

# RCUK Open Access Block Grant analysis

## August 2013-July 2017

### Background

RCUK introduced a collective policy<sup>1</sup> on open access in April 2013, a component of which was the introduction of the RCUK Open Access block grant funding for institutions in receipt of the vast majority of RCUK funding. Institutions were given flexibility on how this funding could be spent, though the primary purpose was for the payment of Article Processing Charges (APCs).

RCUK recognised that there would be a transition period following the introduction of the policy in 2013. The initial period of block grant funding was for five years, but this has been extended for a further two years (2018/19 and 2019/20). The implementation of the policy was reviewed in 2014 by an independent panel chaired by Professor Sir Robert Burgess.<sup>2</sup>

RCUK is committed to publishing as much information about the operation of the block grant and the implementation of its Open Access policy as possible and further information relating to year five of the block grant will be published in due course.

### Introduction

This document summarises some of the information that RCUK has collected as part of the ongoing financial and compliance monitoring of its Open Access Policy.<sup>3</sup> For the first reporting period, which covered the period April 2013-July 2014, RCUK did not collect individual article level APC data but for the second, third and fourth reporting periods (August 2014 – July 2015, August 2015 – July 2016 and August 2016 – July 2017) this information was collected and is reported on here.

- For the 2013/14 reporting period we report here on the sub-set of the data that was collated for the analysis section of the 2014 Burgess Review of the Implementation of the RCUK Policy on Open Access.<sup>2</sup> This was based on 55 institutions which accounted for 93.5% of the block grant in 2013/14.
- For the 2014/2015 reporting period, RCUK received 84 returns of which 73 included an APC breakdown.
- For 2015/2016, 107 returns were received with 88 including an APC breakdown.
- For 2016/2017, 110 returns were received with 96 including an APC breakdown.

Returns were cleansed using data from CrossRef, DOAJ, Elsevier's Scival and Scopus as well as manual cleaning.

The analysis looked at all unique journal articles where an APC was paid. Where an article was funded through an off-setting or membership deal the reporting convention was to make these a zero cost APC (approximately 750 per year) and to report the cost of the deal separately. As a result of this, these papers are not included in the calculation of average APC costs in this document.

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<sup>1</sup> <http://www.rcuk.ac.uk/research/openaccess/policy/>

<sup>2</sup> <http://www.rcuk.ac.uk/documents/documents/openaccessreport-pdf/>

<sup>3</sup> <http://www.rcuk.ac.uk/documents/documents/rcukopenaccesspolicy-pdf/>

## Summary of APC costs

The number of articles published under an APC model using the RCUK block grants has increased by over 50% since the launch of the policy in April 2013 with an increase of over 5% in the last twelve months. The number of articles with an APC payment continues to rise year on year, which supports the improved coverage and accuracy of the reporting as well as a growing awareness and support from researchers in complying with the new policy.

Of the articles with an APC payment, the percentage that are fully open access continues to follow an upward trend, currently ~25%. The majority of articles are published in hybrid open access journals which have a higher average APC cost than fully open access journals.

	<b>2013/14 (16 months)</b>	<b>2014/2015 (12 months)</b>	<b>2015/2016 (12 months)</b>	<b>2016/2017 (12 months)</b>
Value of block grant awarded	£16.85M	£19.83M	£22.8M	£14.0M
Number of Articles which an APC was paid	6,505	6,870	9,509	10,121
Average number of articles per month	407	573	792	843
Of which were fully open access	Not available**	1,499	2,264	2,544
Of which were hybrid open access	Not available**	5,371	7,245	7,553
Average APC <sup>4</sup>	1,580	1,755	1,811	1,988
Average fully open access APC	Not available**	1,424	1,497	1,654
Average hybrid APC	Not available**	1,847	1,909	2,101
Total cost of hybrid APC*	Not available**	9,921,396	13,834,110	15,815,457
Total cost of open access APC*	Not available**	2,135,153	3,389,948	4,202,122
Total cost of APCs*	10,277,184	12,056,549	17,224,058	20,069,375
Total RCUK spend on APCs <sup>5</sup>	Not available**	10,793,817	15,935,714	18,293,719

\*This figure is the total cost of the APCs that the RCUK block grant either paid all of or part of. In the cases where the block grant funded only part of the APC, in most cases the other funders were Charities open Access Fund (COAF) or institutional funds. The average APC costs are based on the total cost of the APCs and not just the portion that the RCUK grant paid for.

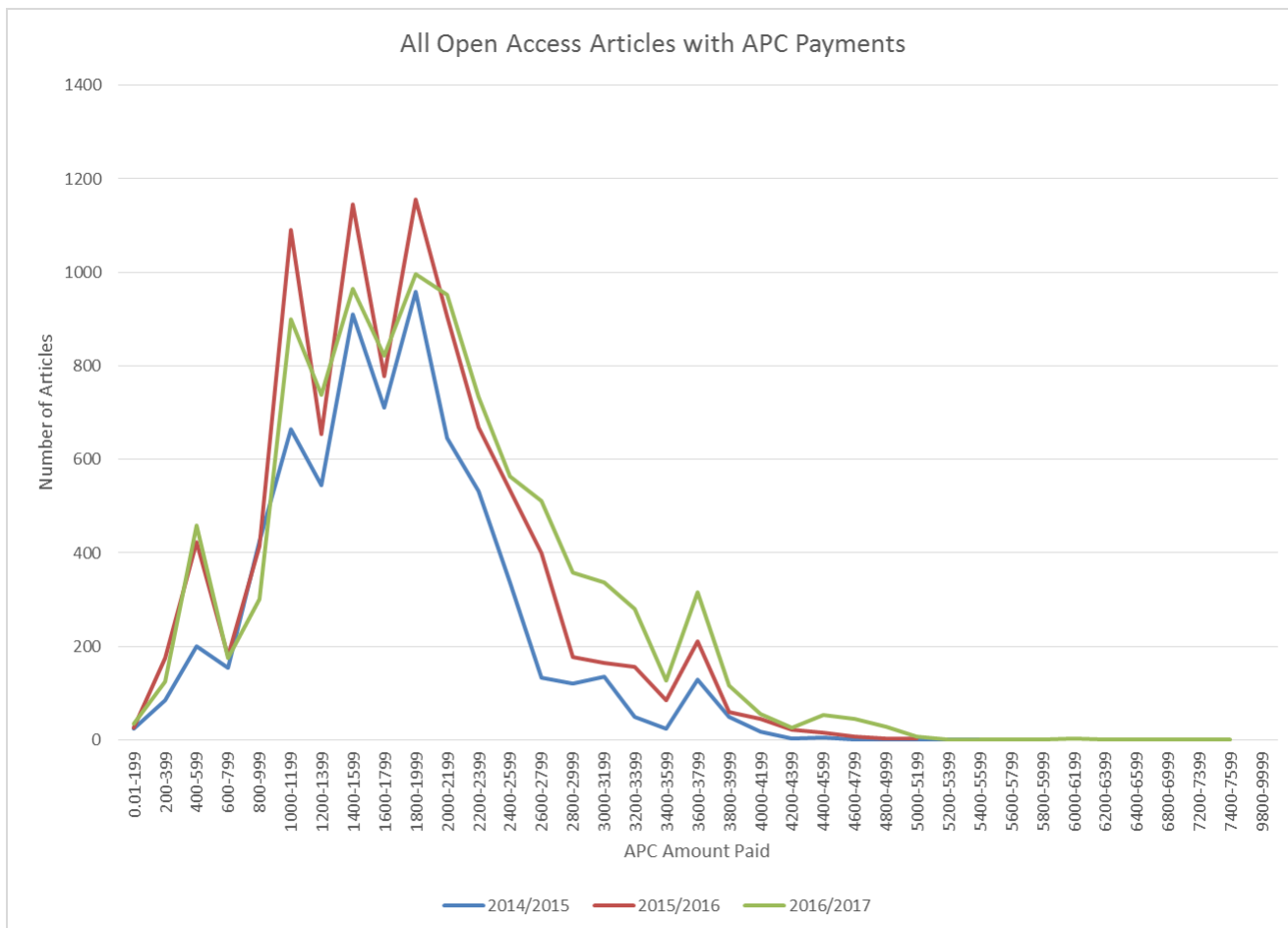
\*\* Not possible to provide as source data is not detailed enough.

<sup>4</sup> This compares to an average cost of €1100 per article in 2015/16 in the particle physics field via the SCOAP3 consortium which STFC contributes to <https://scoap3.org/wp-content/uploads/2016/06/Facts-Figures-30.06.2016.pdf>

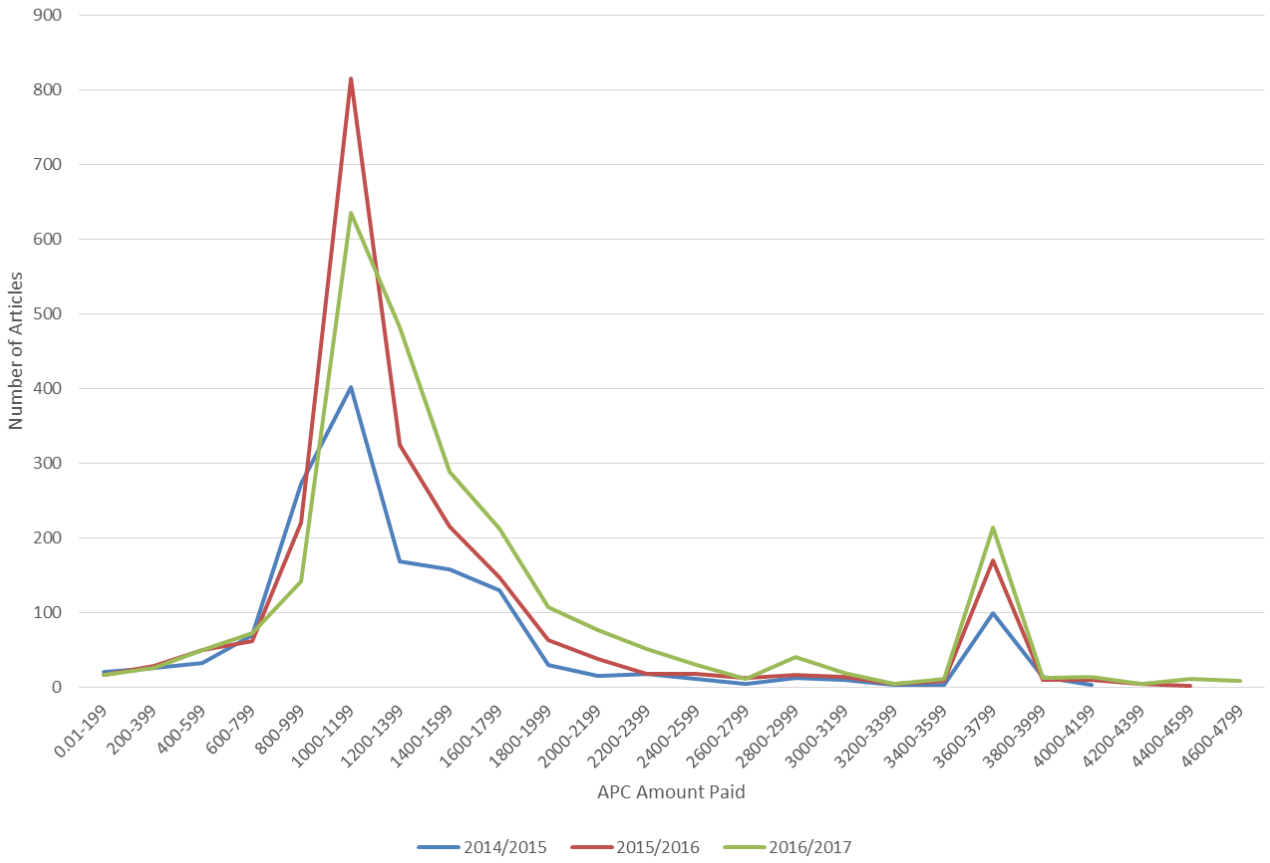
<sup>5</sup> This can be higher than the block grant as institutes may have brought money forward funding from the previous year.

# APC Cost Distribution

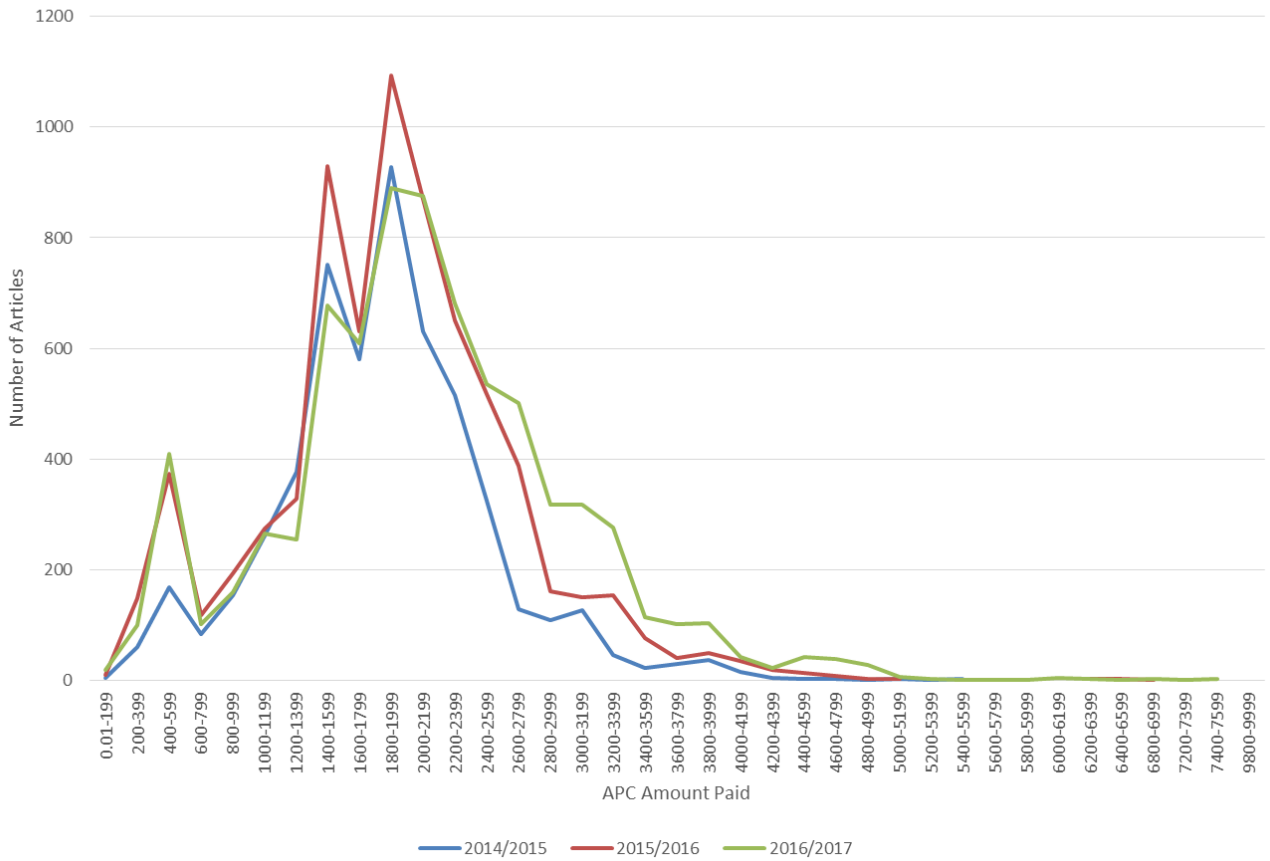
The charts below show the cost distribution of all APCs by year, followed by the breakdown of fully open access journals and hybrid journals. For articles with any type of APC payments, in each of the reporting periods half of the values lie within £500 either side of the average. Over the three year period, the % of articles within this £1000 range has decreased from 55.57% to 43.57%, this indicates a wider range of prices being charged. This could be due to additional institutions included in the data, which will bring a greater variety of costings as institutions could potentially have different pricing agreements. Another explanation may be that the articles reported are now covering a wider range of subject areas and APC pricing varies across publication subject area. It is also worth noting fully open access articles prices are much more consistent whereas hybrid open access has a larger range of pricing.



Fully Open Access Articles with APC Payments

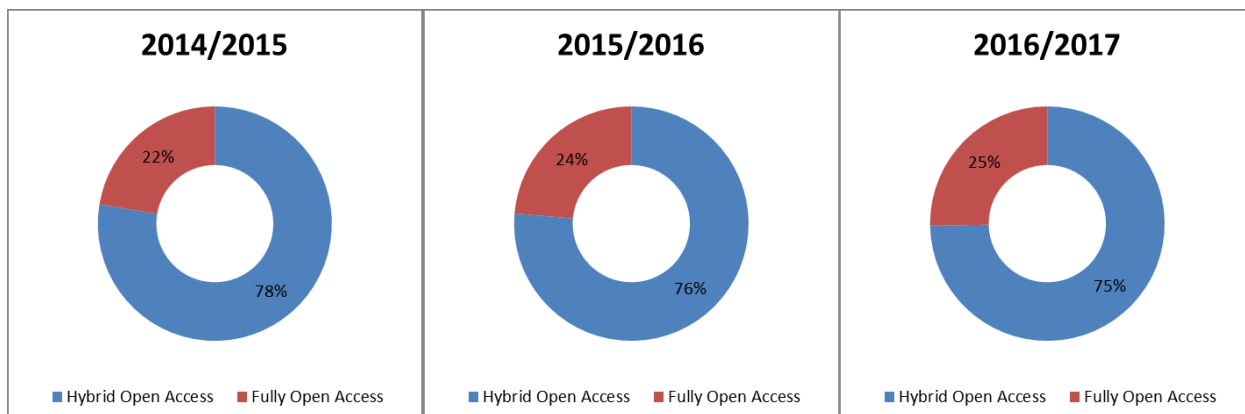


Hybrid Open Access Articles with APC Payments



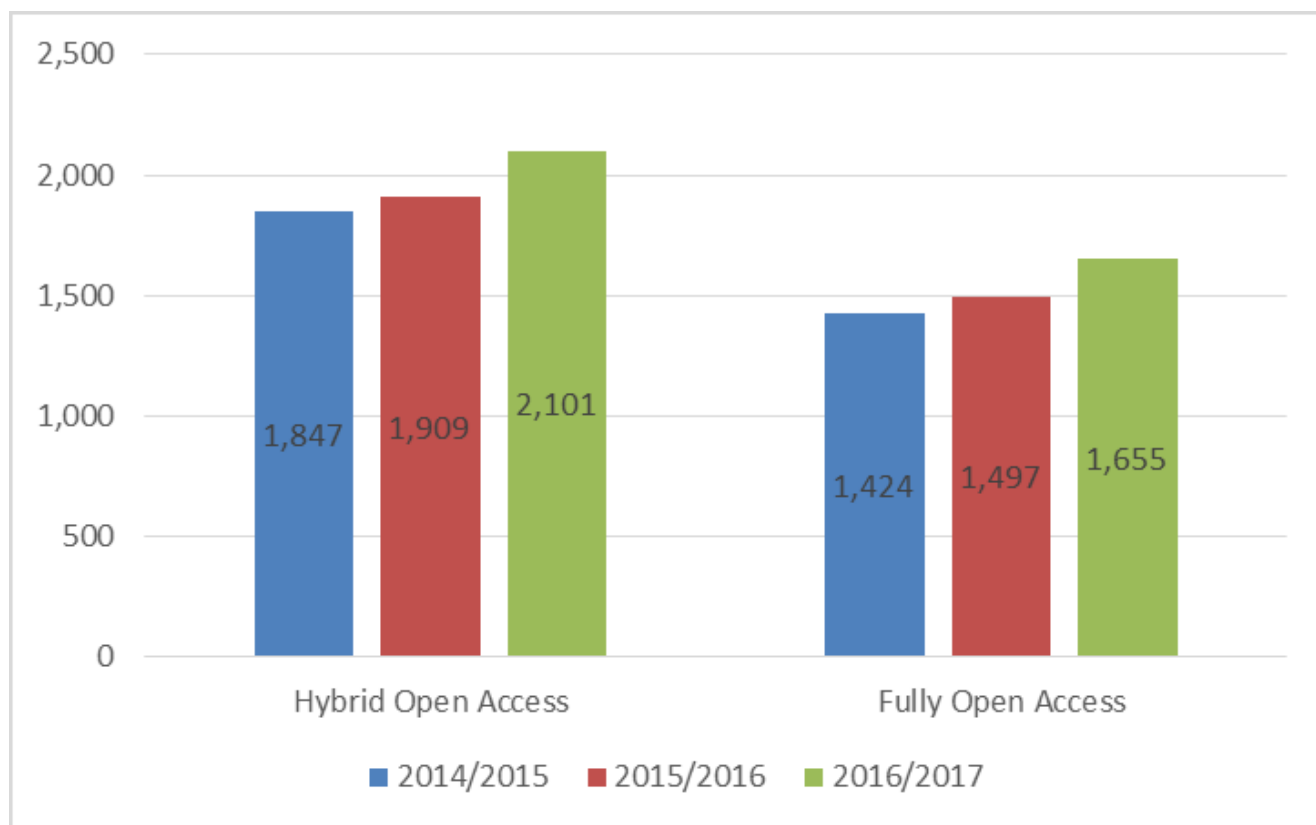
## Hybrid and pure open access journals

The vast majority of APCs paid for hybrid open access publications, the charts below are a visual representation of this by reporting year. From 2014/2015 to 2016/2017 there has only been a slight increase in the percentage of articles in fully OA journals (the latest corresponding COAF figures<sup>6</sup> for 2015/16 were 71:29 hybrid: fully open access).



## Average APC Cost of Hybrid Open Access Vs Fully Open Access

RCUK has found the average APC cost for both hybrid and fully open access is increasing, with slighter larger increases on the fully open access journals. The average costs of APCs for hybrid journals remains far greater than that of the fully open access journals.

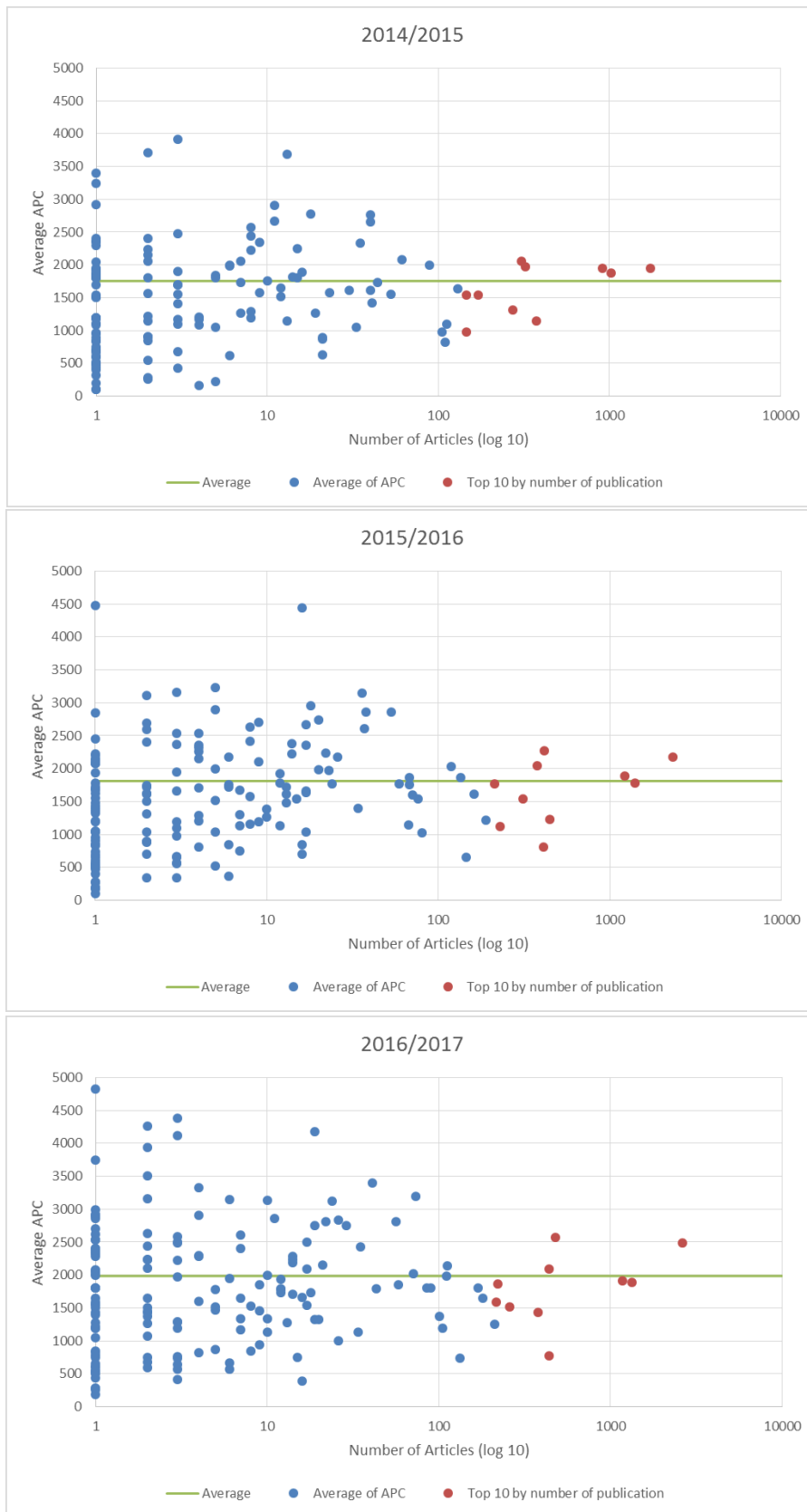


<sup>6</sup> <https://wellcome.ac.uk/funding/managing-grant/wellcome-and-coaf-open-access-spend-2015-16>

## Breakdown by publisher

The charts below demonstrate that, across the years, publishers with less articles have a much greater variation in pricing with the largest and lowest APC charges coming from these publishers. The APC charges for the top 10 publishers are more consistent and in line with the average APC for all publishers.

The number of publishers receiving APC payments from the RCUK Block Grant fund is consistently on the increase, this could be down to the number of articles reported increasing or as a result of more institutions returns.

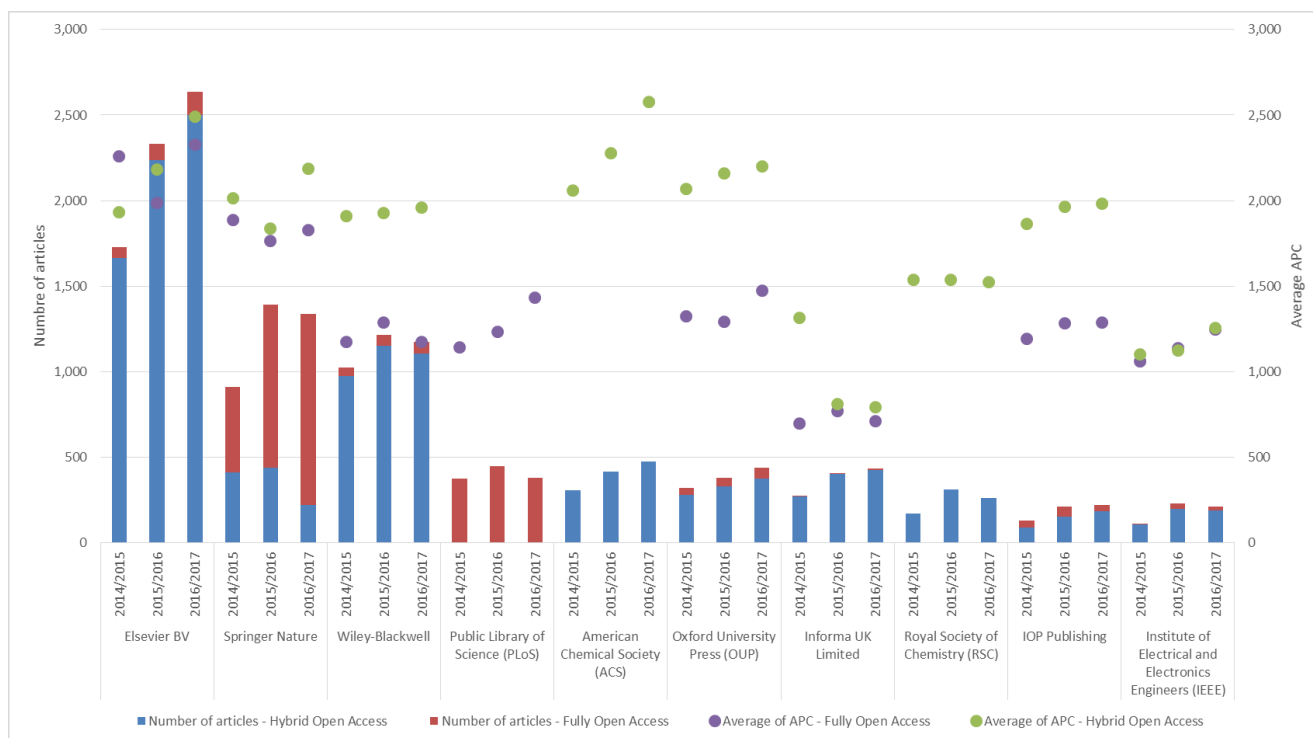


## Publishers with largest number of articles Vs. Average APC

This chart shows the number and type of articles published by the top 10 publishers (by number of articles published) in 2014/15, 2015/16 and 2016/17 as well as the average APC cost by article type for each publisher.

Although the number of articles for the top 10 publishers is steadily increasing, the top 10 publisher's share of all articles is on a slight decline, in 2014/2015 the share was 78.54% whereas in 2016/2017 it is 75.14%. This is likely to

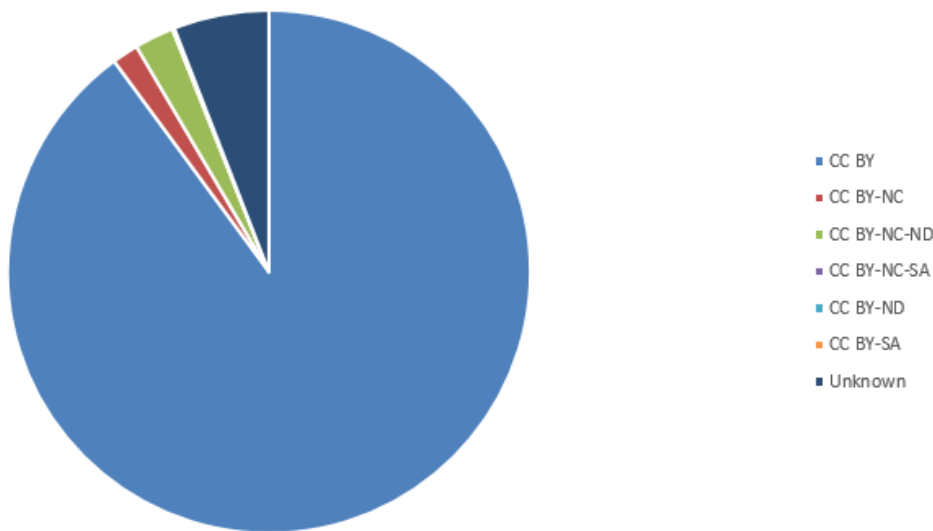
be the result of more articles captured in the data. Potentially these articles will cover an increased cross section of subject areas, which inevitably leads to a larger range of publishers being used.



## Licences

The CC BY licence is applied to 90% of articles, there has been little deviation from this figure across the three years.

Licences Aug 2014 - July 2017



	CC BY	CC BY-NC	CC BY-NC-ND	CC BY-NC-SA	CC BY-ND	CC BY-SA	Unknown
%	89.91%	1.62%	2.43%	0.12%	0.00%	0.01%	5.90%
Number	23827	430	644	33	1	2	1563



## Top Ten Publishers (by APC spend)

The table below shows the top ten publishers in order of total APC spend over the three years period.

These ten accounted for:

- 78% of articles and 81% of APC spend in 2014/15
- 77% of articles and 79% of APC spend in 2015/16
- 75% of articles and 77% of APC spend in 2016/17

Publisher	Is Open Access Journal	2014/2015			2015/2016			2016/2017		
		Number of articles	Average of APC paid	Total Spend	Number of articles	Average of APC paid	Total Spend	Number of articles	Average of APC paid	Total Spend
Elsevier BV	Hybrid Open Access	1,664	1,934	3,218,109	2,238	2,182	4,883,796	2,501	2,493	6,191,881
	Fully Open Access	63	2,261	142,456	96	1,988	190,823	135	2,325	313,908
	<b>Total</b>	<b>1,727</b>	<b>1,946</b>	<b>3,360,565</b>	<b>2,334</b>	<b>2,174</b>	<b>5,074,619</b>	<b>2,636</b>	<b>2,484</b>	<b>6,505,789</b>
Springer Nature	Hybrid Open Access	409	2,015	824,074	439	1,838	807,057	219	2,185	472,043
	Fully Open Access	501	1,887	945,196	954	1,763	1,681,971	1,117	1,830	2,043,657
	<b>Total</b>	<b>910</b>	<b>1,944</b>	<b>1,769,270</b>	<b>1,393</b>	<b>1,787</b>	<b>2,489,029</b>	<b>1,336</b>	<b>1,887</b>	<b>2,515,700</b>
Wiley-Blackwell	Hybrid Open Access	974	1,910	1,860,546	1,150	1,928	2,217,210	1,107	1,960	2,163,540
	Fully Open Access	51	1,175	59,928	66	1,287	84,949	69	1,175	81,061
	<b>Total</b>	<b>1,025</b>	<b>1,874</b>	<b>1,920,474</b>	<b>1,216</b>	<b>1,893</b>	<b>2,302,159</b>	<b>1,176</b>	<b>1,914</b>	<b>2,244,601</b>
Public Library of Science (PLOS)	Hybrid Open Access	0	0	0	0	0	0	0	0	0
	Fully Open Access	374	1,141	426,600	446	1,233	550,004	378	1,434	542,119
	<b>Total</b>	<b>374</b>	<b>1,141</b>	<b>426,600</b>	<b>446</b>	<b>1,233</b>	<b>550,004</b>	<b>378</b>	<b>1,434</b>	<b>542,119</b>
American Chemical Society (ACS)	Hybrid Open Access	306	2,057	629,517	415	2,276	944,711	476	2,575	1,225,869
	Fully Open Access	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>306</b>	<b>2,057</b>	<b>629,517</b>	<b>415</b>	<b>2,276</b>	<b>944,711</b>	<b>476</b>	<b>2,575</b>	<b>1,225,869</b>
Oxford University Press (OUP)	Hybrid Open Access	278	2,069	575,128	329	2,159	710,273	375	2,200	824,953
	Fully Open Access	44	1,325	58,298	49	1,294	63,415	62	1,475	91,446
	<b>Total</b>	<b>322</b>	<b>1,967</b>	<b>633,426</b>	<b>378</b>	<b>2,047</b>	<b>773,688</b>	<b>437</b>	<b>2,097</b>	<b>916,399</b>
Informa UK Limited	Hybrid Open Access	271	1,316	356,554	400	809	323,495	423	795	336,141
	Fully Open Access	1	698	698	8	769	6,153	11	711	7,817
	<b>Total</b>	<b>272</b>	<b>1,313</b>	<b>357,252</b>	<b>408</b>	<b>808</b>	<b>329,648</b>	<b>434</b>	<b>793</b>	<b>343,958</b>
Royal Society of Chemistry (RSC)	Hybrid Open Access	170	1,536	261,072	310	1,536	476,053	259	1,523	394,484
	Fully Open Access	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>170</b>	<b>1,536</b>	<b>261,072</b>	<b>310</b>	<b>1,536</b>	<b>476,053</b>	<b>259</b>	<b>1,523</b>	<b>394,484</b>
IOP Publishing	Hybrid Open Access	87	1,863	162,100	153	1,965	300,631	184	1,983	362,897
	Fully Open Access	43	1,194	51,328	60	1,285	77,084	37	1,288	47,653
	<b>Total</b>	<b>130</b>	<b>1,642</b>	<b>213,428</b>	<b>213</b>	<b>1,773</b>	<b>377,715</b>	<b>221</b>	<b>1,866</b>	<b>410,550</b>
Institute of Electrical and Electronics Engineers (IEEE)	Hybrid Open Access	107	1,103	118,035	199	1,122	223,340	187	1,258	233,942
	Fully Open Access	5	1,059	5,295	29	1,136	32,934	25	1,245	31,121
	<b>Total</b>	<b>112</b>	<b>1,101</b>	<b>123,330</b>	<b>228</b>	<b>1,124</b>	<b>256,274</b>	<b>212</b>	<b>1,256</b>	<b>265,063</b>
<b>Grand Total</b>		<b>5,348</b>	<b>1,813</b>	<b>9,694,933</b>	<b>7,341</b>	<b>1,849</b>	<b>13,573,900</b>	<b>7,565</b>	<b>2,038</b>	<b>15,364,532</b>

## Summary of non-APC costs

Institutions were given flexibility on how this funding could be spent and below we report on the most significant non-APC costs reported to RCUK. The major non-APC costs reported to RCUK are staff costs and offsetting/discount/membership schemes.

The amount reported on staff costs remained the same from 2015/16 to 2016/17, but as the overall value of the block grants decreased, this represented an increase in the proportion of expenditure on staff costs (from 10.1% of awarded funds in 2015/16 to 16.4% in 2016/17). This will be kept under review by RCUK.

The growing importance of discount/membership/offsetting deals is highlighted by the £2M that was reported to RCUK as being spent on them in 2016/17. As these deals become more common it is important that we understand their impact on OA costs. This is something that RCUK will work on with other funders, JISC and the RCUK Open Access Practitioners' Group<sup>7</sup> to improve our reporting and understanding of these deals.

Reporting Period	Amount reported to RCUK as spent on APCs	Amount reported to RCUK as spent on discount or membership schemes <sup>8</sup>	Amount reported to RCUK as spent on staff costs	Amount reported to RCUK as spent on Other costs <sup>9</sup>
<b>1 (April 2013/July 14) 16 months</b>	£10.3M	N/A	N/A	N/A
<b>2 (August 2014/July15) 12 months</b>	£10.9M	£1.56M	£1.35M	£0.4M
<b>3 (August 2015/July16) 12 months</b>	£15.9M	£1.9M	£2.3M	£0.76M
<b>4 (August 2016/July17) 12 months</b>	£18.1M	£2.0M	£2.3M	£0.89M

## Next Steps

This analysis is currently based on annual returns from Research Organisations. We plan to incorporate further analysis using the data collected from Researchfish<sup>10</sup> along with data from unpaywall<sup>11</sup>. This will enable further insight into compliance rates.

We also feel it appropriate after feedback to include further detail surrounding memberships and discounts. To enable this as well as a few other improvements we will revisit the spreadsheet used for data collection and make improvements where necessary.

<sup>7</sup> <http://www.rcuk.ac.uk/research/openaccess/rcuk-open-access-practitioners-group/>

<sup>8</sup> Due to the way in which many of these discount deals work it is not possible to simply add the costs of APC and Memberships together – in some cases the deals are a pre-payment that result in a lower APC from that publisher and to combine them would lead to double counting.

<sup>9</sup> Other costs are non-operational and non-APC processing related spend.

<sup>10</sup> <http://www.rcuk.ac.uk/research/researchoutcomes/>

<sup>11</sup> <https://unpaywall.org/>