



OpenAPC webinar

Making costs of open access publishing transparent

in the European Open Science Cloud (EOSC)

6th October

11:00 - 12:00 (CEST)

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Bielefeld University Library / Germany





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- Introduction of OpenAPC
 - APC, BPC, and TA
- Participation
- European Open Science Cloud
- Conclusion / Outlook







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Introduction **APC, BPC, and TAs**

Introduction

- Open Data project, which is aggregating, normalizing and disseminating data on APC (and BPC) expenditures.
- Established at Bielefeld University Library 2014.
- Aim 1: To release data sets on fees paid for OA journal articles and monographs by universities and funders under an Open Database License.
- Aim 2: Enable transparent and reproducible reporting for institutions and funders and create cost transparency on the APC (and BPC) market.



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?

- funders, authors, libraries.



APCs are paid by academic institutions,

 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.
- and reporting at the beginning.
- Horizon Europe allows also the reimbursement of BPCs.



Market is developing, cost transparency

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.

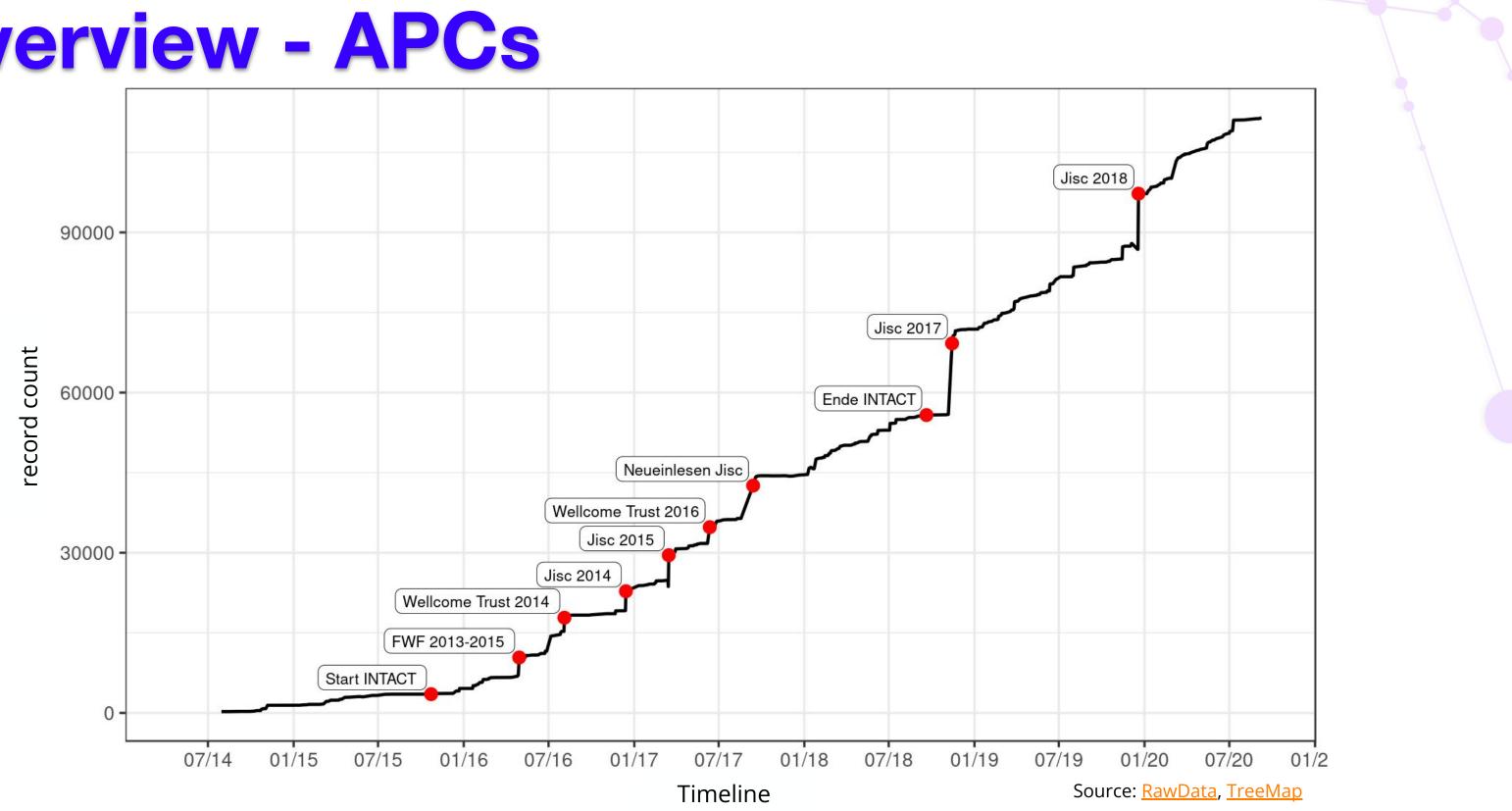
- ("equivalent APCs").
- Europe 2021-2027).



• During transition, average costs per article are hard to calculate, but needed

 Coalition S funders allow reimbursement for articles in hybrid journals within TAs until 2024 (<u>Plan S</u>). Exception: EC (Horizon

Overview - APCs

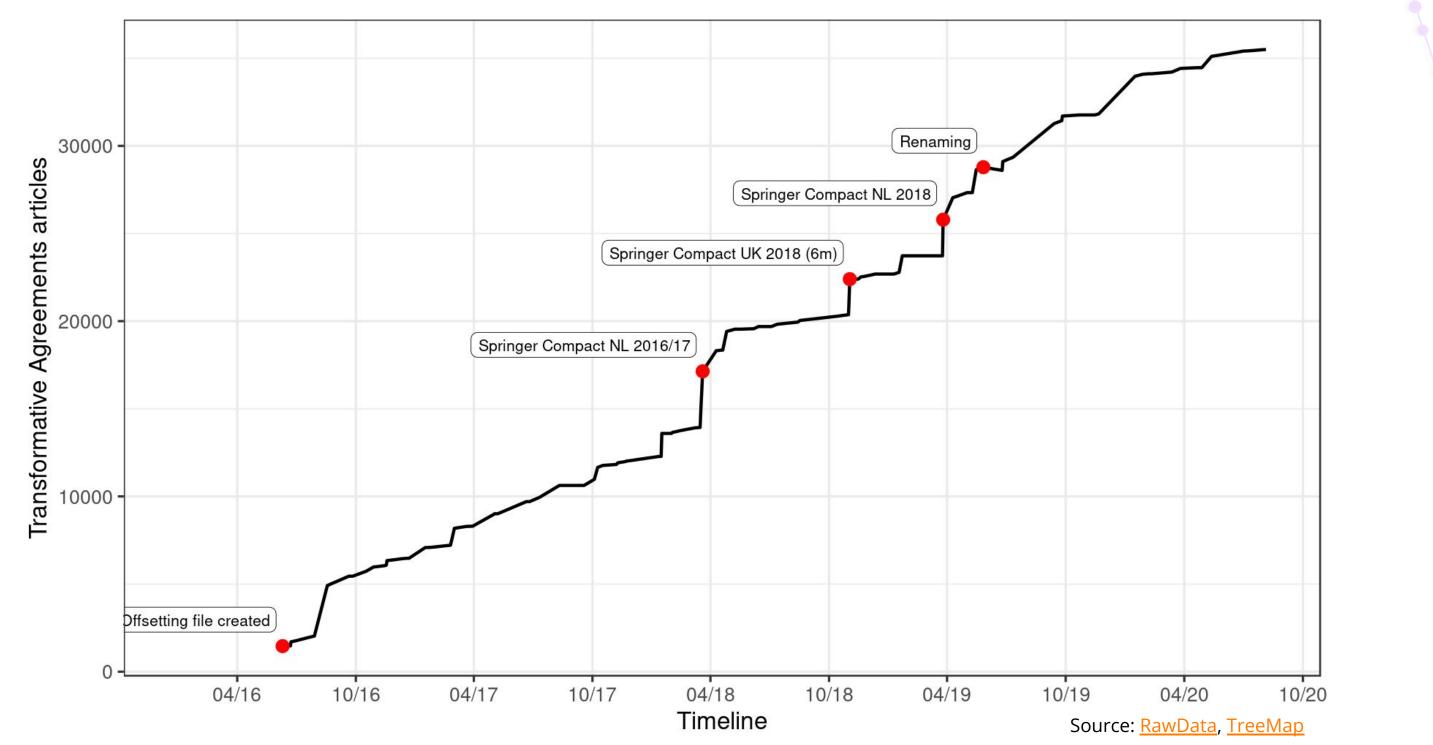




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Overview - TAs





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Current data sets

APCs

- 137,444 articles
- 324 Contributing Institutions/Organizations
- 265Million EURO

BPCs (since Mid-2020)

- 1,324 books
- 14 Contributing Institutions/Organizations
- 8,3Million EURO

• average 1,928 EUR

• average 6,332 EUR



TAs (since 2016)35,501 articles

• 214 Contributing Institutions/Organizations

• 13 Transformation Agreements



Participation



Data submission handout

- <u>Handout</u> defines minimal requirements for participation.
- Definition of costs.
- Submission: Email, GitHub pull request.
- <u>Metadata harvesting via OAI-PMH</u> from Institutional Repositories (implemented with pilots, to be expanded in a new DFG funded project in 2022).

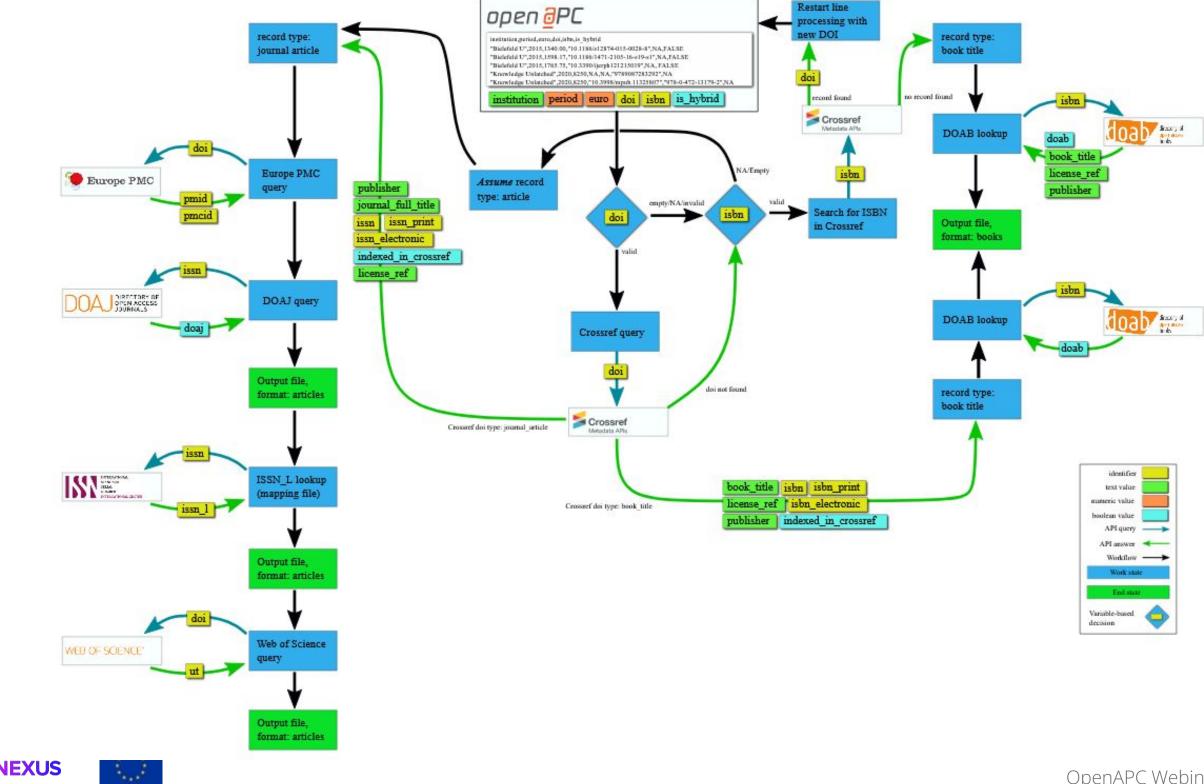


Data submission

- 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.



Workflow





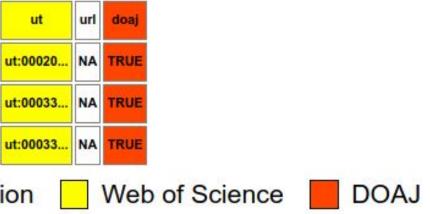
Participating with APC data

- 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	
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CSV) to OpenAPC rnal sources



Reports - A Average costs per publisher (in EURO)

Cost data

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

Elsevier BV	E	sevier	BV
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MDPI AG

IEEE

Springer Nature

Frontiers Media SA

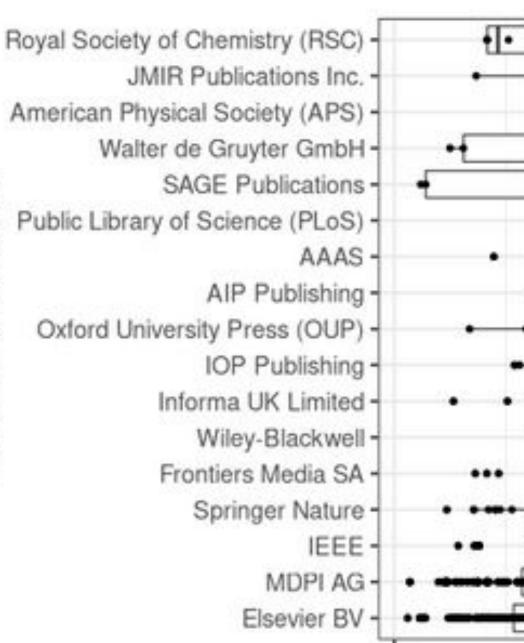
Wiley-Blackwell

Informa UK Limited

IOP Publishing

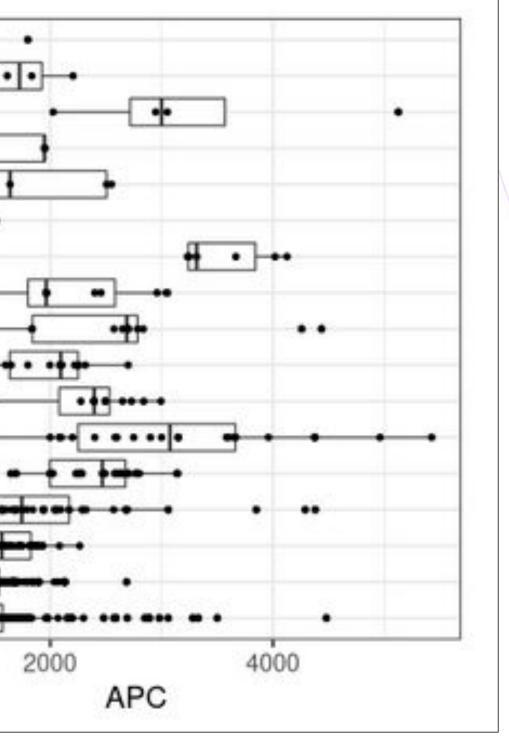
Fees paid

Publisher (> 3 articles)









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**





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Reports - BPCs

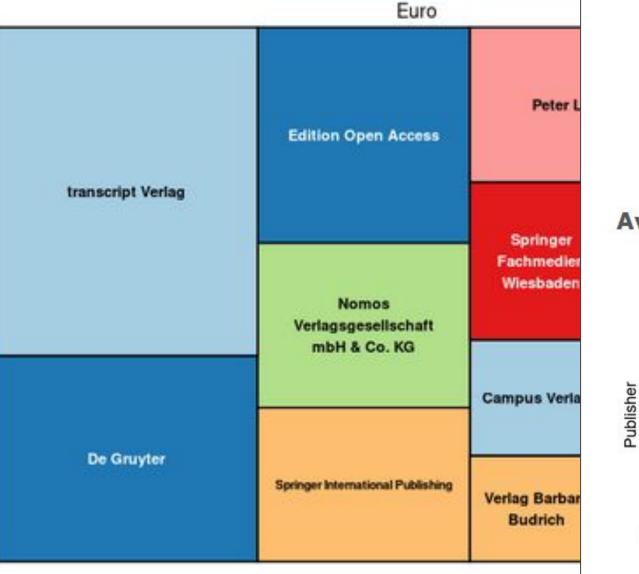
Fees paid per publisher (in EUF

Cost data

The new data set covers publication fee expenditure amounts to 207 860€ and

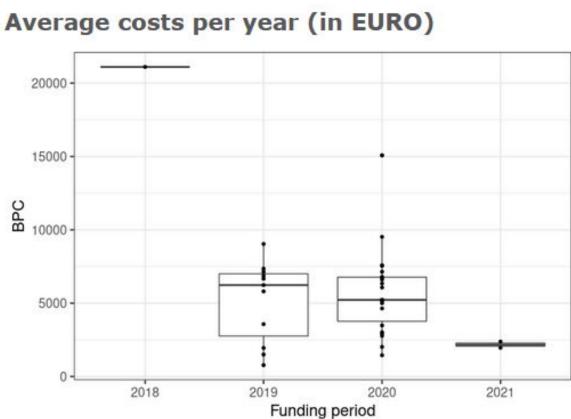
The following tables and plots provide made to book publishers from 2018 to open access books that were funded of Library of HU Berlin.

	Artic
transcript Verlag	
De Gruyter	
Nomos Verlagsgesellschaft mbH & Co. KG	
Waxmann Verlag	
Peter Lang	
Springer Fachmedien Wiesbaden	



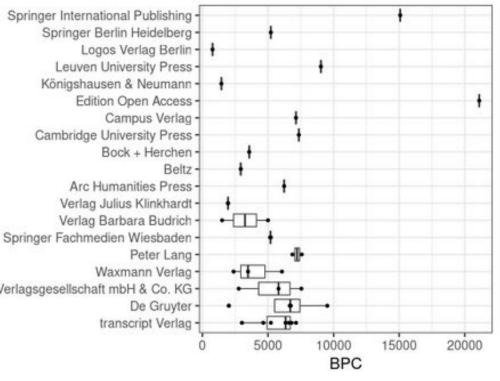






Average costs per publisher (in EURO)

Nomos Verlagsgesellschaft mbH & Co. KG



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 <u>DEAL agreements</u> to report cost data within a TA.



Example TA with cost data: DEAL

View: Publish	er Journal	Institution	Data &	Embed							Filter	: Pu	blishe	: All 🗕	Y	ear: Al	I •	Hyb
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Measure: Su	n Number	of Articles	Mean Value	Standard De	eviation													
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Scientific Reports						€660.085			375				€1.760					
Angewandte	Chemie Inte	ernational	Edition			€332.550			99 €3.359									

£320 120

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£1 578

Chemistry A European Journal









European Open Science Cloud

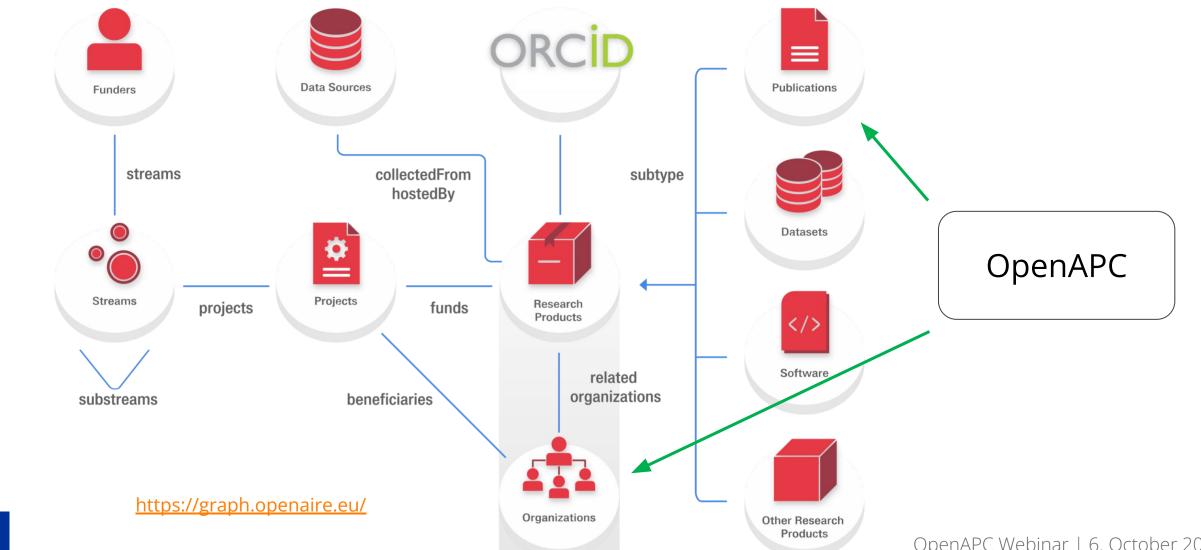


- Aim is to create an environment which is
 - trustworthy, virtual, and federated
 - for interdisciplinary scientific collaboration
 - in a FAIR manner.
- To achieve with steps of
 - Cost estimation for OA publishing for research funders •
 - Estimating the costs of publishing research results for researchers



OpenAIRE Research Graph

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

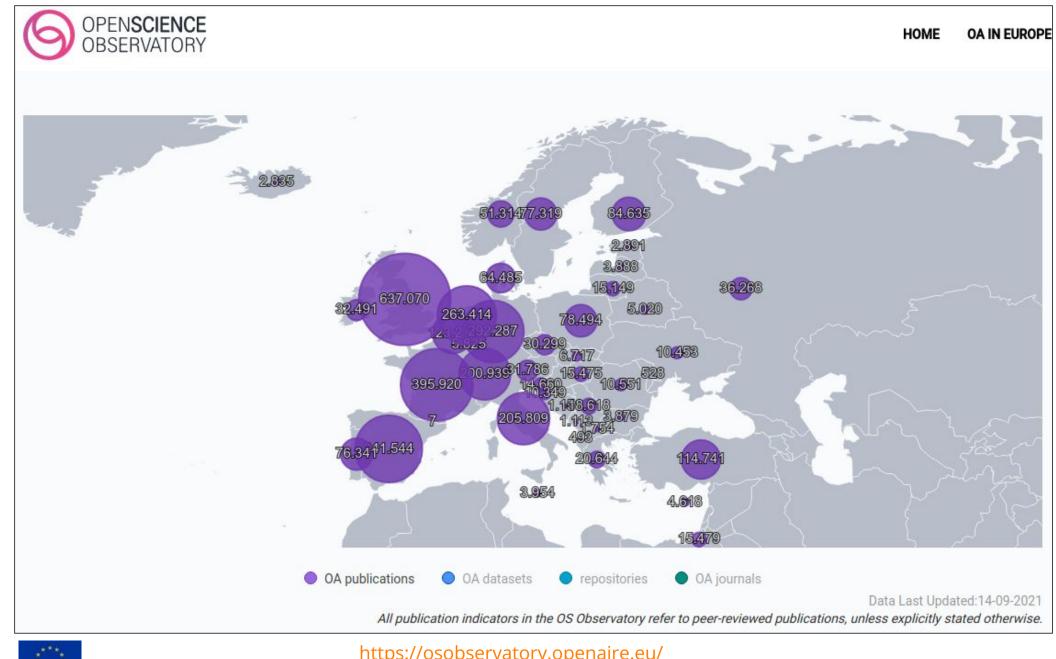




Research AIR

EOSC service - OpenScience Observatory

• APC data will be made available in different EOSC services, eg.

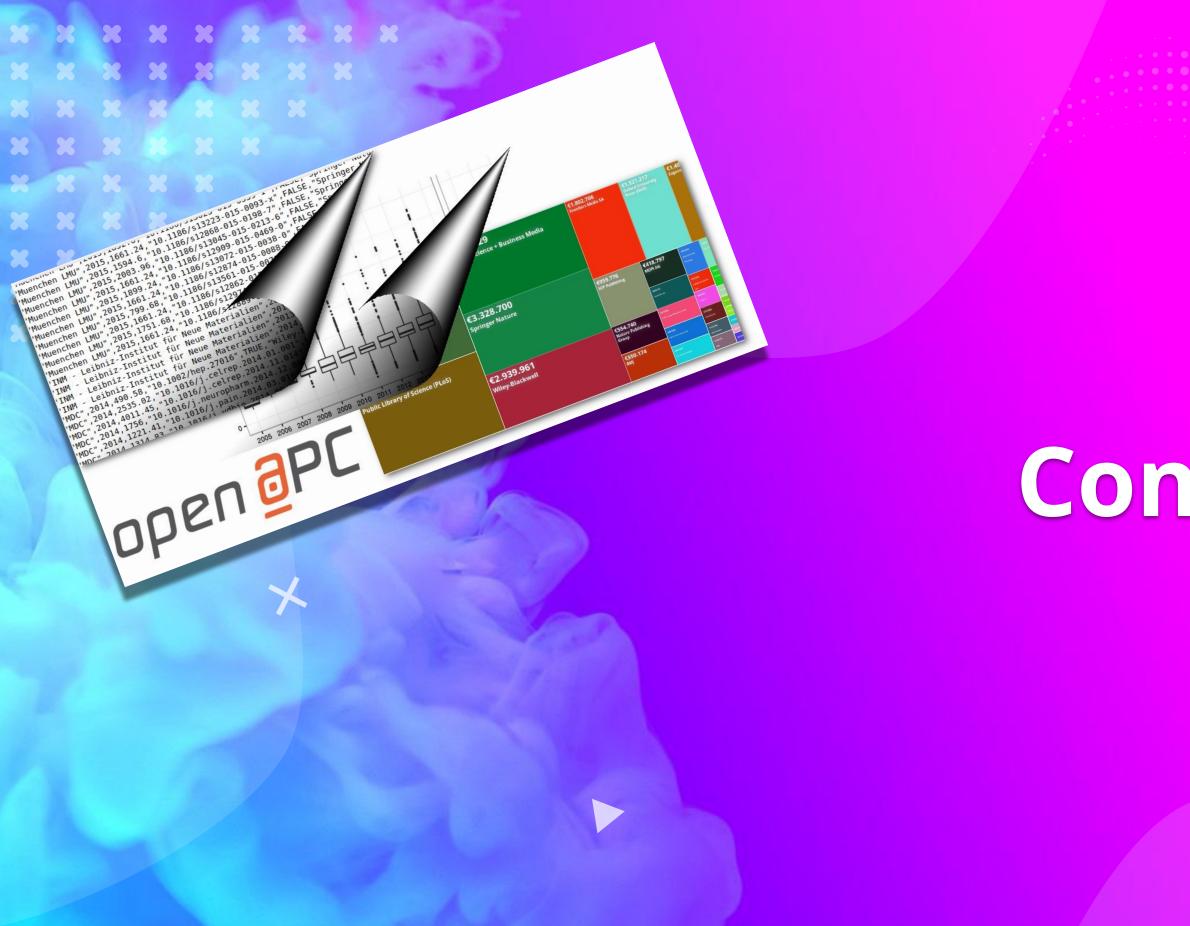






https://osobservatory.openaire.eu/





Conclusion

Conclusion

- OpenAPC is compliant with <u>FAIR principles</u>, fully transparent, and community driven
- Data are disseminated via <u>GitHub</u> (raw and enriched data), <u>treemaps</u> 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. <u>institutional reporting</u>, <u>funder reports</u> or bibliometric studies



Conclusion

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

Every data set counts, please become part of our community!

openapc@uni-bielefeld.de



References

- https://OpenAPC.net
- OpenAPC project at GitHub:

TreeMaps and **Blog**

https://github.com/OpenAPC/

- Contact for support or contributions: <u>openapc@uni-bielefeld.de</u>
- Application Programming Interfaces to use/embed OpenAPC data directly
 - Analytics Cube of OpenAPC:

https://olap.openapc.net

scholarly metadata records:

https://api.openaire.eu





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