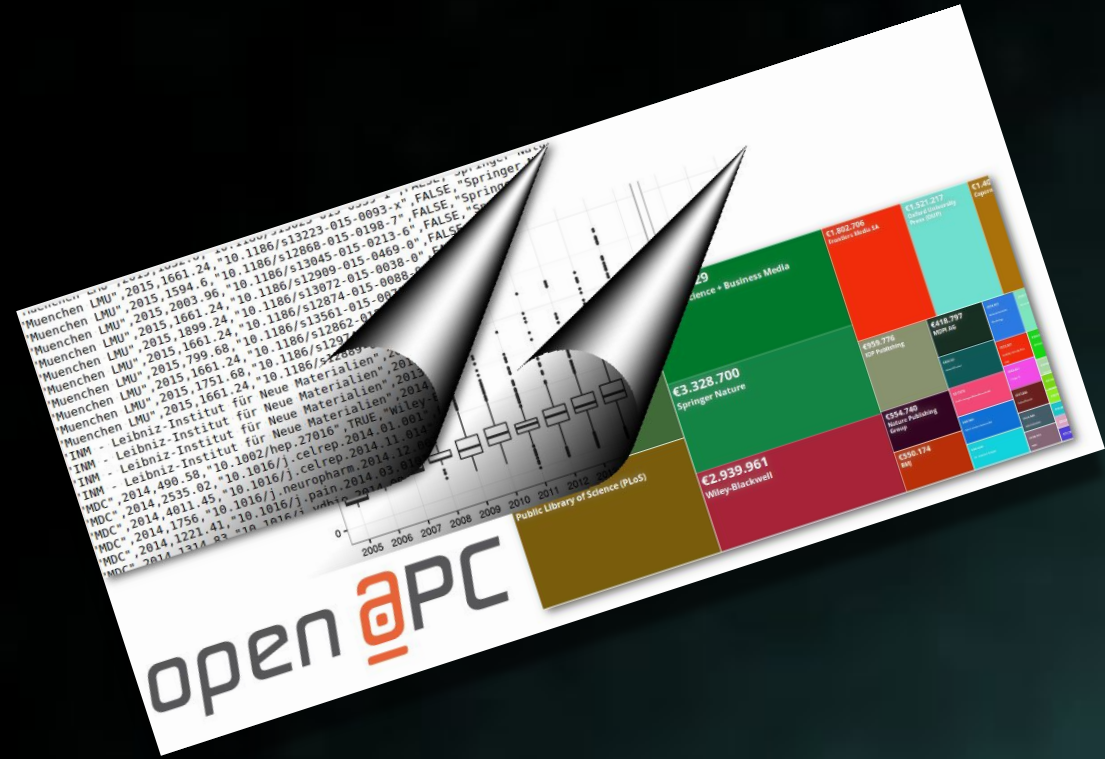
openapc@uni-bielefeld.de



Q & A

References

- <https://OpenAPC.net>
- OpenAPC project at GitHub: <https://github.com/OpenAPC/>
- Contact for support or contributions: openapc@uni-bielefeld.de
- Application Programming Interfaces to use/embed OpenAPC data directly
 - Analytics Cube of OpenAPC: <https://olap.openapc.net>
 - scholarly metadata records: <https://api.openaire.eu>
- OpenAIRE **MONITOR** <https://monitor.openaire.eu>

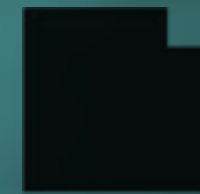


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