Open Access Price Transparency

By Alicia Wise and Lorraine Estelle

Executive Summary

This independent report is published by Information Power. It reports on a project funded by Wellcome and UKRI on behalf of cOAlition S to engage with stakeholders to develop a framework for the transparent communication of Open Access (OA) prices and services. cOAlition S aims to help make the nature and prices of OA publishing services more transparent, and to enable conversations and comparisons that will build confidence amongst customers that prices are fair and reasonable. Ultimately, it seeks a framework which enables publishers to communicate the price of services in a way that is transparent, practical to implement, and insightful.

During the project we consulted widely with stakeholders to gain an understanding of concerns and needs and worked to gain the voluntary engagement and support of publishers. It was clear from the outset that mobilising this engagement and support would be crucial to success. It was also clear that this would be a challenge. While funders, libraries, and library consortia were broadly supportive of the work, many publishers – both mixed model and OA-only – expressed significant concerns about:

- being told what to price, how to price, or how to communicate about price;
- greater transparency with competitors giving rise to anti-trust issues, or conflict with fiduciary duties to charity/shareholders;
- any focus on costs, because publisher prices reflect the market and the value provided and not only costs:
- usefulness, as publishers record price and service information in different ways and costs and practices vary enormously between houses, subject areas, and titles;
- a range of negative outcomes including the imposition of price caps, downward pressure on prices, or funders and libraries ruling out of scope services that are valued by researchers or societies or that are important for business continuity and innovation.

Throughout we have worked to emphasise that this is an evolving framework open to influence by publishers. We have been mindful of competition law and fiduciary duties and have sought expert advice to ensure that the approach we have recommended supports competition and is aligned with competition law.

In this report we present a draft framework and we propose ways in which it could be implemented. It consists of 24 pieces of metadata about platforms or titles providing OA publishing services. The metadata are clustered into three sections: the first for high-level information about the title itself, the second for a range of metrics that together convey a sense of the nature and quality of the title, and the third to indicate the percentage of the total price apportioned to publishing services.

Implementing this framework will require changes in practices, closer alignment between stakeholders, effort, and infrastructure. These metadata would be most conveniently made available by platforms and publishers via the CrossRef service, and from there surfaced via an open licence for ingest and use in a wide array of services. Many relevant services operate now, and there is also potential for new services.

We recommend to publishers that they transform the way they think about price and service communication and provide customer-critical information in more customer-friendly ways. We encourage them to embrace the idea that their customers are genuinely interested in more standard, transparent, and granular price and service information and to take this opportunity to better understand and serve customers. There are opportunities here for publishers to be responsive, to demonstrate their commitment to open business models and business cultures, and to build better awareness of and appreciation for their services and value.

We recommend to cOAlition S that the introduction of a new reporting requirement needs to be organised with clear implementation guidelines and a proper plan for testing, development, release, review, and refinement. We recommend an iterative approach to implementing this requirement, carrying a range of publishers along at each step of the way, with a pilot as the next step.

We recommend that customers align their price and service transparency requirements. At least some publishers currently feel that the scale of market demand for price and service transparency is too low to warrant the implementation effort and costs. Librarians are key stakeholders and yet are not signatories to Plan S, and so the additional weight they wield in terms of purchasing power may understandably be missing from the calculations of publishers at present. We therefore recommend that cOAlition S works with other customers to align requirements for price and service transparency.

We recommend the creation of a level playing field for publishers, with customers requiring price and service transparency from all publishers, no matter what route they follow to provide OA.

Customers will need services to make use of data provided by publishers, and to gather customer feedback on the quality of those services and customer perceptions of value for money. There are cost implications here. Publishers will incur costs to develop and provide price and service transparency data, and if aggregated via CrossRef will fund the provision of these data via their DOI registration fees. Customers should take responsibility from there, ensuring the data are ingested into services as necessary and actively used in practice to inform decisions.

Approach

We used an iterative process throughout this project, alternating discussions with the development of a document or draft to then review and build upon in further discussions. At each stage of the consultation process, we sought broad engagement and took stakeholder feedback to refine and improve the framework.

Our starting point was a 2018 blog post by Kent Anderson in the *Scholarly Kitchen* which outlined 102 things journal publishers do¹. We felt it was important for publishers to see the full spectrum of their services acknowledged from the outset, and for other stakeholders to be aware of these services.

We next issued an online survey and invited participation from all stakeholders. This helped to make the project tangible and stimulated engagement and input. It also provided us with an opportunity to see whether or not customers were interested in having more insight into OA prices and services, and to test if there were any significant differences in the perceptions of publishers and their

¹ https://scholarlykitchen.sspnet.org/2018/02/06/focusing-value-102-things-journal-publishers-2018-update/

customers. What it did not shed much light on was the format any price transparency framework might take. Survey results are presented in Annexe 1.

We then organised a workshop, hosted by the Wellcome Trust in London on 11 October 2019, for 28 invited participants including funders, librarians, library consortia, and publishers. Key points of feedback that informed the development of our thinking were:

- Information about publishing services is needed for both gold and green OA content in order for customers to make reasonable decisions about value and cost/benefit, and in order for there to be a level playing field between competitors.
- The framework should strive to convey a sense of the quality of services provided, for example by focusing on outcomes such as how quickly articles are published, citations, or usage. As there are no generalisable criteria across subjects, there may need to be a range of metrics or new metrics. For example, some HSS publishers have indicated that time to publication isn't important or isn't important for HSS authors, yet there are studies suggesting that it is important for more than 60% of authors².
- There were significant concerns about implementation and a desire to keep the framework simple to implement, but robust enough to instil confidence and trust. Existing services should be used to aggregate and disseminate the information where possible, for example Crossref. Rather than requiring expensive audits to validate the information provided by publishers consider surfacing customer perceptions about quality and value for money.

Following the workshop, we created a Strawman document and used it to engage publishers in discussion at the Frankfurt Book Fair, at the Charleston Conference, and also by phone. We also discussed the document with members during the second project Steering Group meeting. We worked through 3 drafts of the Strawman in total, building it to reflect 5 price transparency framework ideas and 2 validation service ideas.

A price and service transparency framework then developed through 12 drafts and evolved considerably with intensive, usually constructive, input and iteration. We received comments and suggestions through conversations, email, an online focus group, and webinars. This process and the feedback from it are described in detail in Annexe 2.

In parallel, we discussed implementation with a range of potential service providers to explore ways by which the data could be obtained, used, monitored, and maintained:

- The easiest way for customers to obtain these data from publishers would be to ask
 publishers to provide them to Crossref, and from there for Crossref to make the data openly
 available for reuse in other services. While CrossRef staff have indicated this is all possible in
 principle, they were of course unable to commit to piloting or implementing the framework
 without discussion and support from their stakeholders.
- Crossref do not crawl or scrape publisher websites, so they need the data to be pushed to them. They already work with platforms such as Editorial Manager, Highwire, OJS, and ScholarOne to facilitate this push and so some platform development work would be

² https://blogs.lse.ac.uk/impactofsocialsciences/2015/08/28/author-insights-publishing-humanities-social-sciences/ and https://2qkk0e1599xt254aernh2gta-wpengine.netdna-ssl.com/wp-content/uploads/2019/10/Taylor-and-Francis-researcher-survey-2019.pdf

- required by each. **NISO** might wish to consider adding these data into JATS³ to ease implementation. NB: During the course of this project we did not have bandwidth to consult with platform providers or NISO.
- Once available in some way, the data could then be used in a wide array of existing products and services, and there is also potential for new products and services built over the data. We provide some illustrative examples in Annexe 3.

Framework

Having taken all of this input on board, the framework we recommend to cOAlition S is appended below and available online at https://figshare.com/s/f54b653775febea02a11:

F	Pricing Transparency Framewo	ork
	Data Input Column	Notes
Section 1 - Basic title metadata	·	
DOI or ISSN for Title (or Titles if all other data in the framework is the same for each of the titles)		Note this is a title DOI, not an article DOI. Also ok to use the ISSN.
Journal discipline area		Choose frm physical science & technology, life sciences & medicine, social sciences, or arts & humanities
Owner of journal		Use standard organisational identifier
Publisher of journal		Use standard organisational identifier
APC list price or price range for primary research articles		Indicate currency; use currency that you set prices in
Subscription list price		Indicate currency; use the currency that you set prices in
Date Information Submitted		dd/mm/yyyy
URL for additional information about price and services		Publishers are encouraged, but not required, to provide additional context and detail.
Section 2 - Contextual metadata		
Articles published / annum		Number of articles published in last full calendar year (or life of journal if less than 1 year old)
Acceptance rate		Acceptance rate for last calendar year (or life of journal if less than 1 year old)
Frequency of publication		e.g. annual, semi-annual, quarterly, monthly, weekly, continuous publication
Median number of reviews / article		Provide mean for last full calendar year; if an article goes back to the same reviewer for a second review then this counts as two reviews
Median time from submission to first decision		For articles published in the last calendar year; include papers decided on the basis of assessment by in-house prepublication teams, editorial boards, and editorial boards and external referees
Median time from submission to pass peer review and full publication of the article		For articles published in the last calendar year; this figure will include the time taken by authors for their revision stages
Median citations / article		For citations in the last calendar year for articles published in January of that year; if providing additional information for line 9 please indicate which citation database is being used to generate data (e.g. Web of Science, Scopus, etc.)
Total Unique_Item_Requests for the previous calendar year		COUNTER 5 statistic
Total Total_Item_Requests for the previous calendar year		COUNTER 5 statistic
Section 3 - Pricing information % of price for journal and community development		e.g. identifying need for the journal, aims and scope development, investment in funding for field, editorial board costs, commissioning content, competitor analysis, benchmarking, policy development, portfolio development
% of price from submission to desk reject or accept		e.g. triaging [NB this line is separated from the next in order to accommodate the Open Platform publishing model]
% of price for peer review management		please do not factor in time or resources donated by editors or reviewers; please include specialist reviews; e.g. recruiting and training peer reviewers and the editors who work with them, peer review management and tracking systems
% of price for services from acceptance to publication		e.g. platform, copyediting, formatting, typesetting, proofreading, assigning and depositing DOIs, XML file conversion (if content is not born XML), tagging, quality assurance checks, integration with a&I databases/aggregators/repositories/APC management systems, figure re-lettering or other improvements, dealing with article enhancements such as video abstracts, proofing process and author engagement around this, issue compilation, issue line up, printing, alignment with synchronous articles, vendor management, article pipeline management, systems support, systems development; addition of ORCIDs and other IDs to support funder/institutional disambiguation, checking references, design
% of price for services after publication		e.g. handling ethical queries, provision of usage statistics, longterm preservation and access, reader services, postage, inventory and stock control
% of price for sales & marketing to customers or of articles		e.g. sales teams, sales administration,legal costs for contracts, integration with and promotion on social media networks, sponsorship
% of price for author and customer support		e.g. helpdesk, usage/impact/other reports, training, author queries about copyright or CC licenses
Notes: 24-30 should add up to 100%		
Gratis services provided by the academic community are presumably not charged for, and therefore should not be included in section 3.		
We recognise that all organisations have overheads and profit/surplus. Please do not itemise these separately but allocate them across the services provided when completing lines 24-30.		

³ https://jats.nlm.nih.gov/about.html

Discussion of Framework

To ease administration for publishers, these data could be provided one time per title or one time for a range of specified, similar titles. We envisage that the data might be reviewed and, if necessary, refreshed annually or more often if prices change more frequently.

Section 1 - Basic title metadata

4	Section 1 - Basic title metadata		
	DOI or ISSN for Title (or Titles if all other data in the framework		Note this is a title DOI, not an article DOI. Also ok to use the ISSN.
5	is the same for each of the titles)		INOTE this is a title DOI, not an article DOI. Also ok to use the 135N.
I I disability	Journal discipline area		Choose frm physical science & technology, life sciences & medicine, social sciences, or arts
6	6 Journal discipline area		& humanities
7	Owner of journal		Use standard organisational identifier
8	Publisher of journal		Use standard organisational identifier
9	APC list price or price range for primary research articles		Indicate currency; use currency that you set prices in
10	Subscription list price		Indicate currency; use the currency that you set prices in
11	Date Information Submitted		dd/mm/yyyy
12	URL for additional information about price and services		Publishers are encouraged, but not required, to provide additional context and detail.

Section 1 appears to be acceptable in principle to most stakeholders; however, there are some details that could helpfully be addressed in a pilot:

- Line 5 allows multiple titles to be covered by one entry, and it would be helpful to have more detailed guidance about how similar titles need to be in order for this to apply.
- Line 6 asks which of four subject areas a journal covers, and this may or may not be the right level of granularity.
- Lines 7 and 8 request a standard organisational identifier and it would be helpful to specify which identifier should be used.
- Lines 9 and 10 request list prices and there is considerable complexity here. APCs might not
 be the only costs to authors if a journal also charges fees for colour, pages, or submission.
 Librarians suggest that subscription list prices are irrelevant as no one pays these, and so it
 might be more sensible to ask for list prices for a particular type or set of customers. There
 will be currency issues to consider.
- Librarians are keen to receive information about discounts and waivers that are available, and some publishers are keen to provide this, so this might be another element to include.

Section 2 - Contextual metadata

-		•	
13 Section 2	Section 2		
Autological Debat Language		Number of articles published in last full calendar year (or life of journal if less than 1 year	
Articles published / annum		old)	
15 Acceptance rate		Acceptance rate for last calendar year (or life of journal if less than 1 year old)	
16 Frequency of publication		e.g. annual, semi-annual, quarterly, monthly, weekly, continuous publication	
		Provide mean for last full calendar year; if an article goes back to the same reviewer for a	
Median number of reviews / article		second review then this counts as two reviews	
		For articles published in the last calendar year; include papers decided on the basis of	
Median time from submission to first decision		assessment by in-house prepublication teams, editorial boards, and editorial boards and	
18		external referees	
Median time from submission to pass peer review and full		For articles published in the last calendar year; this figure will include the time taken by	
19 publication of the article		authors for their revision stages	
		For citations in the last calendar year for articles published in January of that year; if	
Median citations / article		providing additional information for line 9 please indicate which citation database is being	
20		used to generate data (e.g. Web of Science, Scopus, etc.)	
21 Total Unique_Item_Requests for the previous calendar year		COUNTER 5 statistic	
22 Total Total_Item_Requests for the previous calendar year		COUNTER 5 statistic	

Some feedback focused on the overall approach:

• The overall approach of collecting a number of metrics appears to be acceptable in principle because in aggregate these give a better picture of the nature of a title than any single metric could possibly do.

- However, there was real concern that this approach would favour larger publishers. Smaller
 publishers without their own platforms are less likely to collect these data at present and
 would need to manually aggregate information from many hosting sites.
- There was also concern that this approach would reinforce more traditional styles of buying and publishing. Some publishers reject such metrics on principle as symbolic relics of an old system based on the economics of prestige and scarcity.
- Societies and their publishing partners, or academic editorial committees and their university publishing partners, would need to collaborate or else allocate responsibility for completing different lines, for those titles where they share responsibility. This represents a new way of working for all parties.

Each of the lines triggered some pushback:

- The inclusion of a citation metric (line 20) was criticised more than any other line as it is not well aligned with DORA⁴ and because of variation in the number and speed of citations in HSS and STEM subjects.
- We have included all lines because no single line received overwhelming pushback, and because there are examples of publishers who provide each.
- This is an area of the framework that could be simplified to ease administration burdens, for example by making this section optional, by requiring only a specific subset or a minimum number of the lines, or by phasing in compliance requirements. Some consensus on these points is needed and could helpfully be developed in a pilot.

Section 3 – Pricing information

23 Section 3		
	e.g. identifying need for the journal, aims and scope development, investment in funding for	
% of price for journal and community development	field, editorial board costs, commissioning content, competitor analysis, benchmarking,	
24	policy development, portfolio development	
% of price from submission to desk reject or accept	e.g. triaging [NB this line is separated from the next in order to accommodate the Open	
	Platform publishing model]	
	please do not factor in time or resources donated by editors or reviewers; please include	
% of price for peer review management	specialist reviews; e.g. recruiting and training peer reviewers and the editors who work with	
26	them, peer review management and tracking systems	
	e.g. platform, copyediting, formatting, typesetting, proofreading, assigning and depositing	
	DOIs, XML file conversion (if content is not born XML), tagging, quality assurance checks,	
	integration with a&I databases/aggregators/repositories/APC management systems, figure	
% of price for services from acceptance to publication	re-lettering or other improvements, dealing with article enhancements such as video	
	abstracts, proofing process and author engagement around this, issue compilation, issue line	
	up, printing, alignment with synchronous articles, vendor management, article pipeline	
	management, systems support, systems development; addition of ORCIDs and other IDs to	
27	support funder/institutional disambiguation, checking references, design	
0/ of price for comisee often publication	e.g. handling ethical queries, provision of usage statistics, longterm preservation and access,	
% of price for services after publication	reader services, postage, inventory and stock control	
% of price for calca & marketing to sustamore or of articles	e.g. sales teams, sales administration, legal costs for contracts, integration with and	
% of price for sales & marketing to customers or of articles	promotion on social media networks, sponsorship	
% of price for author and customer support	e.g. helpdesk, usage/impact/other reports, training, author queries about copyright or CC	
30 % of price for author and customer support	licenses	
31		
32 Notes: 24-30 should add up to 100%		
33 We recognise that all organisations have overheads and profit/surplus. Please do not itemise these separately but allocate them across the services provided when completing lines 24-30.		

Pricing information is the area where there is most divergence in views between customers who are keen and some publishers who are absolutely not:

• There was pushback about how difficult this section would be to complete. In many cases this concern was very genuine, but in some cases this concern seemed a bit disingenuous and the key concern more an unwillingness in principle to provide granular data. For perspective, the one publisher who has so far shared its experience of completing the template reported that it took 1 hour to complete the information for 3 titles, plus additional time that would be needed to validate the data with other colleagues. Hopefully the ability to group similar titles in one entry will ease the practical concerns.

⁴ https://sfdora.org/

- Societies and their publishing partners, or academic editorial committees and their university publishing partners, would need to collaborate or else allocate responsibility for completing different lines, for those titles where they share responsibility. Again, this represents a new way of working for all parties.
- There was much discussion of how accurate these figures need to be. Some publishers were comfortable providing thoughtful estimates, but others were very anxious that the figures be precise and auditable. We envisage the first approach rather than the second, with validation provided by gathering customer reviews of quality and value and not by auditing publisher figures. Implementation guidelines or case studies of how publishers approach developing these figures would help and could be developed in a pilot.

Conclusions and Recommendations

For publishers

There does not appear to be consensus among publishers about how to respond to the price transparency element of Plan S or this proposed framework. Some seem primarily interested in providing price information on their own terms: aimed at authors, designed to drive submissions, and only in ways that shine a positive light on them and their titles. Other publishers — while supportive of Open Access, transparency, and/or Plan S — are concerned that any standard approach would be challenging to implement and are wary of incurring new administrative burdens and costs. These publishers would welcome some flexibility and would probably try to implement the transparency framework, despite some reservations. Understandably they seek reassurance that their competitors will do so as well.

Publishers need to transform the way they think about price and service communication. Many do provide information about prices and services but too often the information is hidden away on corporate and journal websites; rarely is it comparable, consistent, or very usable. Customer-friendly ways are needed to provide customer-critical information.

New approaches could help publishers understand and serve their customers better. Customers – and we include funders, libraries, and researchers – are genuinely interested in more standard, transparent, and granular price and service information. Therefore, there are opportunities here for publishers to be responsive to customers, to demonstrate their commitment to open business models and business cultures, to build awareness of their services and value, and to qualify for OA service funding under Plan S.

The real win is achieving better transparency by having an approach that works well in practice, is widely implementable and implemented, and that is used. This will require changes in practices, closer alignment between stakeholders, and effort and infrastructure in order to deliver.

For customers

The introduction of a new reporting requirement needs to be organised with clear implementation guidelines, and a proper plan for testing, development, release, review, and refinement. **We recommend an iterative approach to implementation, carrying a range of publishers along at each step of the way, and with a pilot as the next step.**

At least some publishers currently feel the scale of market demand for price and service transparency is too low to warrant the implementation effort and costs. Librarians in particular are key stakeholders and yet not signatories to Plan S, so the additional weight they wield in terms of purchasing power may understandably be missing from the calculations of publishers at present. **We**

therefore recommend that cOAlition S works with other customers to align requirements for price and service transparency. To be clear, we do not see this need for alignment as a reason to delay moving forward to develop the framework and plan its implementation.

We recommend the creation of a level playing field, with customers requiring price and service transparency from all publishers, no matter what route they follow to provide OA.

Publishers will incur costs to develop and provide price and service transparency data, and if these are aggregated via CrossRef they will fund the provision of these data via their DOI registration fees. We recommend that customers take active responsibility from there, ensuring the data are ingested into services as necessary and are actively used in practice to inform decisions. Services to ingest and use the data can serve a broad customer base. There are cost implications here.

For all stakeholders

There could be temptations along the way. Publishers might be tempted to allocate all their overheads and profits to peer-review services, or to raise their prices in less than transparent ways in advance of new reporting requirements. Once the framework is implemented, customers might rush to make assumptions about the reasons for variation in prices or services, or they might be tempted to try and cherry-pick only the services they feel are important. This exercise is intended to build trust between stakeholders, not to have the opposite effect. We recommend that all stakeholders identify, and take steps to avoid, actions that will undermine trust.

Data Availability

Anonymised survey data and the notes from the first project workshop are available on the Wellcome Trust Figshare site at https://figshare.com/s/f54b653775febea02a11.

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Annexe 1 – Survey

By Dave Jago

Survey limitations

The survey sample was self-selected and, although a proportion of respondents were from the Global South, representation across the region was unevenly distributed. There was no validation of responses, so multiple responses could have been made by single respondents. The biggest limitation of the survey, though, was the fact that significant proportions of each group skipped a number of questions.

Respondents

The survey attracted 939 respondents (Table 1).

Region or country	No. of respondents
UK	255
Rest of Europe	270
USA	138
Africa	138
Far East	27
Australasia	25
South America	23
Asia	16
China	12
Canada	9
Middle East	9
Caribbean	4
Unknown	13

Table 1. Geographical distribution of respondents

Within Africa there were 50 respondents from Uganda, 30 from South Africa, and 18 from Tanzania, with 17 other African countries represented in smaller numbers. Aside from the UK, Germany (54) and the Netherlands (46) were best represented in Europe.

43% of the respondents were librarians, 26% researchers, 20% were publishers, just under 2% were research funders, and 9% held a variety of other roles (Figure 1).

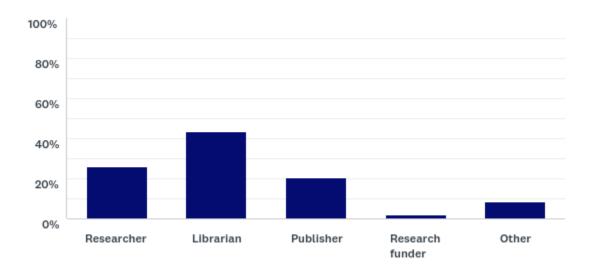


Figure 1 Primary work roles

Only 23% of respondents indicated a discipline; of these, approximately equal proportions worked in STEM or HSS. 102 respondents (approximately 10%) were Editorial Board members, and 47 (5%) were Editor-in-Chief of a journal.

Of the researchers, 37.5% Always, Very Often or Sometimes paid for OA out of budgets they controlled; 62.5% Rarely or Never did so (Figure 2).

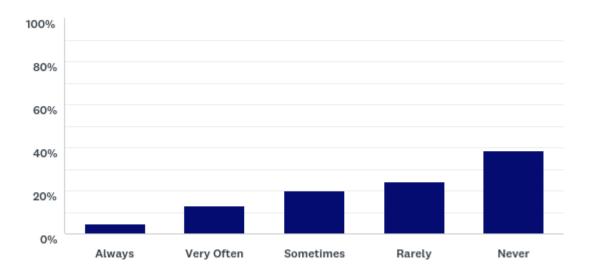


Figure 2 Proportion of researchers paying for OA out of budgets they controlled

When the budgets were controlled by libraries or other departments, the proportion of researchers reporting OA publishing was similar, although some people did not know whether OA was paid for or not (Figure 3.)

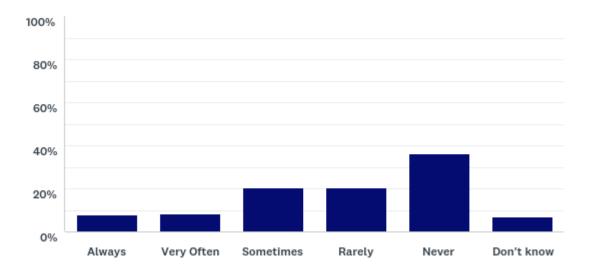


Figure 3 Proportion of researchers paying for OA out of budgets they did not control

Of the publishers, fewer than half (82) shared information about their publishing programme. Of the ones that did, 27% published HSS journals, 48% STM, and 25% both. 23% published fully OA journals, 76% mixed, and one publisher did not publish any OA.

Customer views

About 60% of librarians, 70% of researchers, and 9 of the 17 funders answered the questions about their interest in seeing breakdowns of OA charges. For the non-responders, it is not possible to distinguish between those with simply no interest and those who finished the survey early for other reasons.

Those who answered expressed interest in understanding the price of different components. Interest was highest in the price of article handling and development, with 75% of respondents being Interested or Very Interested. Least interesting (at 51% each) was the price of print dissemination and of Sales and Marketing. Interest in the price of various other components ranged from 63% to 70%. The differences do not seem to be significant enough to support narrowing down to focus on certain categories only; they were all of interest.

Relatively few respondents (between 5% and 15% depending on the component) said they were not interested at all. Levels of interest were a bit lower across the board (with Interested or Very Interested ranging from 38–71%) among respondents who Always or Very Often paid for OA out of budgets they controlled. It may be that a breakdown of charges is more important when approaching a payment for the first time.

76% of respondents felt that the 11 broad service categories outlined were Helpful or Very Helpful. Only 7% felt that they were Unhelpful or Very Unhelpful.

Comments were divided between those who felt the approach worthwhile:

"A concise breakdown of such costs allows us to assess the value of the OA offer and compare against other alternatives."

"Understanding the price of publishers' OA services will assist in provision of necessary information concerning Open Access publishers to stakeholders."

And those who thought it was beside the point:

"These are internal issues for the publishers. All we need to know is the total cost for an article."

"The important thing to know is the actual cost of being published. The breakdown of this is of no importance."

"In the end, I mostly want to know I can afford to publish and I want quality society journals I trust."

The category of Article Handling and Development was taken as an example and broken down into 11 specific services, to judge the level of interest in seeing such a breakdown. As this turned out to be the category attracting most interest, it is not surprising that the individual services attracted general interest, with Very Interesting or Interesting rates ranging from 58% to 73.4%. The average was 67%, a bit lower than the interest expressed for the category as a whole (75%). This is supported by the finding that 78% of respondents found the approach Very Helpful or Helpful.

Again, comments were divided, with some people feeling that this level of detail was unnecessary:

"Too much detail for me! Understanding that there are good grounds for the costs involved is sufficient for me. I am also keen to see a high quality product maintained, and understand that that comes at a cost."

and some supporting the approach:

"Everything mentioned is an important part of scientific publishing, so it is important to know how much time / effort / money is involved."

Publisher views

Only 75 of the 189 publishers attempted to predict the areas in which librarians and researchers would be interested in price information. Of the ones that did, there was a tendency to overestimate researchers' interest. The average Very Interested and Interested score for researchers across the categories was 48%, compared with the publishers' estimate of 65%. The overall estimate of librarians' interest was much closer to the mark (73% cf. 76%), although in the breakdown by category there were some wide variations (librarians are a lot less interested in article preparation prices than publishers think, and a lot more interested in the prices associated with recruitment and management of editors and peer reviewers).

Annexe 2 – Framework Evolution

The first draft was strongly informed by discussion of the Strawman document with publishers at the Frankfurt Book Fair in October 2019. Its form was a three-tab spreadsheet: the first for journal information, the second for information about author services, and the third for information about library services. We attempted to capture not only a standard bucket of services for each customer type, but a sense of different standardised markers of the quality of those services.

As we iterated through drafts, there was consensus around the service buckets but hardly any around the ways one might describe the quality of these services. Publishers used different vocabulary, and understandably focused on their own strengths. There was clear concern from all types of publisher about the effort it would take to gather the data required.

By draft 4 this led to a shift to replace the checklist of quality markers with quantitative metrics that would, taken together, give a sense of the nature and quality of a journal. There was also a shift away from specific service buckets and toward buckets that were more aligned with the stages of the publication process itself.

Cross-stakeholder focus group input

On 29 November 2019 we held a cross-stakeholder online focus group which provided an opportunity to explore the degree of convergence and difference between funders, libraries, and publishers on the sections of the framework. The 16 participants were working with draft 8 of the framework, which had settled into the final draft form with 3 sections for title metadata, contextual metadata, and pricing information. As a result of this discussion we:

- added ISSN alongside the title DOI at the recommendation of Crossref
- incorporated a request for subscription list price information as well as APC price information, to better support customers with transformative and other OA agreements
- used more positive terminology, for example rephrasing rejection rates as acceptance rates
- removed a line requesting information about paid FTEs providing editorial services

We simplified the number of lines in section 3 following a very helpful and constructive suggestion by Springer Nature, who recommended this alternative:

- 1. submission to acceptance (editorial, peer-review, QC, reproducibility, data, etc)
- 2. acceptance to publication (production, formatting, copy editing, metadata, issues, etc.)
- 3. publication to usage (platforms, preservation, promotion, etc.)
- 4. sales & support (contracting, payments, reporting, customer service, etc.)
- 5. other (i.e. everything else general management, legal compliance, taxes, interest on loans, etc.)

Publishers on the whole rallied round this suggestion, so perhaps it would be helpful to explain why it was incorporated in part rather than wholesale. First, a lot of work happens before submission, so that there is an attractive place to submit — and publishers repeatedly made the point to us that it is essential to include journal and community development. We therefore retained this line. Second, the framework needs to support not only journals but the open publishing platform model. Open publishing platforms enable authors to submit their articles, a quick desk check is done, and then those articles that pass the checks are published. Peer review happens after publication. Third, overheads and loss/surplus/profit are a fact of life for all organisations, but they are not services and were explicitly out of scope for the framework.

We considered, and parked, a variety of suggestions because we did not want to add to an alreadybusy framework. This included information about:

- whether the title is fully open, hybrid, or a new model and if so what
- the journal's editorial model
- how many papers host source data that underpin the published figures
- platform up-time, number of unique users, and other reader-focused metrics

There was also a suggestion to limit the article metrics to primary research content only, which makes complete sense as Plan S relates to articles that report on cOAlition S-funded research. However, we had pushback on this proposal from other publishers who said that their submission systems could not differentiate between article types.

Our view at the end of the focus group was that there was a positive and constructive tone to the cross-stakeholder discussion. Funders were pleased that publishers were engaging constructively and said so. Publishers said they knew they needed to be more transparent, and also signalled concern at real implementation challenges.

University Press input

Two webinars took place with university presses, kindly organised by the Association of University Presses. This group of publishers was broadly comfortable with the first section of the framework. They shared some concerns about the second and third.

Some university presses publish titles run by academics who manage the editorial and peer-review processes independently. It would be especially hard to gather the necessary data from them. In many of these cases submissions are not automated and the journal editors have only paper records. Some participants felt that some journal editors would not want to share all this information because it might provide competitive advantage to other journals.

There was also quite a lot of discussion about the nature of university press humanities titles. These were described as high-acceptance titles where all submissions are invited, and they provide high-touch publishing support with the aim of improving articles so that they are of a standard for publication. There was concern about some of the metrics and strong support from this community for adding subject information or at the very least HSS and STEM flags.

A key concern was that in some cases APCs had simply been set too low and did not cover a journal's costs. This made it particularly challenging to complete the template, and the concern is that the information provided would be particularly open to misinterpretation. [NB: We believe this is a shared, but otherwise unspoken, concern for many publishers.]

Learned Society publisher input

We were kindly invited to engage with members of the Society Publishers Coalition at their November meeting. The Association of Learned and Professional Society Publishers (ALPSP) then helpfully amplified some key points from this community. Again, the inclusion of information about the discipline of the journal was seen as being extremely important. Also important was a signal about the for-profit/non-profit nature of the title, for example through inclusion of both the owner and the publisher of the journal. Frequency of publication also emerged as a helpful flag for the nature of a journal. Print distribution remains important in many HSS subject areas, and so it is essential that the framework supports this clearly.

Implementation concerns also clearly emerged, with recognition that this is an entirely new ask, and for Societies with a publishing partner would involve unexpected and new collaboration between the parties.

STM Member input

Despite particular difficulty in engaging the STM association with this project in its early stages, we organised two webinars for association members in December.

Concerns expressed included those of principle:

- questions about whether funders have a right to ask for this information customers, including funders, do have a right to ask for additional information and suppliers have a choice about whether or not they wish to supply it
- the introduction of regulation 'through the back door' by funders
- the intended and unintended consequences of making this information public
- that the exercise would distract from a rapid transition to OA
- that customers would be tempted to dive into ever more detail, and to demand ever more control
- that funders and other customers might not actually use this information

and of practice:

- pushback on various of the metrics in section 2 there was quite a lot of variation here, but more suggestions to eliminate the request for citations than any other line
- pushback on section 3, which was described as arbitrary and onerous, with little recognition that this was the section of most interest to customers
- costs: people would have to be employed to do this work, which would drive up prices; detailed implementation guidance would be needed for the metrics section to try and ensure comparability, and yet this would increase the already burdensome implementation

One participant carefully summed up the key messages: there are many questions about why this is being done, many feel it is an onerous distraction driven by funders who represent only 6–7% of the content, and we must ask is it really worth it?

There were constructive comments and suggestions too. One participant noted that she understood that libraries and funders want to ensure they are receiving reasonable value for what they are paying. The information requested in section 1 was acknowledged as often publicly available and yet perhaps not easy enough to access at present. There was some very muted support for a pilot to work out some of the practical implementation issues and suggestions for making the framework easier to implement: asking for information at a portfolio rather than title level, being clearer that the price percentage figures would not need to be audited, and revisiting the update frequency as annual updates may be unnecessary.

Librarian input

Librarians typically expressed strong support for more information and increased transparency around pricing and services. One commented, "I will make the point that as part of our licence agreements we will demand ever-greater transparency. Our experience is that what is apparently impossible to provide one year becomes eminently attainable once an agreement rests on it." They noted that at present there is little clarity in agreements with publishers about what services are provided in exchange for a payment, and they are interested in services for both authors and readers on their campuses. They provided many examples of the effort they make to monitor and track OA agreements and services and how these are implemented in practice.

They would appreciate much more information about publisher discount and waiver policies, and information to demonstrate how these are implemented in practice.

They would appreciate more insight into how valued – by customers of all kinds – a publisher's services actually are. One example: "We hear so much complaining about the quality of publisher submission systems, and the publishing process in which authors are doing so much work, for example to add metadata and tags."

Some also expressed sympathy for publishers with the increased effort that would be required to deliver greater transparency around pricing and services, particularly for smaller publishers and publishers perceived as genuinely trying to transition to Open Access and improve transparency. Many of the librarians we spoke to in depth had some first-hand experience of what this would be like for a publisher, for example through involvement in a library or university press or in their learned society's journal.

There was some concern expressed that the metrics in section 2 would be of limited interest to customers and would be used primarily by big publishers to promote their services.

There were practical questions about how the framework would evolve over time as new entrants provide innovative services or as practices change.

There was recognition that services would be needed to collate and use these data once they had been provided by publishers, and concern about who would pay for these services and how.

Annexe 3 – How the data could be used

Aggregators, sales agents, and subscription agents might be interested in ingesting these data and providing services around them.

Cabells Journal Blacklist might find these data useful for separating out good journals from predatory ones.

The **Charleston Advisor** asks its expert reviewers to discuss product pricing, but they can only say what they know, so at present this information is individualistic and unstructured. Publishers have the option of adding in additional information, and not all do. Ingesting data more systematically might appeal.

CHORUS provides a very useful compliance tracking service for funders and institutions, and already ingests metadata from Crossref to incorporate into its dashboards. Some stakeholders felt its governance to be too concentrated with publishers, and we note steps taken by CHORUS to strengthen library representation on its Board.

Discovery services might find these data useful for result ranking, using information other than citations or impact factor.

DOAJ provides a directory of fully OA journals, and already ingests information about pricing and

currencies. It would be much easier for it to obtain this information via a central source such as Crossref.

Journal recommender services are available through a number of service providers, for example Editage, and these data might be of

Publishers

considerable interest to them.

Any publisher could use these data in their customer support systems, submission gateway systems, websites, and more.

Publishers might also collaborate to present these data, or to fund a service that would do so. Some illustrative examples from the UK might be useful:

- Publishing organisations that are also charities may already have some experience, as charitable donors often like more insight into how donations are used. The useful and userfriendly website Charity Choice⁵ provides a breakdown per £1 spent to facilitate comparison across 10,000 charity reports.
- Unlike publishers, UK solicitors are regulated and must provide price and service transparency⁶ for the different sorts of legal service they provide. The service information must explain what services are included in the quoted price, highlight any

Price Iransparency: at-a-glance
What your firm needs to do...

From 6 December 2018, our transparency rules mean you must display prices and service information if you publish that you work in any of the following areas:

Conveyancing (residential)

From 6 December 2018, our transparency rules mean you must display prices and service information if you publish that you work in any of the following areas:

Frobate (ummany offences)

Limiting applications (unterly offences)

Limiting applications (up to £ 100,000)

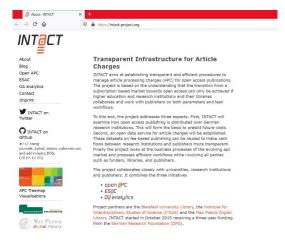
Limiting a

⁵ https://www.charitychoice.co.uk/

⁶ https://www.sra.org.uk/solicitors/resources/transparency/transparency-price-service/

services not included within the price which a client may reasonably expect to be, include information on key stages and typical timescales for these services, and publish the qualifications and experience of anyone carrying out the work and of their supervisors. These reports are monitored by the regulator by regular, random reviews of websites.

 Other industries, particularly in the business-toconsumer space, have price-comparison websites that provide consumer-friendly information that enables shopping comparisons. These are customer friendly and competition friendly, lowering search costs and increasing transparency.



SHERPA could include this information in its RoMEO service, which is a database of publisher copyright and archiving policies.

Transpose is building a database of journal policies on peer-review practices and might wish to ingest some of these data to provide additional context to its users.

Unpaywall Journals might find the data useful for the tools they provide to support librarians in making purchase and cancellation decisions.

Validation tools would be useful to compare publishers' assertions about price and service to customer experiences and views about quality and value for money. For example, Intact is a database to provide transparency around the actual fees paid by authors for OA services. This could be further developed to capture the views of customers about the quality and value for money of those services. Thanks to the Internet Archive, we discovered a service called Journalysis that was ahead of its time. This was an attempt by academic authors to exchange information about their reviewing experiences with academic journals.

