



o p e n a c c e s s
2 0 2 0



The OA2020 Roadmap to Open Access

3rd SPARC Japan Seminar 2018

9 November 2018 – National Institute of Informatics

Dr Ralf Schimmer

Head of Information Provision | Max Planck Digital Library



@oa2020ini

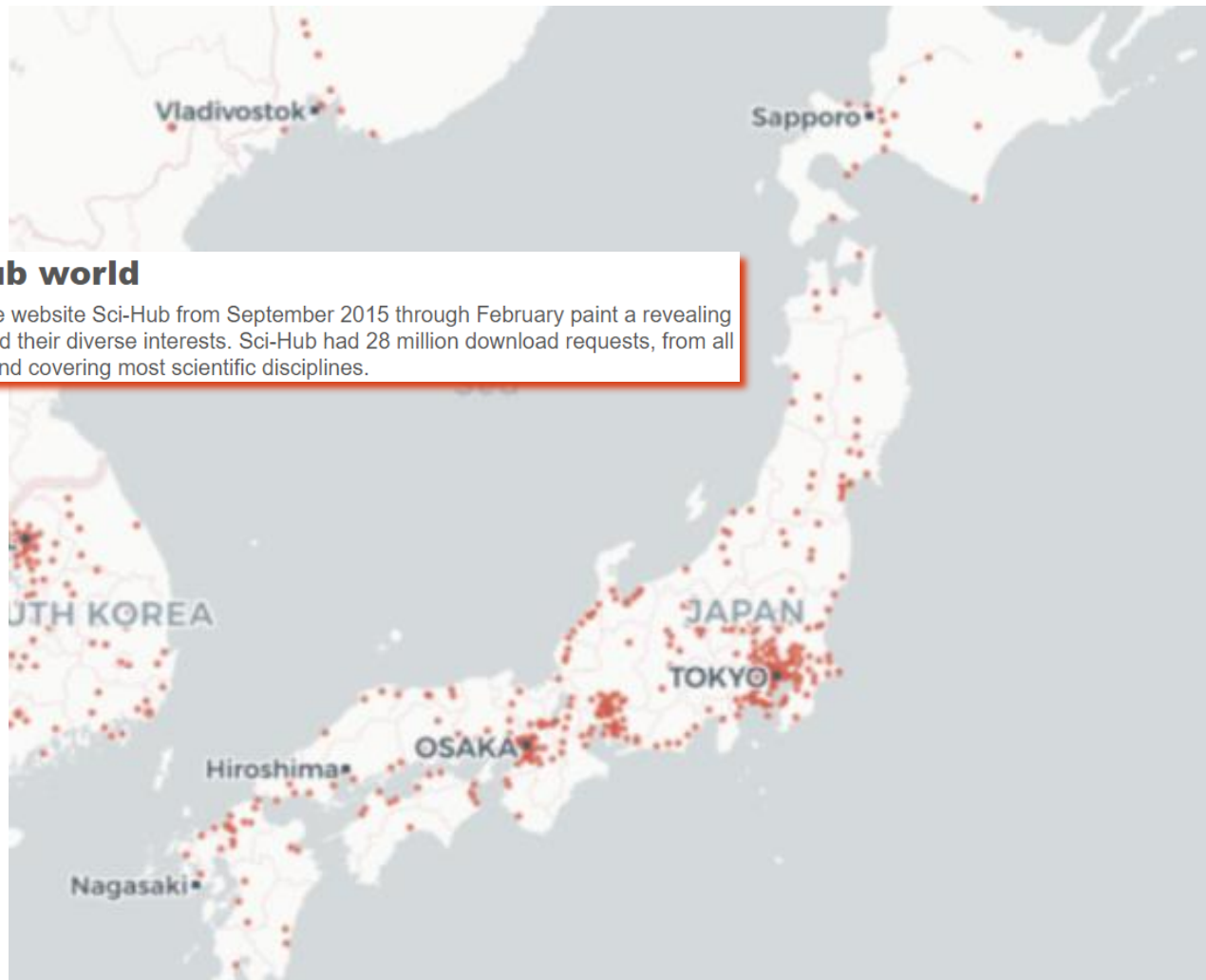
The promise of open access



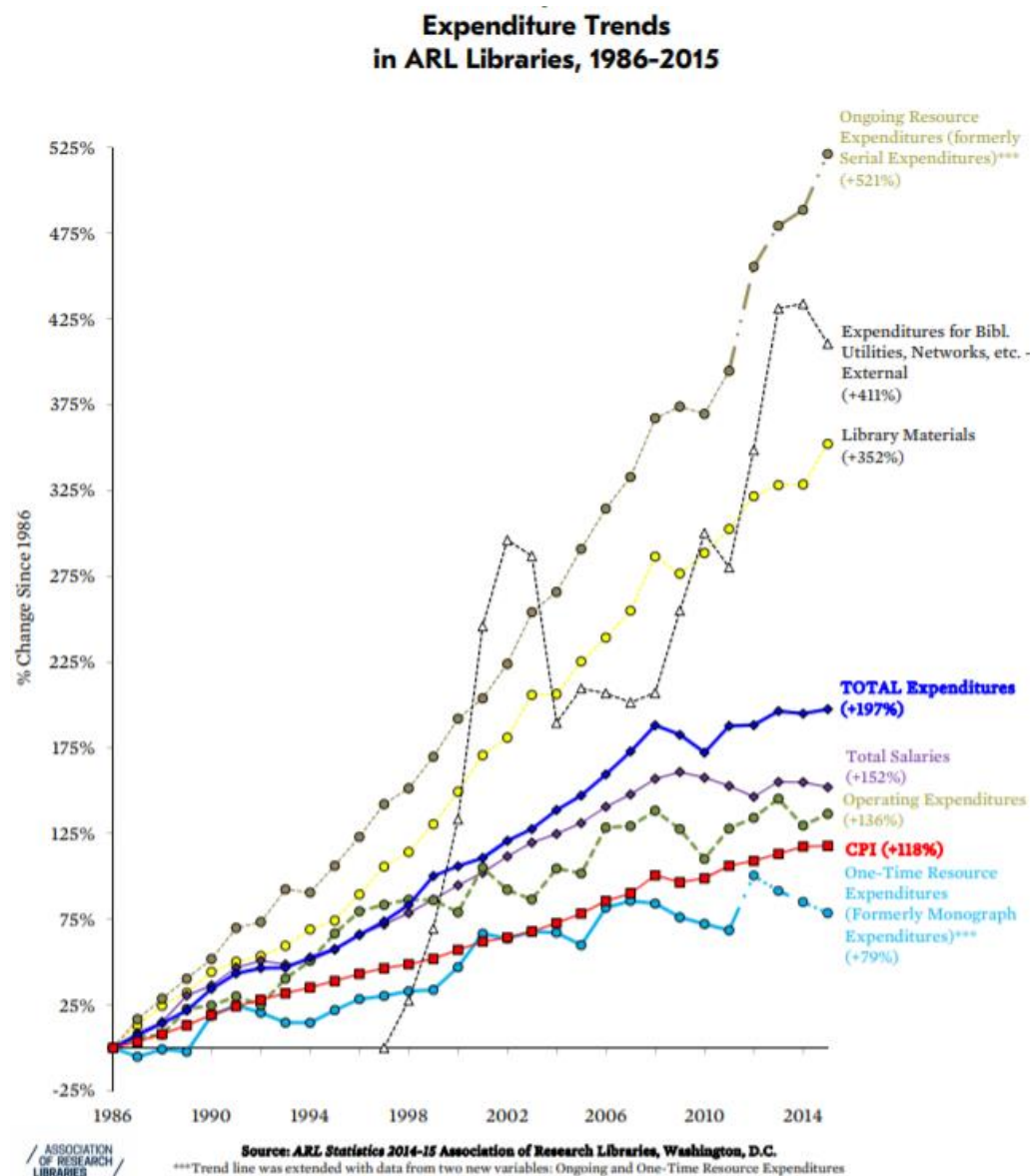
Paywalls continue to hinder research and slow the advancement of science

It's a Sci-Hub world

Server log data for the website Sci-Hub from September 2015 through February paint a revealing portrait of its users and their diverse interests. Sci-Hub had 28 million download requests, from all regions of the world and covering most scientific disciplines.



We cannot afford to continue subscriptions



The open access dilemma

*Open Access is (exceptionally) strong as a **principle***

- cf. the many resolutions, policies, guidelines etc.

*...but still fairly weak as a **practice***

- very low deposit rate in IRs
- only 15% of research is immediately OA
- subscription system as prosperous as ever

Economic grounding for transformation

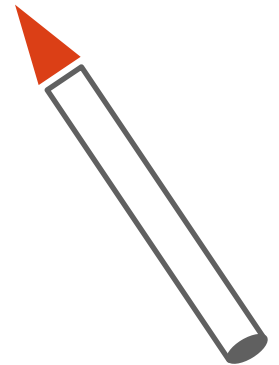
Cost per article under subscription regime

$$\begin{array}{r} 7.6 \text{ Bn EUR} \\ \div 2M \text{ \# articles} \\ \hline 3800 \text{ EUR per article} \end{array}$$

Cost per article published open access

$$\begin{array}{r} > 2000 \text{ EUR per article} \\ \times 2M \text{ \# articles} \\ \hline 4.0 \text{ Bn EUR} \end{array}$$

$$\begin{array}{r} 7.6 \text{ Bn} \\ - 4 \text{ Bn} \\ \hline 3.6 \text{ Bn} \end{array}$$



<http://hdl.handle.net/11858/00-001M-0000-0026-C274-7>

<https://treemaps.intact-project.org/apcdata/openapc/>

Significance of growth in OA publishing

Publisher	Journal	#Papers 2016
PLOS	PLOS ONE	22091
NPG	Scientific Reports	20546
RSC	RSC Advances (OA as of 2017)	13274
Impact	OncoTarget	6625
APS	Physical Review B: Condensed Matter and Materials Physics	5345
ACS	ACS Applied Materials and Interfaces	4057
NPG	Nature Communications	3537
RSC	Physical Chemistry, Chemical Physics	3503
APS	Physical Review D: Particles, Fields, Gravitation, and Cosmology	3390
Elsevier	Medicine	3275
Elsevier	Journal of Alloys and Compounds	3243
ACS	The Journal of Physical Chemistry C: Nanomaterials and Interfaces	3241
OUP	Monthly Notices of the Royal Astronomical Society	3208
NAS	Proceedings of the National Academy of Sciences of the USA	3183
AIP	Applied Physics Letters	3047
e-Century	International Journal of Clinical and Experimental Medicine	3005
RSC	Chemical Communications	2967
OSA	Optics Express	2903
AAS	The Astrophysical Journal	2812
Desalination	Desalination and Water Treatment	2762

20 largest journals, based on number of papers published in 2016. OA highlighted in grey.
MPDL analysis based on data from **Web of Science**.

That is a good thing, but...

OA publishing constitutes an **unmonitored and unchecked parallel revenue stream** for subscription publishers

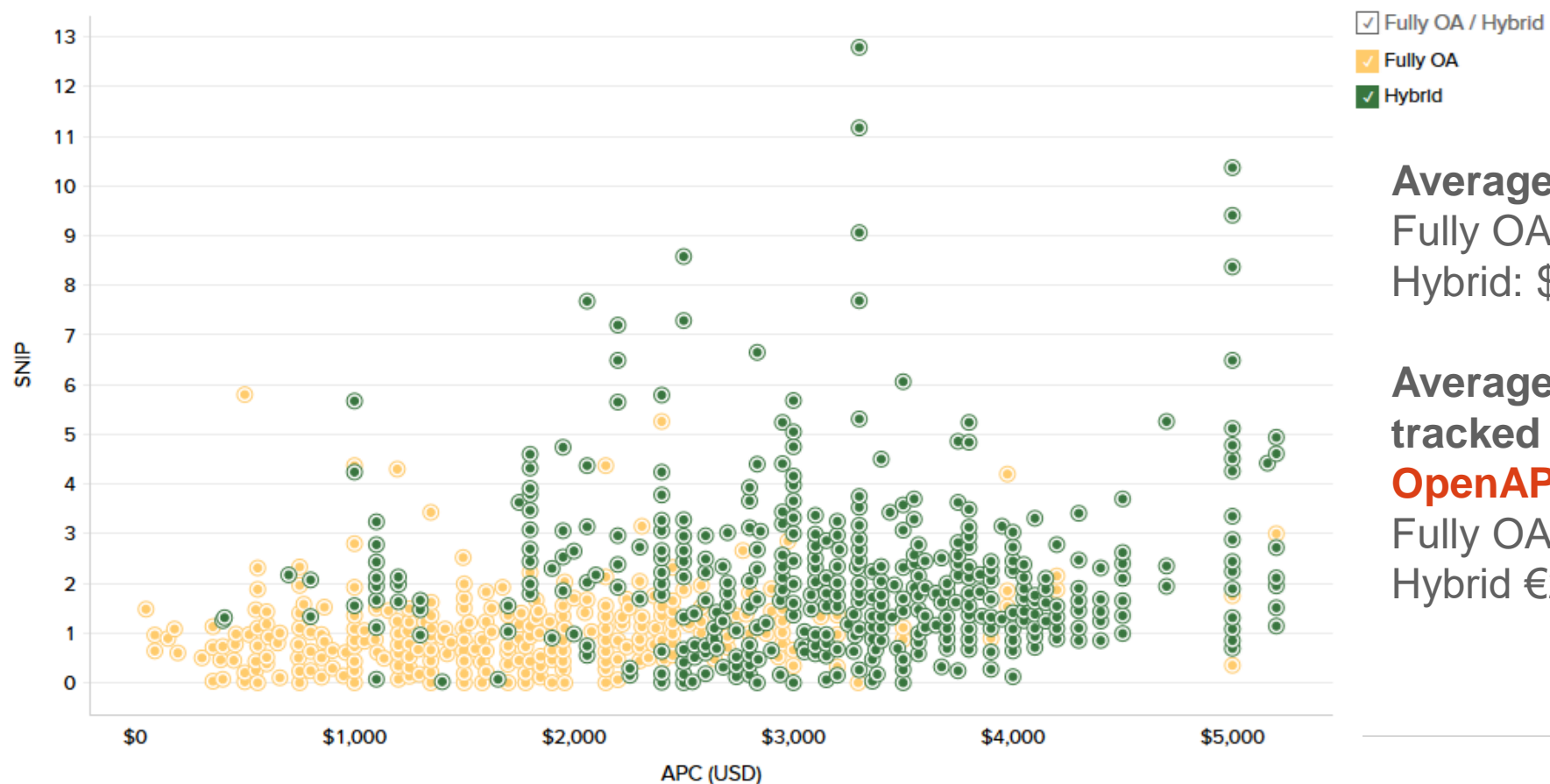

$$\begin{array}{r} 7.6 \text{ Bn EUR} \\ \div 2M \text{ \# articles} \\ \hline 3800 \text{ EUR per article} \end{array}$$

$$\begin{array}{r} + \cancel{10} \\ + \cancel{100} \\ + 1000 \end{array}$$

Risks of uncontrolled APCs

APC vs. SNIP for Publishers by Fully OA/Hybrid:

All publishers (2017-2018)



Average list APC

Fully OA: \$1600

Hybrid: \$2900

Average payment tracked by

OpenAPC:

Fully OA: €1488

Hybrid €2445

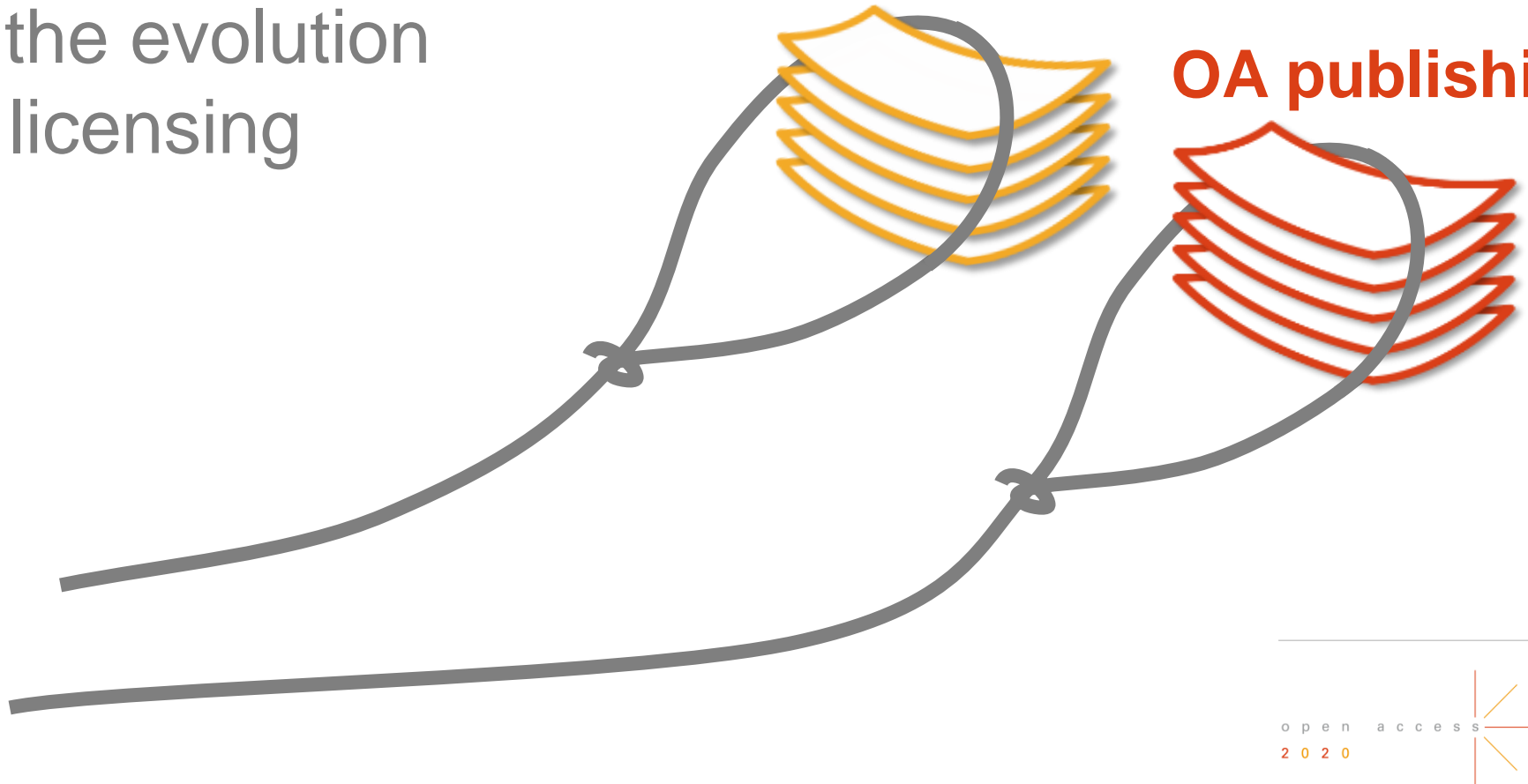
With permission from Delta Think Open Access Data & Analytics tool. Analysis 15.09.2018

To transform the system, both revenue streams must be reined in and...

OA is (just) the next step
in the evolution
of licensing

subscriptions

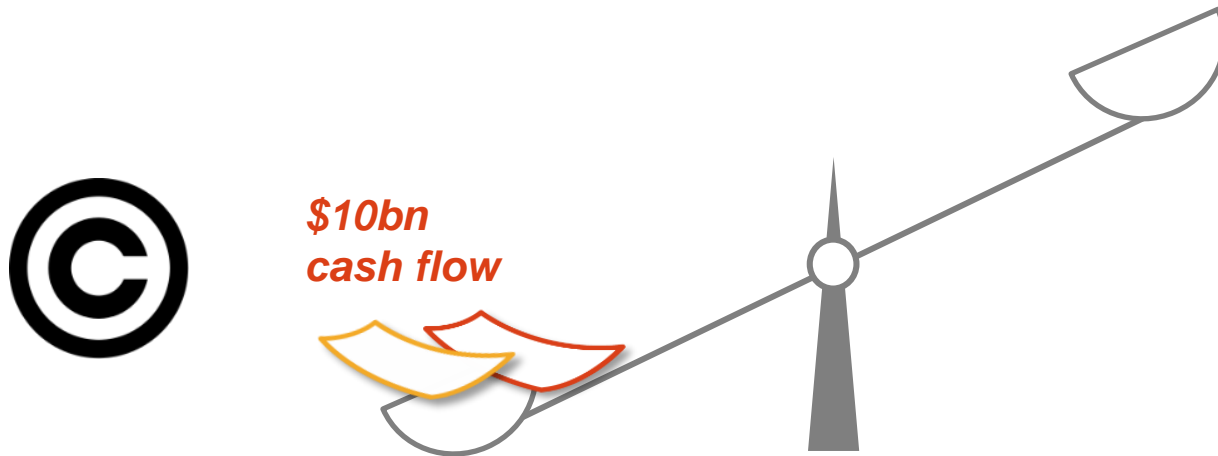
OA publishing



Spending must shift *away* from paywalls *toward* open access publishing services

Subscription system

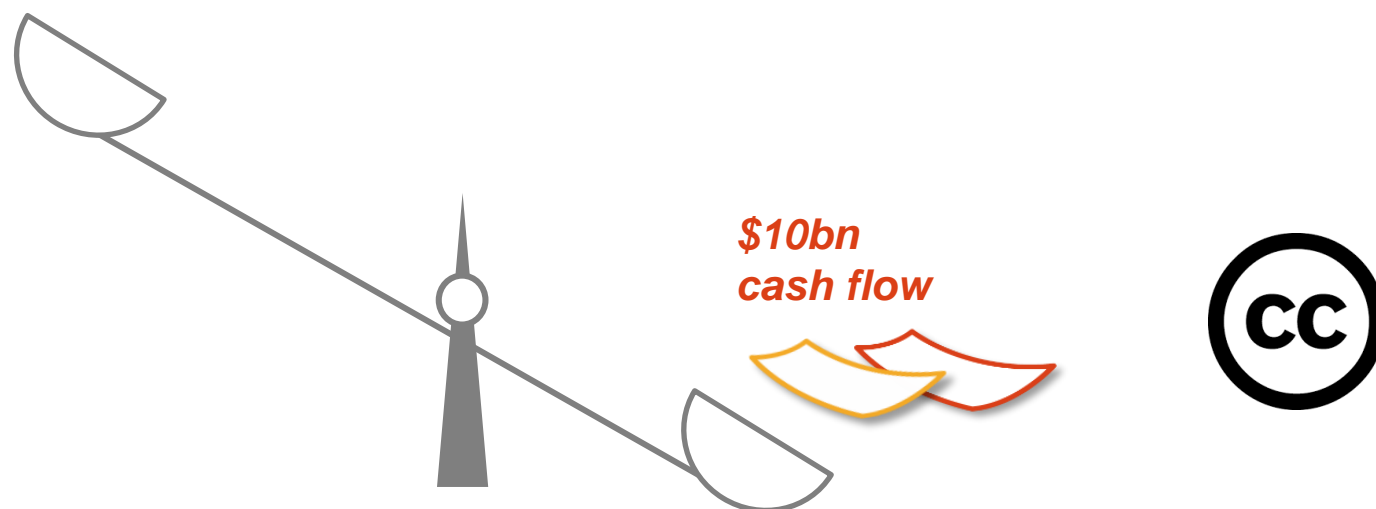
Open Access



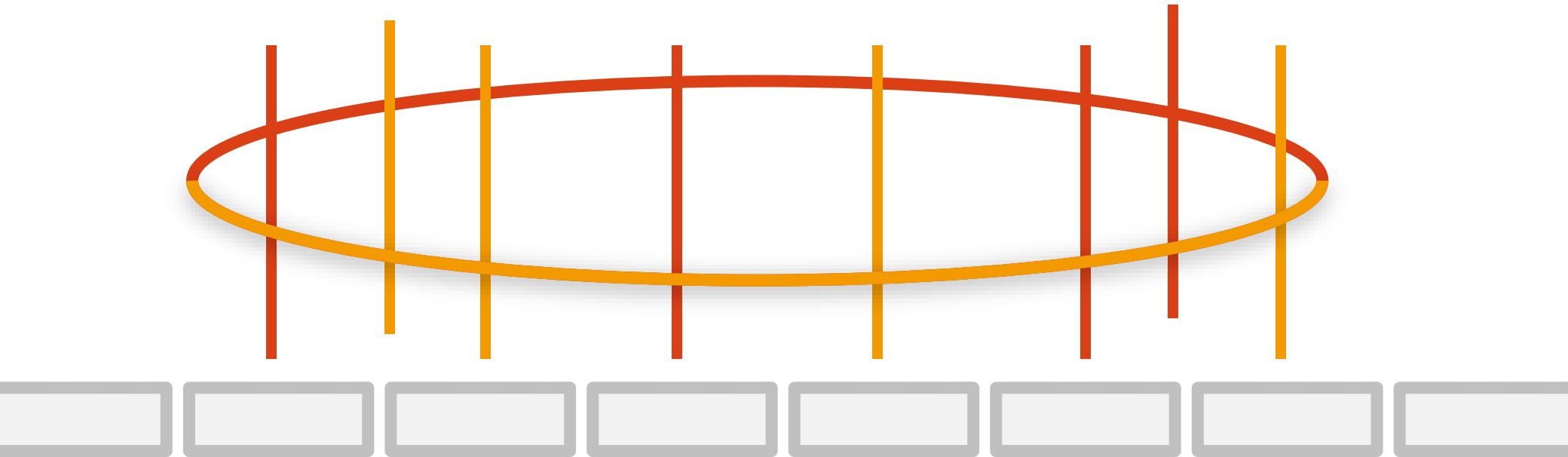
Spending must shift *away* from paywalls *toward* open access publishing services

Subscription system

Open Access



A global strategy for large-scale transformation



20 countries account for 80% of global research output

Countries at B13	y2015RP	Share	Cumulative
Total	1,468,689	100%	
United States	297,093	20.2%	20.2%
China	250,375	17.0%	37.2%
Great Britain	69,613	4.7%	41.9%
Germany	68,952	4.7%	46.6%
Japan	60,448	4.1%	50.7%
South Korea	47,900	3.3%	54.0%
Italy	45,835	3.1%	57.1%
France	44,573	3.0%	60.1%
Canada	43,264	2.9%	63.0%
Australia	39,293	2.7%	65.7%
Spain	39,169	2.7%	68.4%
Brazil	32,968	2.2%	70.6%
Russian Federation	25,729	1.8%	72.4%
Netherlands	23,377	1.6%	74.0%
Poland	20,524	1.4%	75.4%
Switzerland	15,150	1.0%	76.4%
Sweden	15,069	1.0%	77.4%
Belgium	12,126	0.8%	78.2%
Denmark	10,139	0.7%	78.9%
Austria	8,144	0.6%	79.5%

Corresponding author
output by country
based on 2015 WoS
data presented at the
13th Berlin Open
Access Conference

The tipping point can be reached with as few as 100 institutions

# of institutions	Firm support	Median	Cumulative
United States	10-20	15	15
China	8-12	10	25
Great Britain	6-8	7	32
Germany	6-8	7	39
Japan	5-7	6	45
South Korea	4-6	5	50
Italy	4-6	5	55
France	4-6	5	60
Canada	4-6	5	65
Australia	4-6	5	70
Spain	4-6	5	75
Brazil	3-5	4	79
Russian Federation	3-5	4	83
Netherlands	2-4	3	86
Poland	2-4	3	89
Switzerland	1-3	2	91
Sweden	1-3	2	93
Belgium	1-3	2	95
Denmark	1-3	2	97
Austria	1-3	2	99

Corresponding author
output by country
based on 2015 WoS
data presented at the
13th Berlin Open
Access Conference



OA2020 meets publishers at eye level



OA2020 delivers open access to authors

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

UNIVERSITY COMMITTEE ON LIBRARY AND SCHOLARLY COMMUNICATION
Assembly of the Academic Senate, University of California

Declaration of Rights and Principles to Transform Scholarly Communications

Championing Change in Journal Negotiations

Negotiating Journal Agreements at UC: A Call to Action

<https://osc.universityofcalifornia.edu/2018/06/championing-change-in-journal-negotiations/>

UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

UNIVERSITY COMMITTEE ON LIBRARY AND SCHOLARLY COMMUNICATION
Assembly of the Academic Senate, University of California

13 April 2018

DECLARATION OF RIGHTS AND PRINCIPLES TO TRANSFORM SCHOLARLY COMMUNICATION

To align our institutional policies and practices toward the goal of replacing subscription-based publishing with open access (OA), we propose that the University of California assert the following rights and principles when negotiating with publishers during journal license renewals:

- 1. No copyright transfers.** Our authors shall be allowed to retain copyright in their work and grant a Creative Commons Attribution license of their choosing.
- 2. No restrictions on preprints.** Our authors shall have the right to submit for publication work they have previously made available as preprints.
- 3. No waivers of OA Policy.** Publishers shall not require our authors to provide waivers of our Institutional OA Policy as a condition for publishing our work.
- 4. No delays to sharing.** Publishers shall make work by our authors immediately available for harvest or via automatic deposit into our Institutional OA repository or another public archive.
- 5. No limitations on author reuse.** Our authors shall have the right to reuse figures, tables, data, and text from their published work without permission or payment.
- 6. No impediments to rights reversion.** Publishers shall provide a simple process for our authors to regain copyright in their previously published work.
- 7. No curtailment of copyright exceptions.** Licenses shall not restrict, and should instead expressly protect, the rights of authors, institutions, and the public to reuse excerpts of published work consistent with legal exceptions and limitations on copyright such as fair use.
- 8. No barriers to data availability.** Our authors shall have the right to make all of their data, figures, and other supporting materials from their published work publicly available.
- 9. No constraints on content mining.** Publishers shall make licensed materials open, accessible, and machine-readable for text and data mining by our researchers, at no additional cost and under terms that allow retention and reuse of results.
- 10. No closed metadata.** Publishers shall make bibliographic records, usage metrics, and citation data for our authors freely available, easy to parse, and machine-readable.
- 11. No free labor.** Publishers shall provide our Institution with data on peer review and editorial contributions by our authors in support of journals, and such contributions shall be taken into account when determining the cost of our subscriptions or OA fees for our authors.
- 12. No long-term subscriptions.** Publishers shall provide our Institution with plans and timelines for transitioning their subscription journals to OA.
- 13. No permanent paywalls.** Our Institution shall receive perpetual access for previously licensed content and back files shall be made freely available once a journal transitions to OA.
- 14. No double payments.** Publishers shall provide our Institution with data on hybrid OA payments from our authors and such payments shall reduce the cost of our subscriptions.
- 15. No hidden profits.** Publishers shall use transparent pricing for the services they provide our authors when levying article processing charges and other fees associated with publishing.
- 16. No deals without OA offsets.** Our Institution shall only enter into publishing agreements that include offsets for OA publishing by our authors.
- 17. No new paywalls for our work.** Work by our authors shall be made OA on the publisher's website as part of subscription terms for new journals.
- 18. No non-disclosure agreements.** Publisher agreements with our Institution shall be transparent and shall not contain terms that prevent the sharing of their contents.

OA2020 is in alignment with funders



cOAlition S Making Open Access a reality by 2020

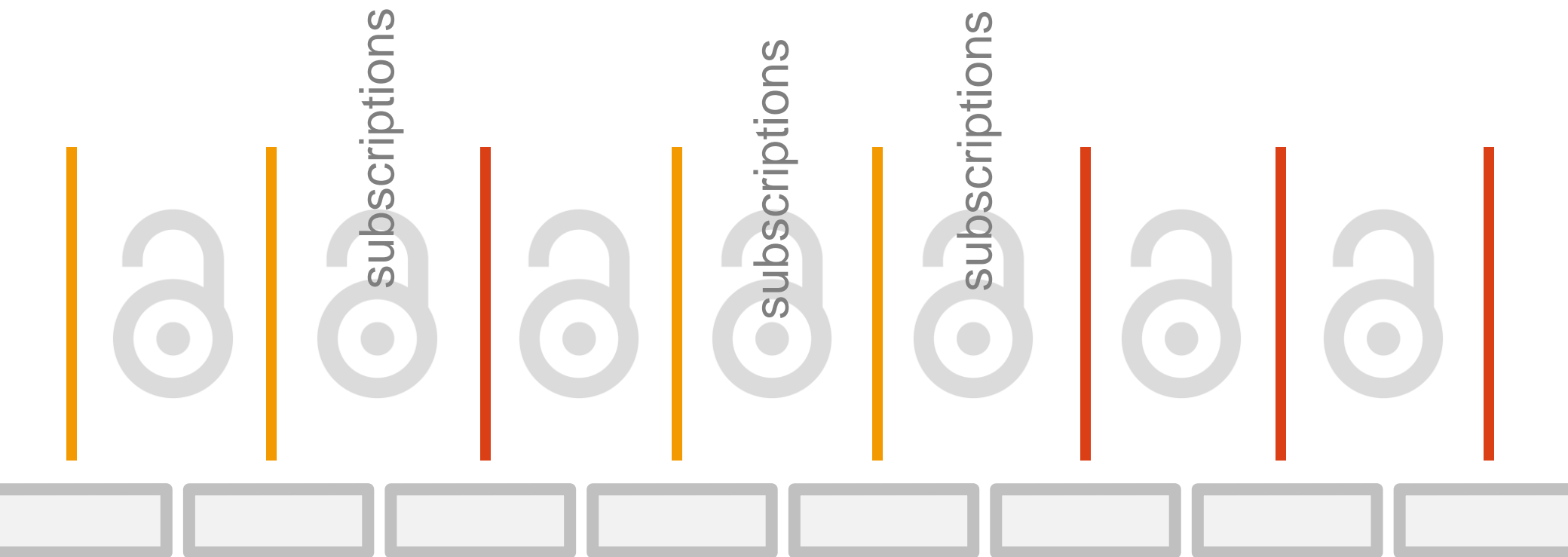
A DECLARATION OF COMMITMENT
BY PUBLIC RESEARCH FUNDERS

<http://scieur.org/coalition-s>

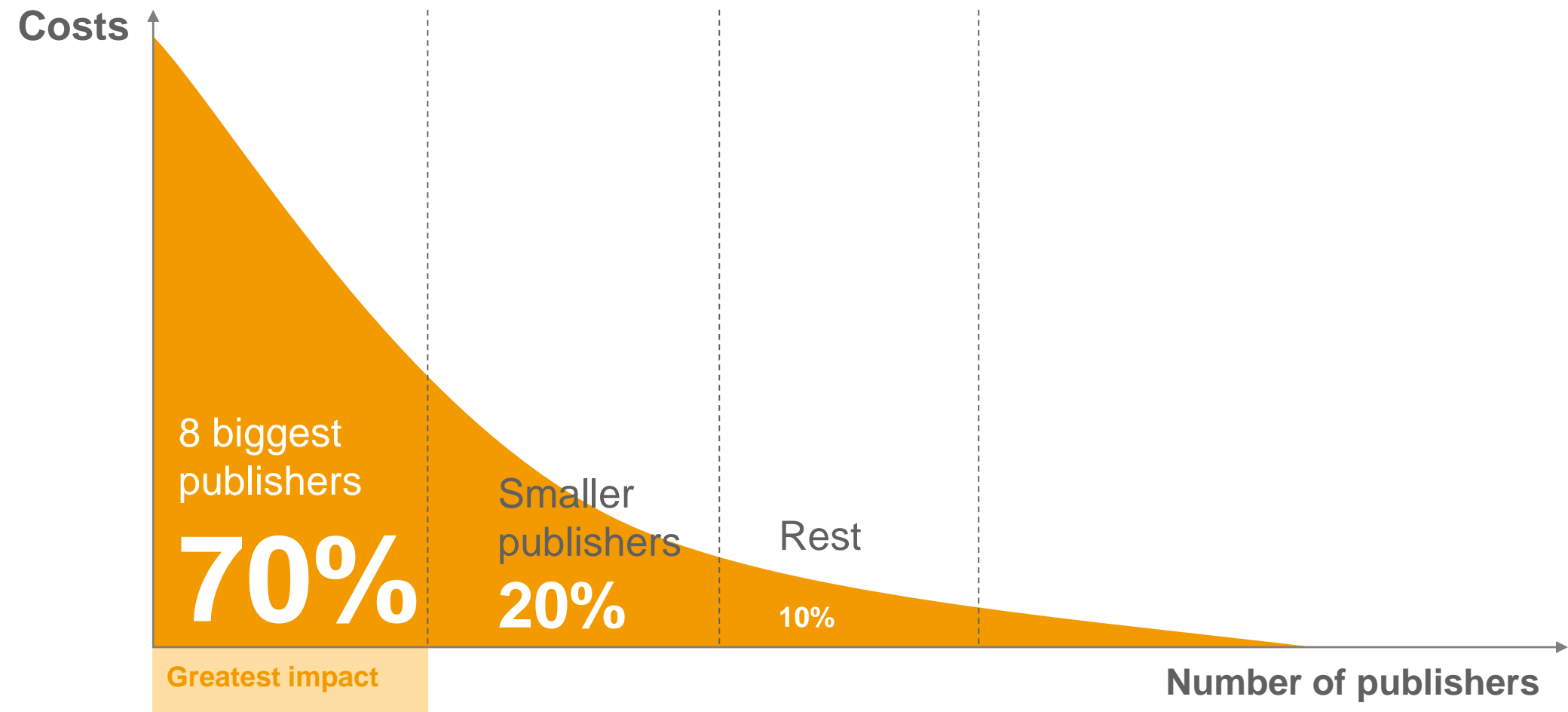


The OA2020 strategy for transformation

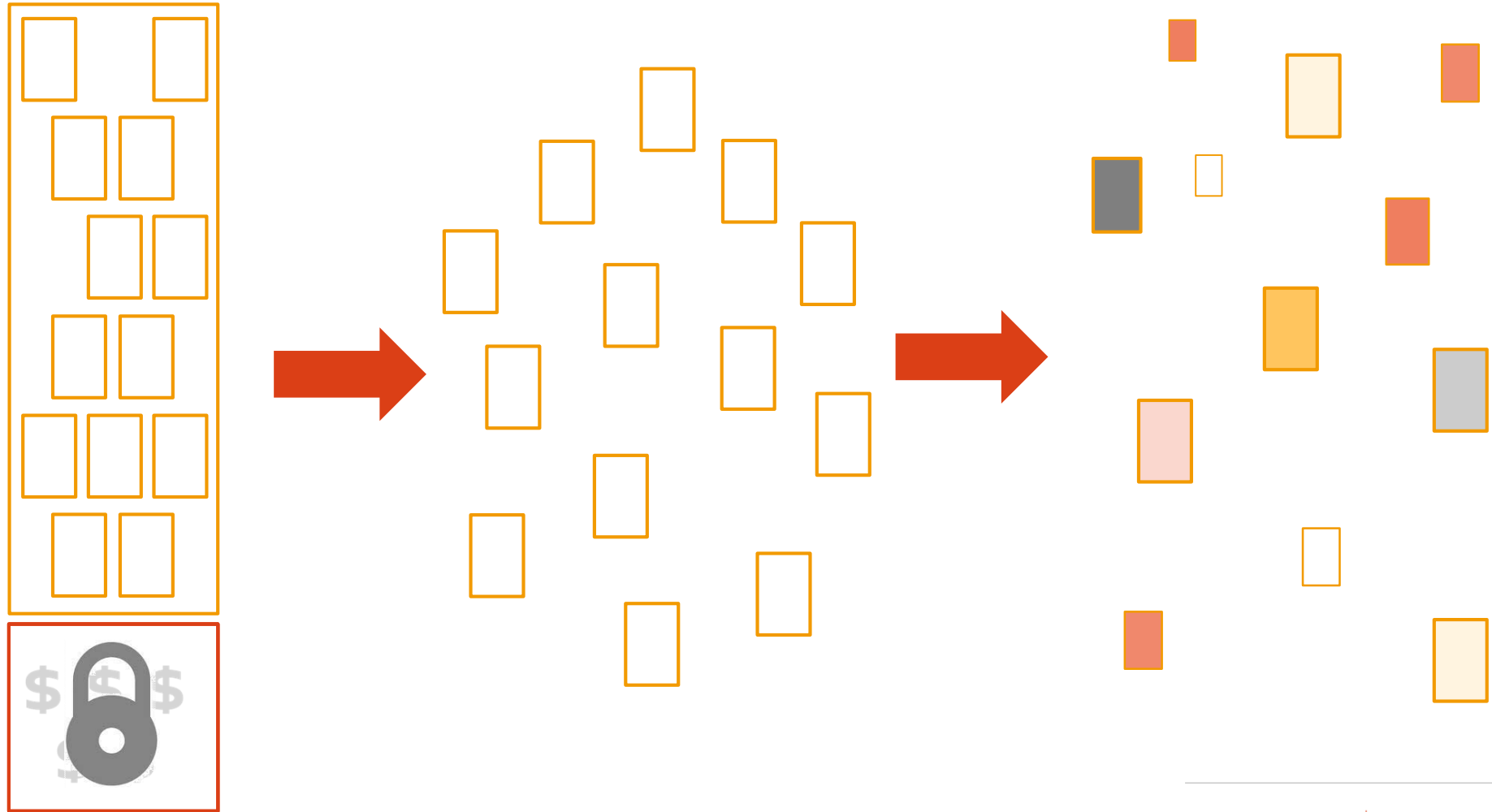
Divest of subscriptions - **Invest** in open access



Pareto principle works to our advantage



Transformative agreements



<http://esac-initiative.org/>

Temporary and transitional

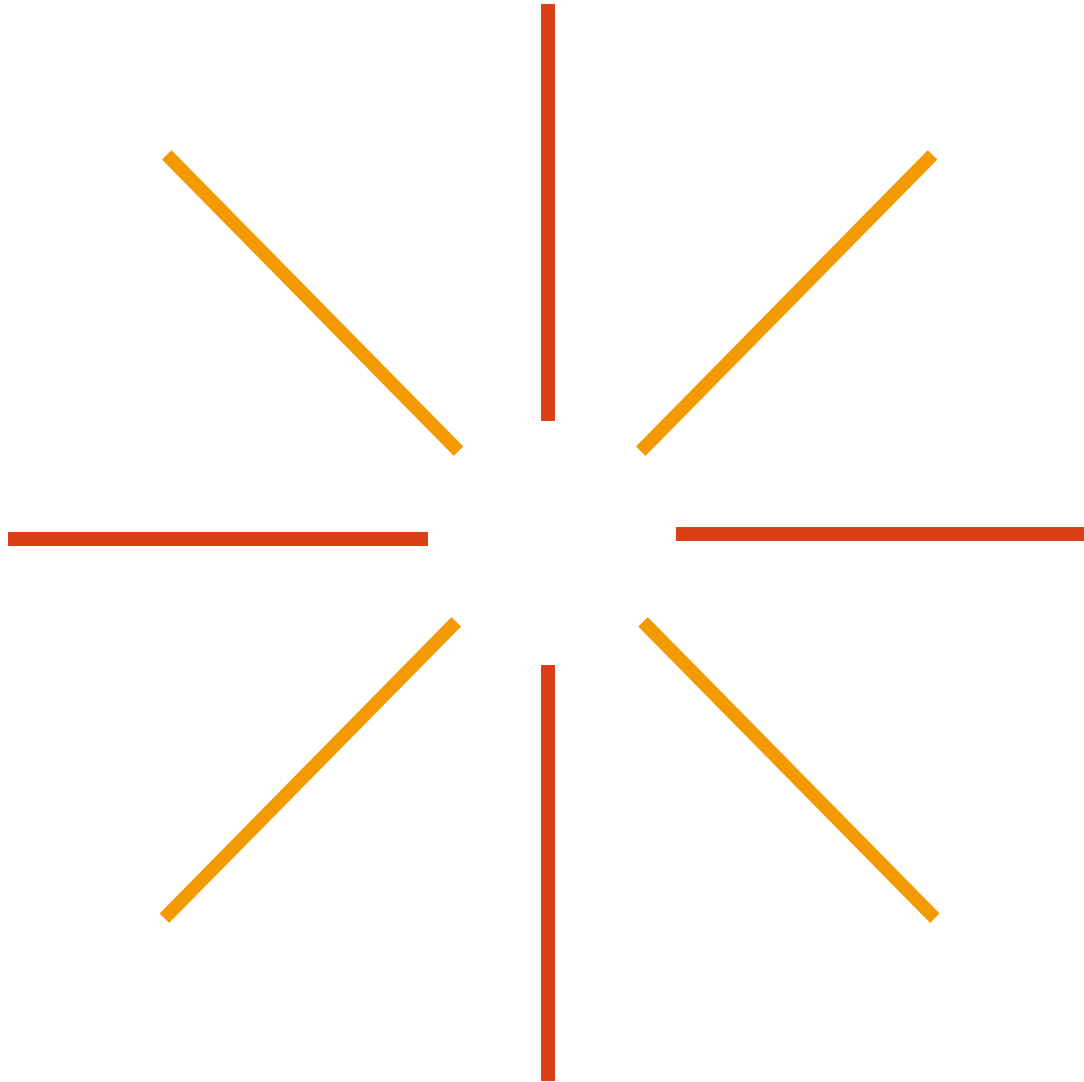


MIT and Royal Society of Chemistry Sign First North American “Read and Publish” Agreement for Scholarly Articles

*Publisher represents that the Read & Publish model, with its foundation in “hybrid” open access – where some articles are paywalled and others published open access – **is a temporary and transitional business model whose aim is to provide a mechanism to shift over time to full open access.***

*The Publisher commits to informing Customer of progress towards this longer-term aim on an annual basis, and to adjusting Read & Publish terms based on **its progress towards full open access.***

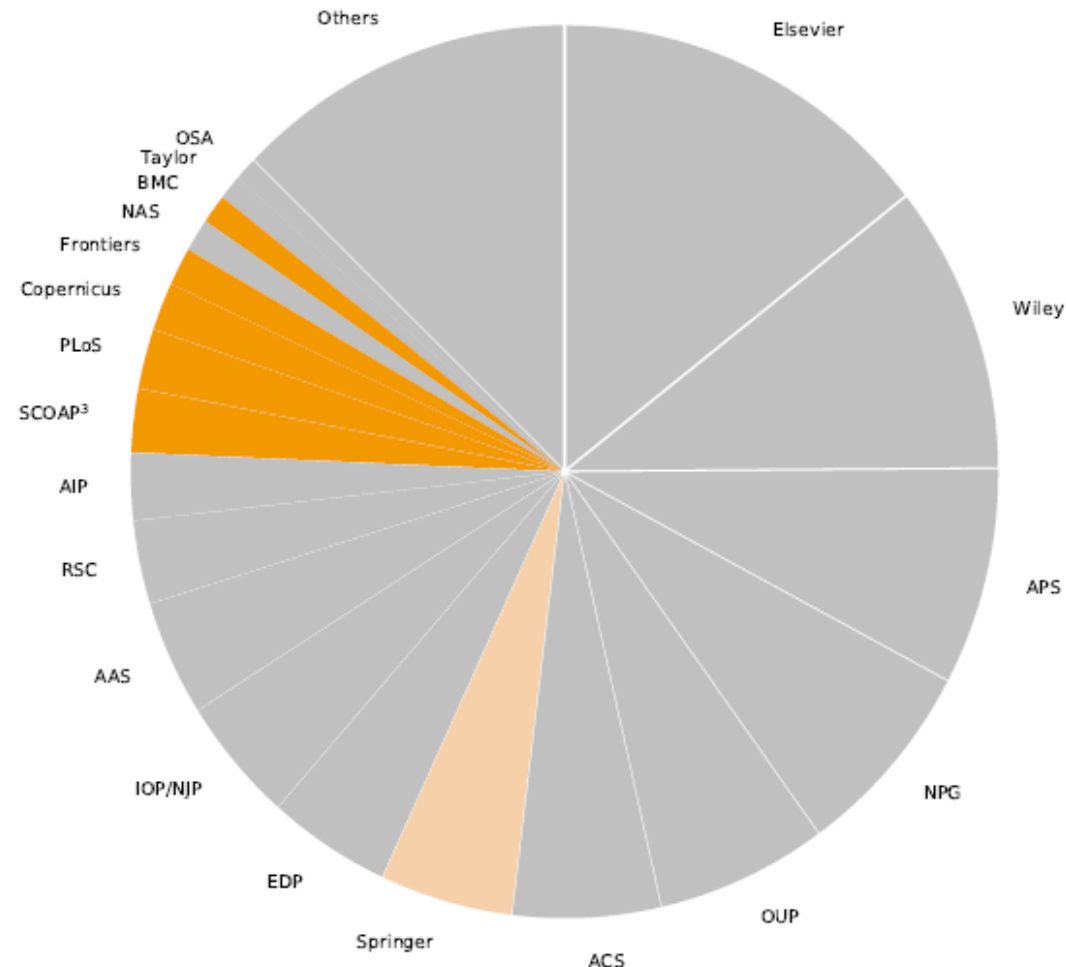
Local OA2020 roadmaps



Publisher distribution of Max Planck Society papers

MPG publications by provider / OA Gold

articles and reviews in Web of Science **2016**



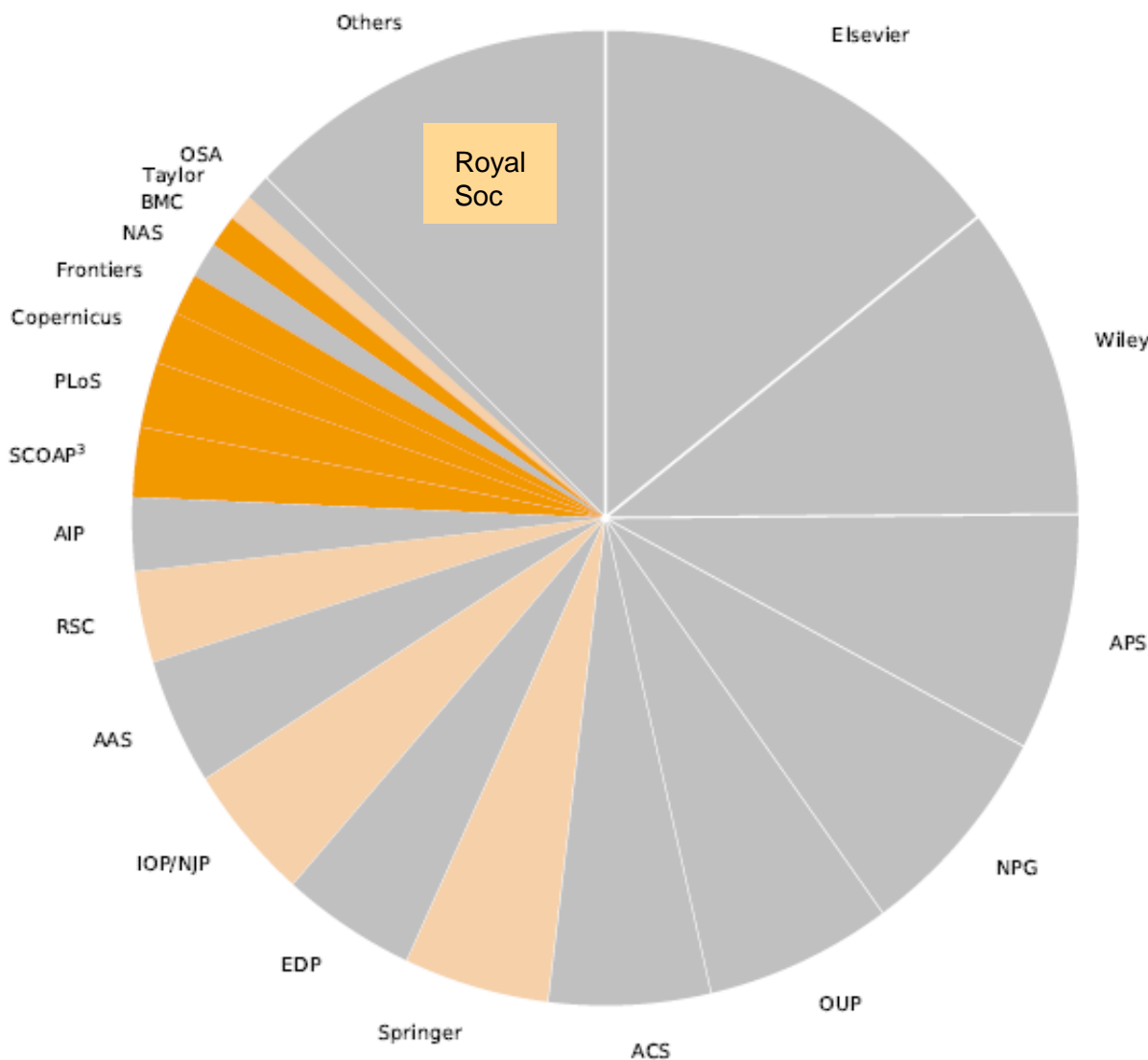
Subscription publisher
OA publisher
transformation agreement

More than 80% of the total article output of the Max Planck Society is published in journals from **20 key publishers.**

5 out of the 20 publishers are already pure OA publishers.

In 2016, we started with our first offsetting agreement

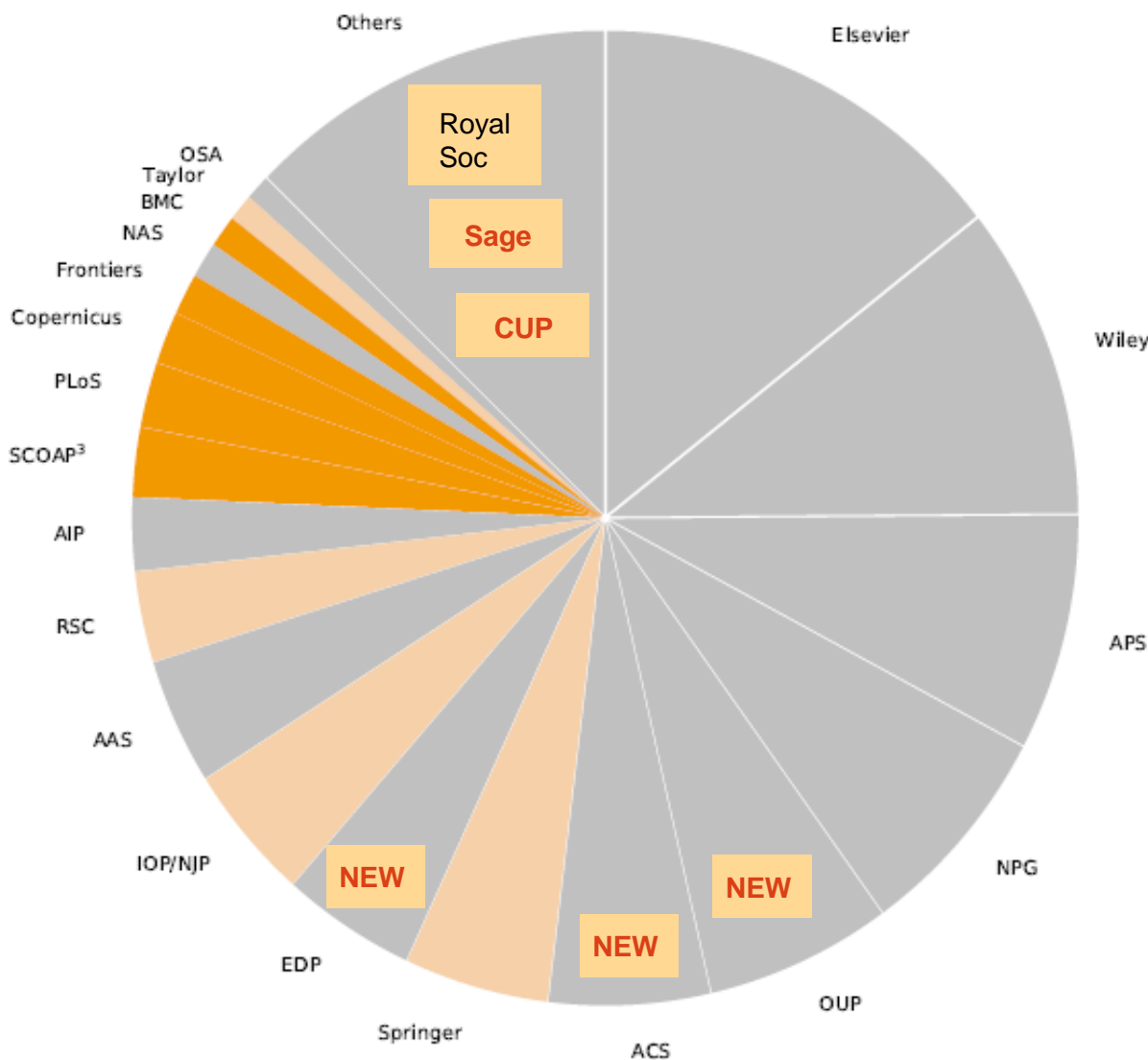
Offsetting effects for the Max Planck Society in 2018



With our transformation agreements we have started to divest from subscriptions and increased our OA share.

This approach will be further extended as soon as the next license agreement is up for renewal.

Offsetting effects for the Max Planck Society in 2019

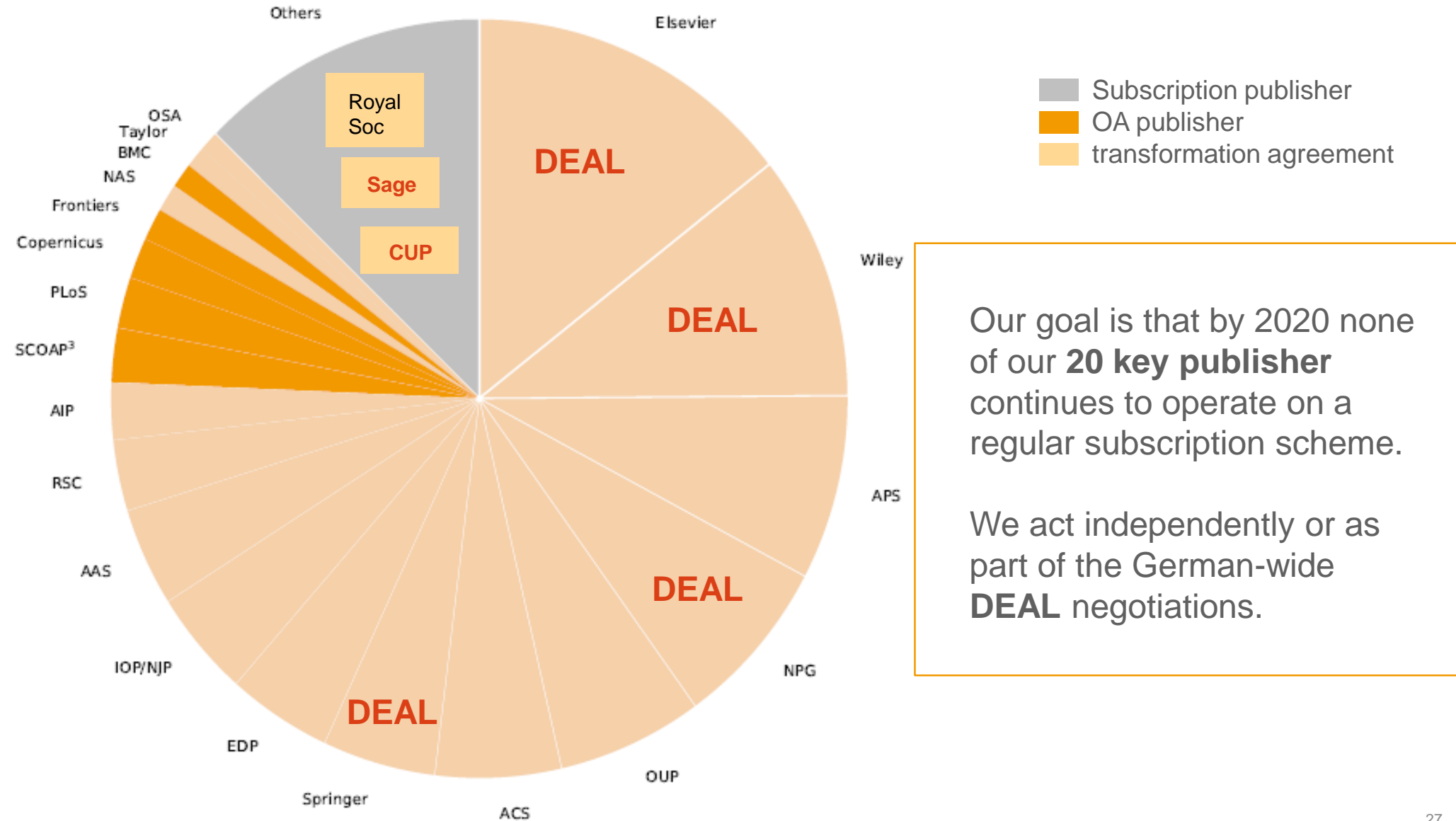


With our transformation agreements we have started to divest from subscriptions and increased our OA share.

This approach will be further extended as soon as the next license agreement is up for renewal.

MPG goal:

Maximum divestment from subscriptions **by 2020**



Projekt DEAL

OA2020 roadmap of Germany

All German research organizations have signed the 2003 *Berlin Declaration on Open Access* and have joined the OA2020 initiative

The **DEAL** negotiations with **SpringerNature**, **Wiley** and **Elsevier** reflect the collective demand for more OA and transparent pricing

PAR model (Publish & Read)

- Nationwide licenses to the entire portfolio of electronic journals
- All publications by corresponding authors of eligible institutions become open access immediately upon publication (CC-BY license)
- Fair pricing, ultimately only based on the number of papers published

Aligned with national approaches in UK, NL, AT, SE, NO and other countries

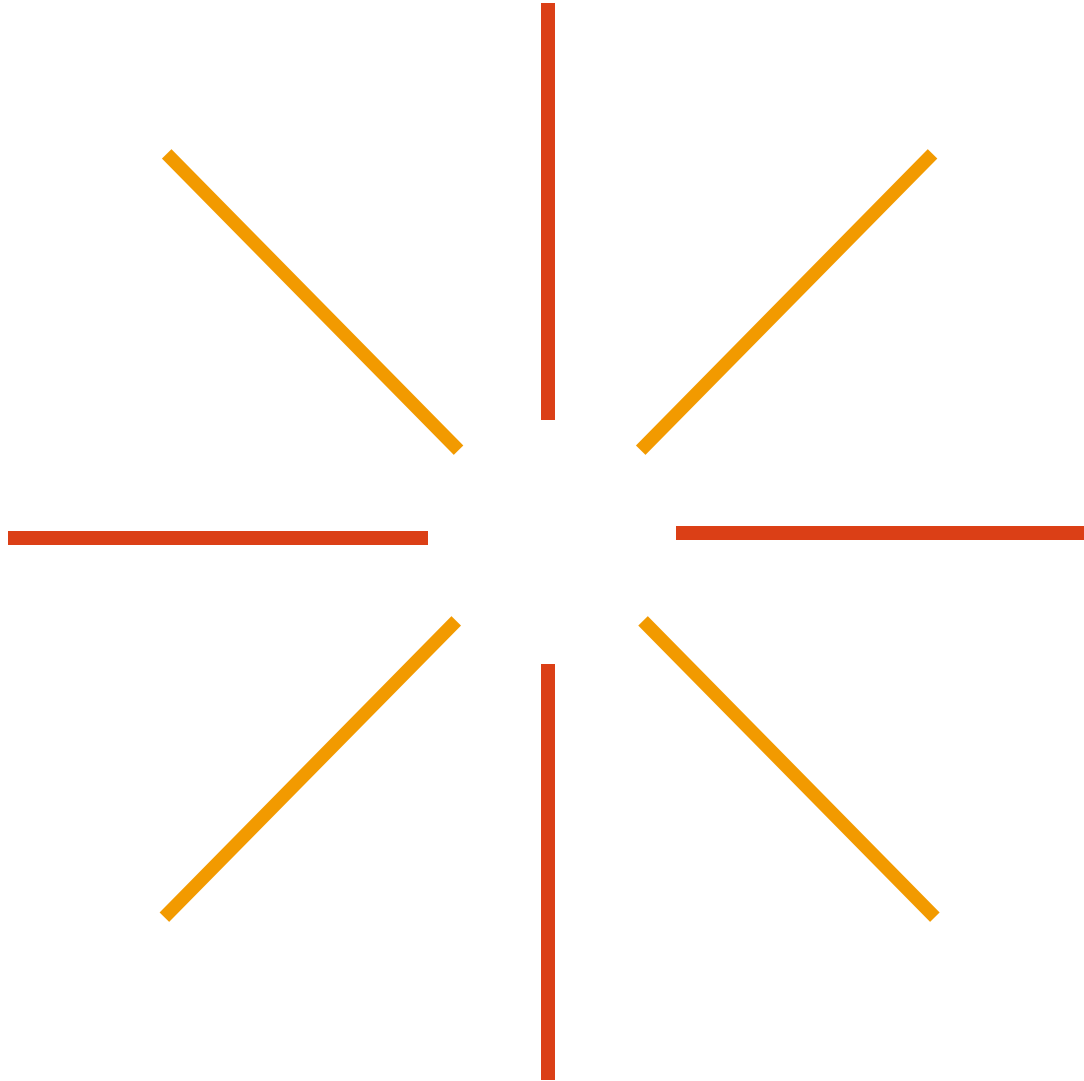
DEAL organizational structure



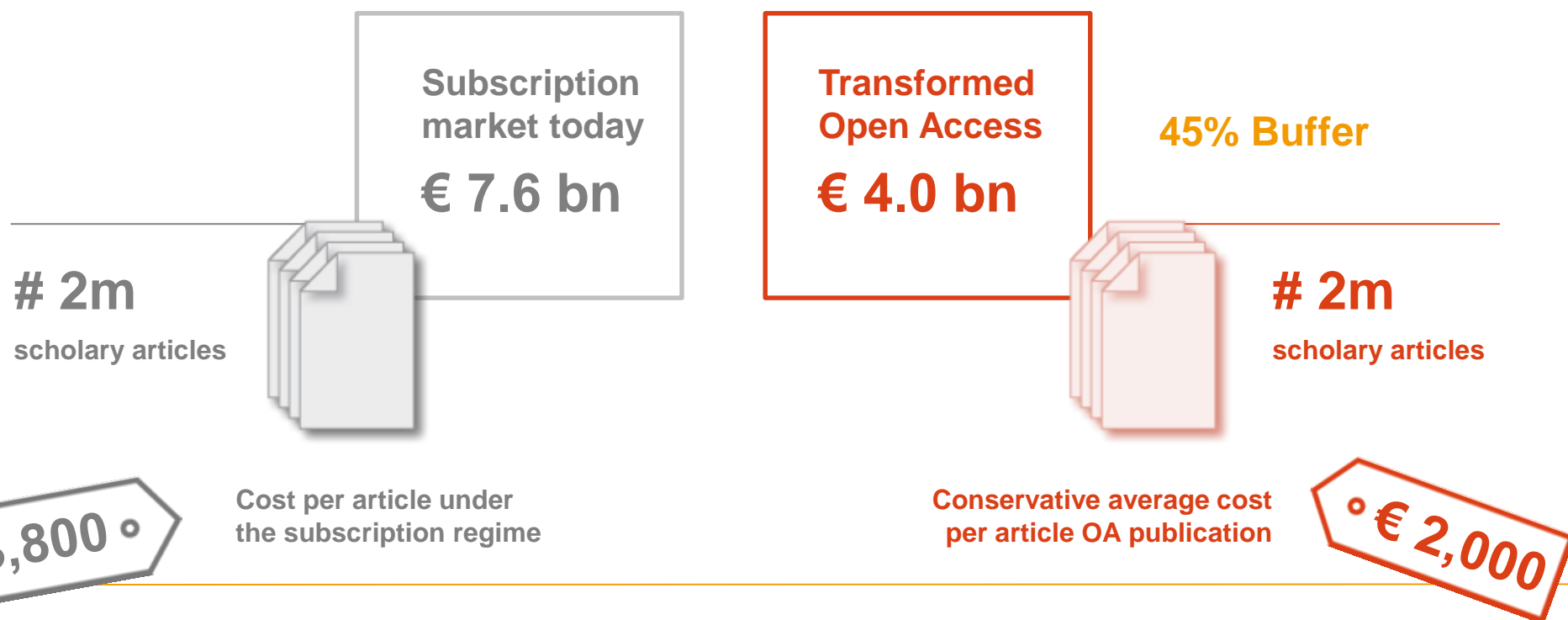
DEAL current status

	SpringerNature	Wiley	Elsevier
Accept Publish & Read (PAR) principle	yes	yes	no
2018 contract status	interim solution with 0% price increase; access opened up for additional institutions	interim solution with 0% price increase	200 institutions discontinued their license agreements. Access stopped per July 2018; no major complaints or problems reported
Further escalation	currently none	currently none	public withdrawal of senior researchers from editorial boards (13 MPG out of 41)
Current negotiations	ongoing	ongoing	stalled
2019 outlook	some form of agreement expected	some form of agreement expected	additional non-renewals expected

Take action: create your OA2020 roadmap



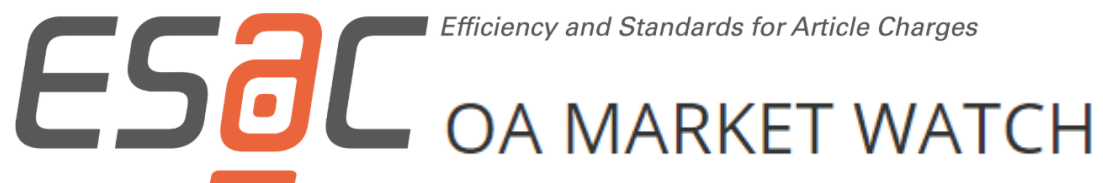
Financial leverage: there is already enough money in the system



<http://hdl.handle.net/11858/00-001M-0000-0026-C274-7>

<https://treemaps.intact-project.org/apcdata/openapc/>

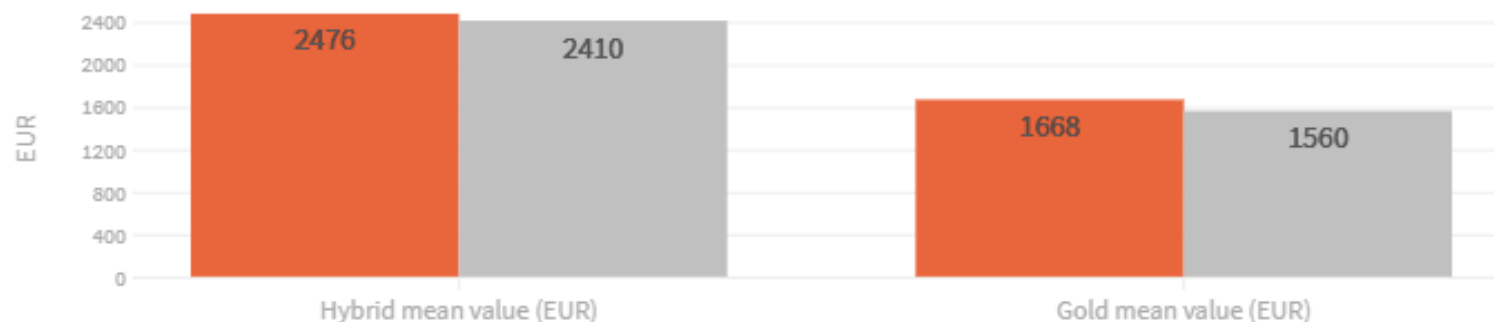
Additional leverage in shared knowledge



Average amount paid per Hybrid and Gold APC in 2017

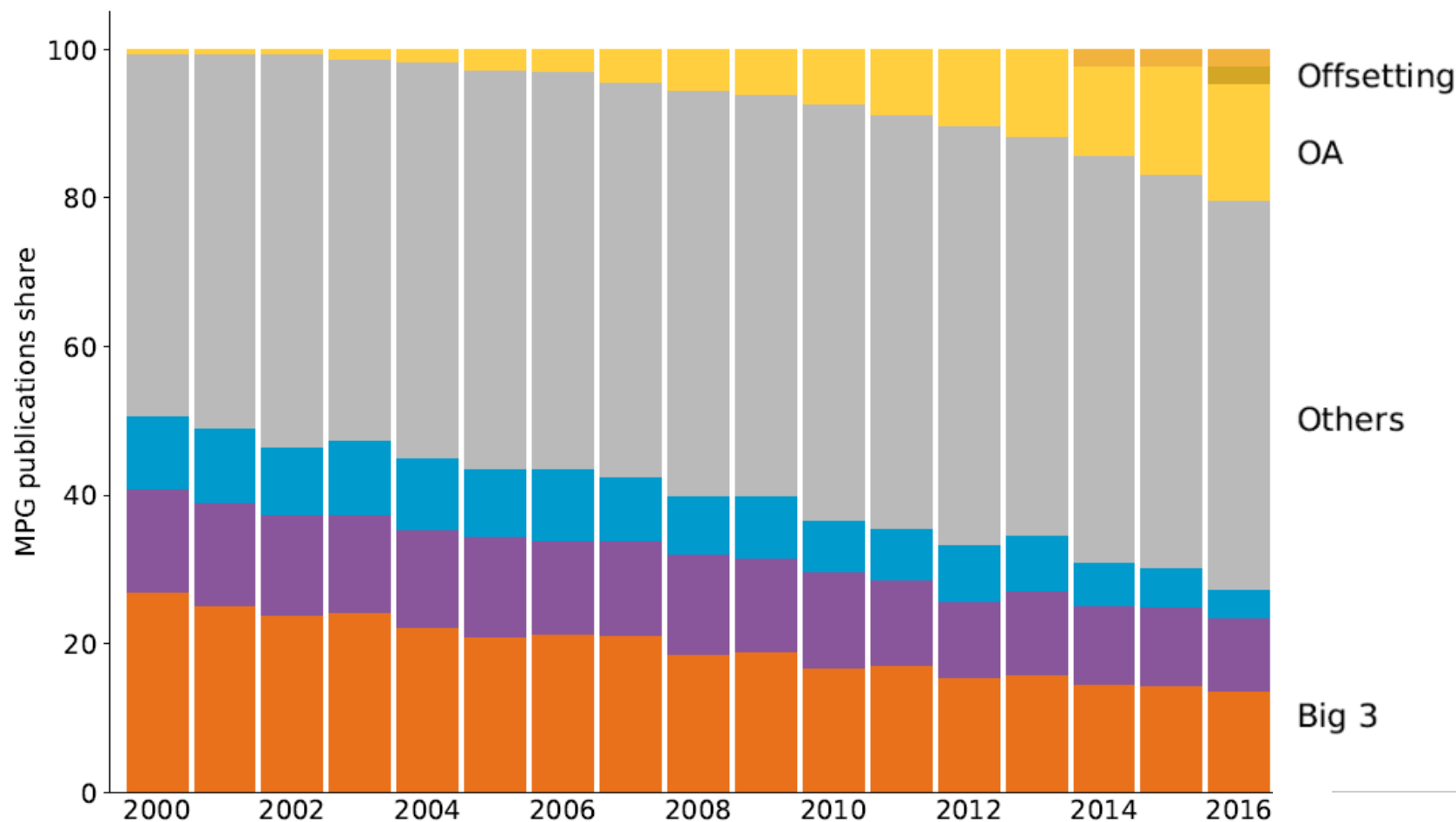
Open APC data

Springer Nature Open APC total



<http://esac-initiative.org>

Additional leverage in growth trend of open access publishing



Additional leverage in timing and public opinion

SCIENTIFIC PUBLISHING

European funders seek to end reign of paywalled journals

Move aims to accelerate full transition to open access

<http://science.sciencemag.org/content/sci/361/6406/957.full.pdf>

NEWS • 19 JULY 2018

Dutch publishing giant cuts off researchers in Germany and Sweden

Negotiations with Elsevier have stalled over open-access deals.

<https://www.nature.com/articles/d41586-018-05754-1>

German researchers resign from Elsevier journals in push for nationwide open access

By **Gretchen Vogel** | Oct. 13, 2017, 3:30 PM

<http://www.sciencemag.org/news/2017/10/german-researchers-resign-elsevier-journals-push-nationwide-open-access>



Stepping away from the table IS an option

HOW TO GET THE PDF?

Alternatives to the publisher version of full-text journal articles

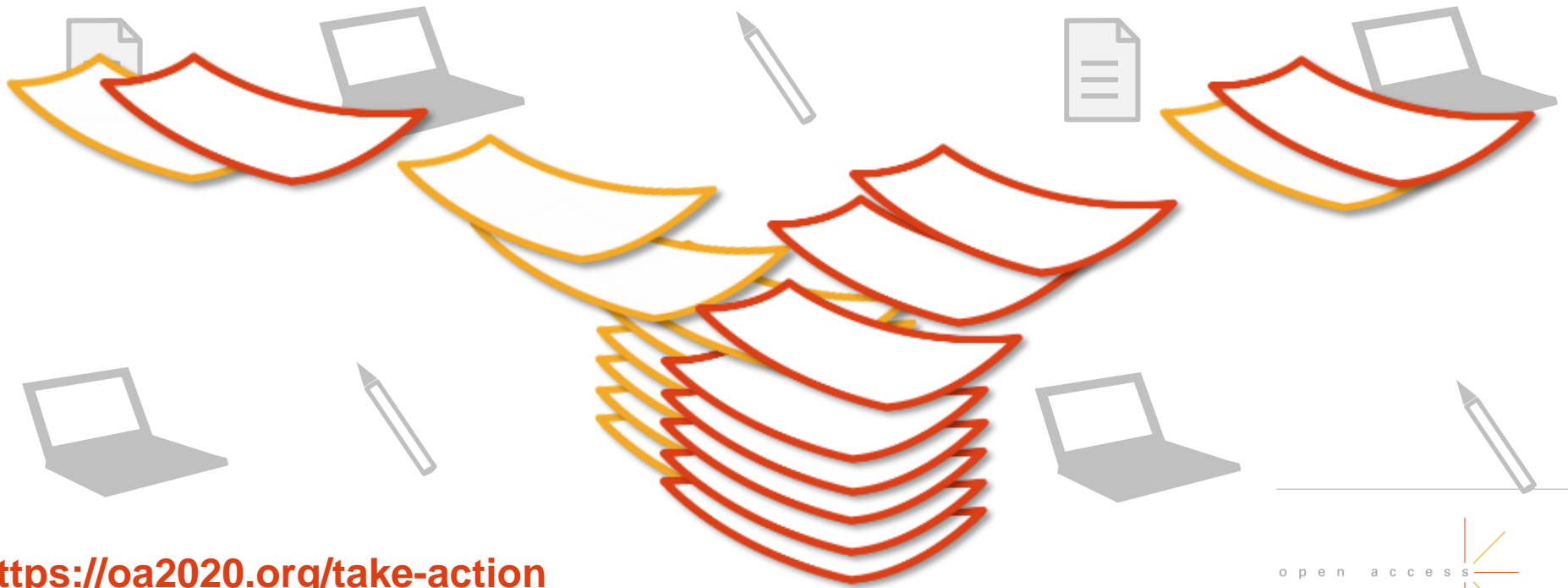
- 1 UNPAYWALL**
Get full-text of research papers as you browse, using Unpaywall's index of 10 million legal, open access articles.
For CHROME | Firefox
<http://unpaywall.org/>
- 2 GOOGLE SCHOLAR BUTTON**
Easy access to Google Scholar from any web page. Find full text on the web or in your university library. Select the title of the paper on the page you're reading, and click the Scholar button to find it.
for CHROME | Firefox
<https://addons.mozilla.org/nl/firefox/addon/google-scholar-button/>
- 3 KOPERNIO**
Get instant notifications of available versions from your library or otherwise. Promising features like a personal Locker, saved articles and more.
<https://kopernio.com/>
- 4 OPEN ACCESS BUTTON**
Free, legal research articles and data delivered instantly or automatically requested from authors. You can do this from the website, or install a browser extension/API.
<https://openaccessbutton.org/>
- 5 HASHTAG #ICANHAZPDF**
Use the hashtag #icanhazpdf together with a link to the requested publication; if somebody has access, they can send you the PDF.
<https://twitter.com/search?q=%23icanhazpdf>
- 6 REQUEST COPY VIA AUTHOR**
You can always request a copy directly from the author ; often not the fastest way, but traditionally a well-used route to get pdf's. Many researchers have joined the social network for scientists ResearchGate. And many make their pdf's available inside ResearchGate for download, or offer the option to request it from the author. Other examples social networks: in Academia.edu and Humanities Commons.
[Request full-text](#)
- 7 REQUEST PDF VIA LIBRARY**
This is not free, but often a fast option, and often much cheaper than buying it from the publisher. Libraries usually have special rates for staff, phd's and students! Ask your library for advice.
[Overview Dutch University Libraries](#)

- 8 NARCIS**
NARCIS provides access to scientific information, including (open access) publications from the repositories of all the Dutch universities, KNAW, NWO and a number of research institutes, datasets from some data archives as well as descriptions of research projects, researchers and research institutes.
<http://www.narcis.nl/>
- 9 OSF PREPRINTS**
OSF offers access to over 2 million open access preprints.
<https://osf.io/preprints/>
- 10 DIRECTORY OF OPEN ACCESS JOURNALS**
DOAJ offers access to over 10.000 open access journals.
<https://doaj.org/>
- 11 SCIENCE OPEN**
Science Open contains over 37 million articles, a large part in open access.
<http://www.scienceopen.com/>
- 12 SCI-HUB**
If all else fails, you may be tempted to use Sci-Hub. Do realize, however, that in many countries, including The Netherlands, the use of Sci-Hub is considered as an illegal act, as it involves content protected by copyright laws and licensing contracts.

http://www.openaccess.nl/sites/www.openaccess.nl/files/documenten/howtogettothepdf_march_2018.pdf

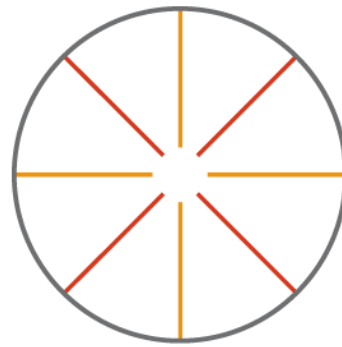
We have the leverage to drive open access into the system

Effect cost transparency and a competitive market in which our money can follow scholars, not publishers.

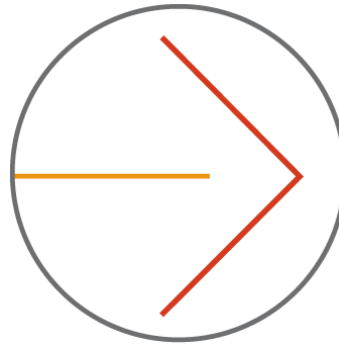


<https://oa2020.org/take-action>

Thank you!



Participate
in **OA2020**



Accelerate
the transition

Dr Ralf Schimmer
Max Planck Digital Library

schimmer@mpdl.mpg.de
<https://oa2020.org>