

# **SCIENCE AND TECHNOLOGY SELECT COMMITTEE**

# The implementation of open access Oral and Written evidence

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## 1994 Group - Written evidence

### **Statement on Open Access**

- 1. The 1994 Group welcomes this timely inquiry into the implementation of Open Access (OA). We are committed to OA and support the contribution that this will make to broader transparency initiatives. However we are concerned that, following the review last year by Professor lanet Finch, there remains a substantial amount of uncertainty regarding the extent of the financial and practical challenges that the current approach to implementation will cause for research-intensive universities.
- 2. We accept that efforts are being made to ensure that the academic career system supports and rewards OA publishing, including by the European Commission and by research funders<sup>2</sup>. However, uncertainties continue to be expressed across the research community about the financial and practical implications of OA on ability to publish outputs and to ensure they are compliant, particularly amongst early-career researchers. The Finch report noted in particular that "In the humanities, where much research is undertaken without specific project funding, OA publishing has hardly taken off at all; and it is patchy in the social sciences, for similar reasons". As the implementation process for OA takes place, the efforts to minimise impact on academic careers must be better communicated by research funders – in particular, to researchers in the arts, humanities and social sciences.
- 3. We were disappointed to note the absence of a discipline-specific policy on embargo periods by RCUK. The Finch report noted in particular the different approaches to publishing and to OA across the disciplines, suggesting that "Moreover, in subject areas where the half-life of the articles in each issue of a journal is several years, there may be a case for a longer [embargo] period [than twelve months]". The proposed policy by RCUK, however, takes a much broader approach in generally requiring six-month embargo periods except where outputs are funded by AHRC or ESRC, where twelve-month periods are accepted. We would urge RCUK to instate a more flexible policy on embargo periods which reflects the little knowledge that we have on how quickly OA can be implemented in individual subject areas.
- 4. A 24-month embargo period may be more appropriate for subject-areas where OA will likely take longer to achieve. This would give full regard to the Government's response to the Finch report, which stated that "Rules should be kept under review in the light of the available evidence as to their likely impact on [certain journals]",<sup>5</sup>

<sup>&</sup>quot;COMMISSION RECOMMENDATION of 17.7.2012 on access to and preservation of scientific information", 5. http://ec.europa.eu/research/science-society/document library/pdf 06/recommendation-access-and-preservation-scientificinformation en.pdf

<sup>&</sup>lt;sup>2</sup> e.g. Wellcome Trust - http://www.wellcome.ac.uk/about-us/policy/spotlight-issues/Open-access/Guides/wtx036803.htm <sup>3</sup> Dame Janet Finch et al, "Report of the Working Group on Expanding Access to Published

Research Findings", June 2012, 39. http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf

<sup>4</sup> Ibid, 106

<sup>&</sup>lt;sup>5</sup> BIS, "Letter to Dame lanet Finch on the Government Response to the Finch Group Report: "Accessibility, sustainability, excellence: how to expand access to research publications", 16 July 2012, 5. https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/32493/12-975-letter-government-responseto-finch-report-research-publications.pdf

- and that "embargo periods could be up to 12 months for science, technology and engineering publications and longer for publications in those disciplines which require more time to secure payback".<sup>6</sup>
- 5. We would also note that current OA policy refers specifically to "research papers" and does not appear to cover other forms of scholarly outputs, such as monographs. Since it has been proposed that OA publication could become a condition for submission to future counterparts to REF2014, the Government and funders must consider the feasibility of this condition and potential impact on certain subject communities at the earliest possible stage. There will also be a requirement within the Horizon 2020 programme for all funded "publications" to be made on OA terms, even though the challenge of meeting this condition will vary across subject communities. As noted by the Finch group, we must be wary of "pushing too hard, too fast".
- 6. An additional £50-60m in expenditure was the Finch group's best estimate for the annual cost to the HE sector of OA. Current levels of investment by RCUK stand at just £27m for the first year of implementation, a figure which includes institutional block grants and the £10m initial "pump-priming" funding the latter of which was only made available to a small number of institutions. The costs implications of OA are therefore extremely concerning, particularly given uncertainties around Treasury commitments to research funding in advance of the next Spending Review.
- 7. In particular, we would welcome more clarity on how additional institutional spending on OA will be treated in light of expected compliance with the Wakeham efficiency targets.
- 8. We would also welcome further clarity regarding the rules around research data. The types of research data and extent that must be made OA is not currently clear, and there are additional concerns about how such policies relate to restrictions within the Freedom of Information Act around sensitive research data. Furthermore, the scale of data that universities may be required to store in certain disciplines, such as large scale computing and genomics, may incur considerable financial and environmental costs.
- 9. University research is fundamentally international, and academic staff will seek to publish where their research will have the greatest reach and impact on an international level. Varied adherence to OA principles across the world may there have an adverse impact on the sector should many high-profile international journals remain non-compliant. This is particularly concerning for specialist institutions and certain disciplines such as language, where the majority of research is published in non-UK journals and in countries where there are no clear national OA initiatives.
- 10. Finally, we would welcome further consideration of Green OA as a sustainable solution for the sector. While recognising that there are costs and benefits to both Gold and Green OA, RCUK's expectation that compliance levels with Gold OA will

<sup>6</sup> Ihid

<sup>&</sup>lt;sup>7</sup> http://europa.eu/rapid/press-release\_IP-12-790\_en.htm

<sup>8</sup> Supra note 3, 106

<sup>9</sup> Ibid, 11

## 1994 Group – Written evidence

reach around 75% by 2018 suggests that Green OA will be considered an appropriate alternative beyond the initial five-year implementation phase. Should Green OA prove to be an effective solution during this time, it would be sensible for policy makers to re-evaluate its role in OA policy.

## Academy of Social Sciences - Written evidence

The Academy of Social Sciences counts 44 of the social science Learned Societies and more than 850 of the country's most distinguished social scientists amongst its membership. Both groups have expressed a range of concerns over the implementation of Open Access publishing and its implications for sustainability – both for academic excellence and for the future of Learned Societies and their publicly beneficial work.

The Academy is in favour of the principle that the results of publicly-funded research should be more readily available to researchers outside the academic sector and to the public at large. However, there is a view in our community that there has been insufficient reflection on the potential impacts of a move to Open Access on the ecosystem of academic publishing and Learned Societies' business models and work. These issues, and those related to the rights of content creators, were aired at a major 2-day conference which the Academy staged at the end of November 2012

(http://www.acss.org.uk/OAConfNov2012.htm) .The Academy's main concern is that Janet Finch's recommendation for a suitably ordered transition may not be being implemented.

Finch's emphasis on managing change over time has at times seemed in danger of being sidelined in the discussion over attaining OA in the UK. <sup>10</sup> Furthermore, Humanities and Social Science research publishing operates differently from that in STEM subjects, which are currently closer to being OA-compliant. The Academy's questioning of the way in which the recommendations from Finch's report are being implemented, echoes issues raised by Lords in the Science and Technology Committee in Janet Finch's oral evidence session on 15<sup>th</sup> January.

We appreciate that the House of Lords Science and Technology Committee is currently engaged in a rapid review process, with one day of oral evidence-gathering scheduled for the end of the month, but we feel that the concerns raised here are sufficiently serious in their implications to warrant more extensive investigation. The Academy therefore recommends that the Committee undertake a further, more detailed, inquiry and we would welcome the opportunity to contribute expert evidence to this, either orally or in writing.

The Academy's concerns are grouped under the following headings:

- **'Routes' to OA** the source of income to support these, the narrow choice of either 'green' or 'gold' and the divergence between recommendations from Janet Finch's report and the subsequent statement from BIS, and RCUK policy
- **Disruption of income streams for Learned Societies** implications for sustainability and wider understanding of 'value added' by these organisations
- **CC-BY licences** and their implications for intellectual property rights and publishing markets
- Global pressures on a local model

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<sup>&</sup>lt;sup>10</sup> For example, Finch et al state: 'The key policy questions are how to promote and manage the shift in an ordered way which delivers the benefits but minimises the risks' and further that, 'the costs [of transition to OA] could be higher than we estimate. But that risk can be managed by slowing the pace of transition' (Report of the Working Group on Expanding Access to Published Research findings - Executive Summary (2012): 4 and 10)

### 'Routes' to OA

'Gold' OA is the preferred option of RCUK, whereby researchers pay to have their work published via Article Publishing Charges (APCs), distributed through HEIs. This system lends itself well to publishing in STEM research, which is high-volume and short shelf-life, but is less compatible with publishing in social sciences and humanities where work by sole authors (and limited funding for APCs) and/or long shelf-life is commonplace. Arguably, the *immediate* free access to material provided by the 'Gold' model is less of a prize for HSS than STEM, as articles in our disciplines remain topical over periods of years rather than months.

There are distinctive types of publication and 'grey data', central to the practice of social science and humanities research which are apparently underprivileged by an OA model which favours short shelf-life and first use of data; monographs, collected essays, discussion papers, working papers and reviews of conference proceedings, sit uneasily in a gold route to OA where funding for comes from 'fresh' money via institutions.

An alternative 'Green' model of open access allows researchers to deposit articles in institutional repositories and publish in subscription journals without an APC; after an embargo period the material is made fully available under OA. Finch, and subsequently BIS, have recommended a green route allowing 12-24 month embargo periods, with discretion for journals to set their own limits; RCUK has recommended that a maximum of 12 months be allowed as embargo period for ESRC- and AHRC- funded work, with work from scientific Research Councils sticking to a shorter embargo period of 6 months. Recently, a group of British historians proposed an embargo period of 36 months for 'Green' routes to publication in their journals (<a href="http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access">http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access</a>), saying this period was 'the shortest possible period that would still protect our viability as subscription-funded organisations' and that it was 'fully consistent with the need to make research publicly available'. 

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Social scientists and Learned Societies (LS) in the UK are concerned both by the mismatch in recommendations by two key bodies (Finch/BIS and RCUK), and by the lack of recognition by RCUK of the implications of the short embargo period for sustainability of particular publications and LSs (covered more fully below).

An additional concern is that the 'Green' route is not cost-free: although deposited articles can be published without APCs, there is a cost to maintaining repositories and getting articles into publications from them. There is also a cost to obtaining and maintaining 'discoverability' through navigation, linking and interactive services provided by on-line publication. How exactly these costs are to be covered remains unclear.

### Disruption of income streams for Learned Societies

As already suggested, Open Access offers a significant challenge to the current business models of Learned Societies in social sciences and humanities. Learned Societies represent many specialist areas individually, often publishing a single journal in their subject area.

<sup>&</sup>lt;sup>11</sup> The issue of embargo periods has led to debate over implementation of OA in the American community of history academics as well: <a href="http://blog.historians.org/news/1734/aha-statement-on-scholarly-journal-publishing">http://blog.historians.org/news/1734/aha-statement-on-scholarly-journal-publishing</a>; and more widely: <a href="http://www.insidehighered.com/news/2012/09/24/historians-organization-issues-statement-calling-caution-open-access">http://www.insidehighered.com/news/2012/09/24/historians-organization-issues-statement-calling-caution-open-access</a>.

Whilst the diversity of social science and humanities Learned Societies should not be underestimated (Sally Hardy of the Regional Studies Association presented evidence from a subsample of LSs at our conference, showing annual incomes range from under £200k to £10 million; and publishing accounting for between 1% and 67% of total income with a median proportion of around 1/3), for many LSs, the threat posed to total income by OA is considerable.

Without the possibility of embargoes extending beyond I year, it is difficult for specialist journals to sustain their current sales, where shelf-life often extends beyond 2 years. This has implications for revenue available not only for publications themselves, but for the wider remit of Learned Societies' work, which is significantly subsidised by income from journals. It is not inconceivable that some Societies may experience a double hit under OA: both reduced income from journal publications and reduced membership through the declining attractiveness of journals as a Membership benefit.

The wider implications of reduced income from journal publication were a concern on the second day of the Academy's conference, which attracted an audience of 140 people. Typically, profit from subscription is re-invested in the wider work of LSs - in promoting the interests of early-career researchers and supporting the discipline as a whole through, for example, subsidising postgraduates' participation; recognising excellence through awards and prizes; outreach work with schools; advocating to government. Learned Societies are also sometimes able to provide grant schemes for research that may not otherwise be funded and which therefore contributes to the diversity and innovation of UK research.

These 'value adding' functions of Learned Societies need to be better measured and understood as part of the world upon which OA has impact. It has been suggested to us, as the LSs' representative body, that we draw government attention to the need to appreciate these functions fully and to account for their positive impact on research in the UK. The Academy is currently exploring the possibility of obtaining funding to scope and quantify the 'value-added' effect of LSs, and to cover the costs of Societies obtaining professional advice on adapting their business models for sustainability, in the new environment presented by OA models. It is vital that the wider work of the LS's is not put in jeopardy as an unintended consequence of a rapid switch to OA publishing.

### **CC-BY** licences

RCUK has advised that all publicly-funded research should be licensed as CC-BY — which permits immediate commercial and derivative use of published papers' content. More recently, RCUK has clarified that this form of licence may only apply to Gold route publications - with the more restrictive CC-BY-NC-ND applying to the Green route, thus protecting research from commercial or derivative use without prior permission from the author. But this clarification has not been issued in writing, and our membership seeks reassurance that this will be the case. For HSS researchers, interpretation of data and context of extracts are key, and the protection of permission to cite is keenly sought.

It has also been noted that CC-BY is not structured to establish permission to re-publish from literary sources or with respect to copyrighted images.

The overall implications of OA routes to publication and CC-BY licensing arrangements, is to create a system where income for publication and dissemination shifts from readers (subscribers) to institutions and publishers, with free re-use of work encouraged. This

presents important issues for HEI's as gatekeepers in the publishing process and for researchers seeking to publish.

Several of these issues were raised at the Academy's conference, including:

- the fact that there is a funding gap between the cost of the number of papers currently published and the money proposed to be provided for APCs by RCUK;
- the lack of clarity on who pays for maintaining and storing data in repositories and extracting it for publication under 'green' OA;
- concern over the OA mandate being imposed on research output for the 2020 REF;
- the lack of transparency over how institutions (Universities and sometimes publishers) will allocate APCs in practice.

This last point is crucial: if Universities hold the funding for publication under OA, and that funding is less than in the current system, there will have to be an allocation process – and it is not at all clear how this will operate. Even if the overall pool of money should remain the same, there are still concerns that allocation would be managed by internal higher education managers, rather than editors and peers. Who decides, using what criteria, whether academic work is worthy of publication or not? If Universities want the highest return on investment in publication, the OA system may struggle to accommodate early career output, when the attractions of citations in premier journals by established names are likely to be hard to resist.

The Academy is aware of various approaches adopted by Higher Education Institutions responding to the new funding structures: allocating funding on a first-come-first-serve basis and postponing the decision on what to do when the money runs out until forced to do so; transferring the responsibility wholesale to journal publishers for them to decide; acknowledging that rationing will take place, but uncertain about how it will occur in practice. None of these variants is reassuring in terms of academic freedom to publish innovative or adventurous work, or overall transparency. There are therefore significant worries that a new system is being introduced without sufficient time to explore sustainable options: potentially a 'real-time' experiment with maximum exposure to uncertainties and risk.

### Global pressures on a local model

All of the above issues would be complicated enough if UK research was published solely in UK journals and overseas authors did not share the same space or markets. In fact, many journals operate with a global reach, and Learned Societies' journals in this country often publish only a minority of articles by UK researchers. In the social sciences, many of the prestige journals are hosted outside the UK, with no compelling case to comply with UK policies. They may not wish to comply with 'Green' route embargos of only I or 2 years; they may not alter subscriptions whilst offering 'Gold' OA. A key player internationally is, of course, the USA – the largest research and publishing market in the world. The Americans have not yet committed to OA, and as the dominant force in global social science publishing, and with US researchers subscribing in large numbers to UK social science journals, their future decisions with respect to OA will have decisive impact here.

These issues lead to a number of questions and potentially complex incentives which remain largely unresolved:

- if articles are co-authored by academics from different countries, not all of whom are OA- compliant, what proportion of the cost of publication is to covered via APCs?
- If it is cheaper to publish under existing rules than under OA, how will we guard against UK research becoming less attractive to publish than that from cheaper, non-compliant countries?
- If OA becomes the preferred standard for high-income countries, what happens to the market for research by authors in emerging economies in the global market?

As with the other areas of concerns outlined above, the OA model offers many opportunities for the future of UK research, but it is uncertain how the possible negative consequences can be avoided, given the rapid pace of change.

# The Academy of Social Sciences is making the following recommendations in its ongoing advocacy work with Government:

- That the Government take heed of risks associated with rapid implementation of OA, and slows the pace of transition to accommodate ALL academic disciplines
- That the Government enable longer embargoes under 'Green' OA to allow for the greater half-life of HSS journal articles
- That the Government set up a fund to support Learned Societies in evaluating their functions fully and in managing the transition to new business models encompassing OA publishing
- That the Government pay attention to concerns expressed by academics over the insistence on OA compliance for REF2020
- That the Government monitor unintended consequences for dissemination of UK research in international journals produced by a unilateral mandate for OA

### In light of the foregoing, the Academy recommends to the Committee:

 That the House of Lords Science and Technology Committee conduct a more detailed inquiry into implementation of OA, including evidence from the Academy of Social Sciences and other influential bodies in the HSS sector.

## Association for Learning Technology (ALT) - Written evidence

"The kind of organization we wish to aim at is one where all relevant information should be available to each research worker and in amplitude in proportion to its degree of relevance. Further, that not only should the information be available, but that it should be to a large extent put at the disposal of the research worker without his having to take any special steps to get hold of it."

- ID Bernal, writing in 1939<sup>12</sup>

### **ALT**

- I. The Association for Learning Technology (ALT) is the UK's leading membership organisation in the learning technology field<sup>13</sup>. We are a professional body with over 1000 individual members, and over 200 organisational and sponsoring members (including most of the UK's universities, a substantial number of colleges, government bodies such as BIS, and large and small UK and international IT companies). We run a peer-reviewed journal Research in Learning Technology (RLT). We hold a very successful 3-day annual international conference. We run a competence-based accreditation scheme for learning technologists that is used internationally. We are a nominating body for members of Research Excellence Framework panels.<sup>14</sup> We respond to policy and other consultations such as this one.<sup>15</sup>
- 2. Our field of discourse allows us to have a view in this area from a number of sometimes conflicting standpoints. We have academic authors in our membership who receive royalties for their works. We have links to publishers. We are a professional and learned body that publishes a peer-reviewed journal. However, we are also a body committed to wide availability of information through Open Access to resources. We are keen that students at UK learning establishments enjoy the benefits that technology brings. We are keen to see the power of the Internet exploited to the benefit of society at large and worldwide, with information a common good rather than the basis of restricted practices. What follows is therefore the result of balanced consideration and is informed by our own data arising from the experience of our own journal.

### Our starting point

- 3. The Internet and the World Wide Web change many aspects of cultural and scientific production, along with the way in which knowledge is shared and mediated. Just as the music and newspaper industries have changed, so the publishing industry is changing, as is the role of libraries.
- 4. Although it has changed greatly in the sense that articles are now available online to those with access rights, scholarly publishing has so far remained relatively unscathed by the "Internet revolution", mainly because:
  - the business-model is typically subscription-based, under which usage of scholarly articles is not paid for at the point of use;

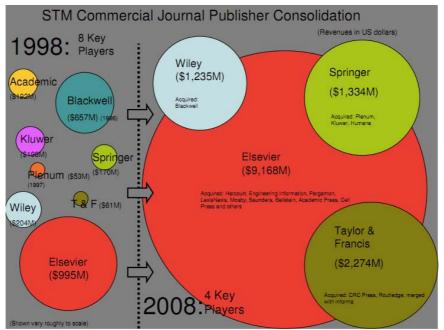
 $<sup>^{12}</sup>$  Quoted in "Information Science in 2003: A Critique" by Sheila Webber, Journal of Information Science 2003; 29; 311, DOI: 10.1177/01655515030294007.

<sup>&</sup>lt;sup>13</sup> ALT defines Learning Technology as "the broad range of communication, information and related technologies that can be used to support learning, teaching, and assessment".

<sup>&</sup>lt;sup>14</sup> For the 2014 REF individuals we nominated to the Education and to the Computer Science sub-panels were each appointed.

<sup>15</sup> Our recent policy consultation responses can be found on the ALT web site.

- subscribing libraries need to keep a back-catalogue and therefore there is a tendency towards lock-in;
- publishing contracts are complicated and slow to get changed, especially for smaller learned societies, many of whom lack the muscle and experience to deal effectively with large publishing companies;
- the industry is dominated by a four main businesses (Wiley, Springer, Elsevier, and Taylor and Francis), as the diagram below indicates.



Source - 2012 talk by MIT Professor of Computer Science and Engineering Hal Abelson at SIGCSE 2012 on 2 March 2012 in Raleigh, North Carolina: <a href="http://www.sigcse.org/sigcse2012/downloads/ha\_sigcseTalk.pdf">http://www.sigcse.org/sigcse2012/downloads/ha\_sigcseTalk.pdf</a>

5. We note and strongly welcome and support the opening remarks made by Lord Krebs (just prior to Dame Janet Finch's 15 January evidence session) that the Committee will not be questioning the overall Open Access agenda, which it takes as a given. For this reason we have not sought in this note to justify the push towards Open Access, which we fully support.

6. Our peer reviewed journal has been published since 1993, initially as a conventionally published journal. In 2009 ALT established an ePrints based Open Access Repository –

### Research in Learning Technology (RLT)

http://repository.alt.ac.uk – into which, by agreement with Taylor and Francis, RLT articles were placed after an 18 month embargo period. In December 2010, following a competitive tendering process, our Trustees decided to change the publishing model for RLT from conventional to Open Access, with effect from I January 2012. The change involved a change of publisher from Taylor and Francis (one of the "big four") to Co-Action Publishing (a small specialist Open Access publisher based in Sweden). RLT is now a "Gold" Open Access journal, published under a Creative Commons Attribution BY 3.0 licence, with currently no Article Processing Charges (APCs), and with a SPARC Europe Seal for Open

Access Journals 16. We made the transition to Open Access without introducing APCs, whilst at the same time managing a small reduction in our organisational membership fees.

<sup>&</sup>lt;sup>16</sup> RLT's TOC page on the Directory of Open Access Journals can be viewed here: http://www.webcitation.org/6B4crCug7

For the moment we continue to make RLT available in print. The most recent Issue of RLT is a Special Issue on Digital Inclusion and Learning, guest edited by Professor William Dutton (Oxford Internet Institute, Oxford University) and Professor Jane Seale (Graduate School of Education, University of Exeter).<sup>17</sup>

### The effect of openness

7. Switching to Open Access has sharply increased the use made of RLT's content. During April 2011 Taylor and Francis made RLT freely but temporarily available (along with the content of many of its other education journals). This resulted in a six-fold increase in the number of full text downloads. Since switching to Open Access in January 2012, the number of full text downloads per month for the top 10 most downloaded of RLT's articles increased on average by a factor of 8.1 (range 6.2 to 11.5). The average number of abstract views recorded per month increased by a factor of 4.6 on the average monthly 2011 level, to nearly 18,000. The average number of full text downloads recorded per month increased by a factor of 9.6 on the average monthly 2011 level, to nearly 17,000.

- 8. It is important to note here that, as soon as articles are made available as Open Access content, especially under the most open CC-BY licence (which RLT uses), there is nothing to stop multiple versions of articles being posted anywhere on the Internet. As a result the traditional concept of "full text download" from a journal's own primary publishing platform has even less meaning than under conventional publishing arrangements. For obvious reasons it is far too early to say whether the switch to Open Access will change the esteem, influence and impact of RLT overall, or whether it will have any influence on citation rates.
- 9. Overall we have been very pleased by our move although it was not without significant financial risk. It has been part of thinking through our changing role, activities and income streams in a changing world.

### Our observations on the implementation of the Finch report

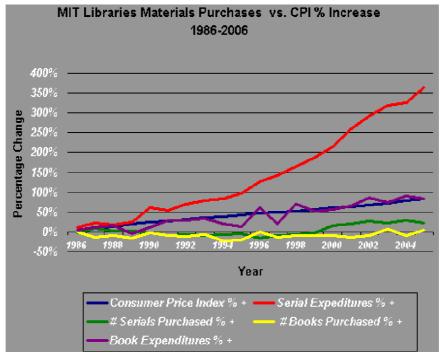
- 10. As a learned society that successfully made its journal "Gold" Open Access of its own accord, we fully support the move to Gold that the Finch report and now the Government, the funding councils and the major UK research funders are supporting. We concur with RCUK's Mark Thorley that Gold will make the outputs of research "accessible at the highest quality to the widest number of people, to do the widest range of stuff with, with the least restrictions" <sup>18</sup>.
- II. A switch to Open Access, funded by learned societies as part of their charitable endeavour (as in the case of RLT and many of the other "no-fee" Open Access journals<sup>19</sup>), or by Article Processing Charges (as in the case of PLOS) is probably the only realistic way to drive down the costs of scholarly publishing (other than very widespread and systematic adoption of Green Open Access) because it exposes the economics of publication much more clearly than is the case under a subscription model, where, perversely, the more successful a journal is, the more valuable it is to individual libraries, and thus the more can be charged per subscription, thereby driving up the net income to the publisher per individual article.

18 http://blogs.rcuk.ac.uk/2012/10/24/rcuk-open-access-policy-our-preference-for-gold/ 24 October 2012

<sup>17</sup> http://www.researchinlearningtechnology.net/index.php/rlt

<sup>&</sup>lt;sup>19</sup> Here is a recently published list of "no-fee" Open Access Journals <a href="http://www.eigenfactor.org/openaccess/fullfree.php">http://www.eigenfactor.org/openaccess/fullfree.php</a> (last accessed 18 January 2013)

- 12. However, we believe that the approach to implementation flowing from the Finch report could be further improved.
- 13. The "elephant in the room" is the role and position of the big publishing companies, which have as we indicate above have so far remained largely unscathed (in comparison to the music, film, and newspaper industries) by the "Internet revolution".



Source - 2012 talk by MIT Professor of Computer Science and Engineering Hal Abelson at SIGCSE 2012 on 2 March 2012 in Raleigh, North Carolina: <a href="http://www.sigcse.org/sigcse2012/downloads/ha\_sigcseTalk.pdf">http://www.sigcse.org/sigcse2012/downloads/ha\_sigcseTalk.pdf</a>

- 14. The chart above highlights the key problem, which is that the cost to universities and hence essentially to the state of providing staff and students with access to scholarly output has risen steeply throughout the period in which the Internet revolution was driving down hard the costs of digital content more generally. There has been a feeling that somehow this part of the university system should be protected from market forces and this has been fostered by some in universities as well as by the major publishing beneficiaries.
- 15. The Finch recommendations, and plans for implementation, thus seem to have been written with one eye on protecting the revenues of the journal publishing industry (and perhaps also of those learned societies who have become reliant on these revenues for their perfectly justified and valuable field-sustaining and field-developing activities) rather than on putting the incumbent publishers under firm pressure to reduce their prices in effect to make less money from scholarly publishing than is presently the case whilst at the same time encouraging the widening of access that is made possible by the Internet revolution.
- 16. There is a further problem that parts of the Finch report seem to have differentiated insufficiently between STEM and the Humanities / Social Sciences, putting forward an approach that undoubtedly makes greater sense for STEM than it may do for some other

fields<sup>20</sup>. A possible explanation for this problem is that the learned society world is extremely diverse: the two learned society representatives on the Finch Committee (from the Society for Biology and from the Royal Geographical Society) will have had the unenviable and arguably impossible job of representing the very varied perspectives and situations of the UK's learned societies.

17. Learned societies, who make a very significant contribution to promoting disciplines as well as research outcomes in the UK and internationally, have thus been caught in the crossfire. Some of them have traditionally had their income artificially protected either by the pricing policies of the big publishers, or by having been able themselves to publish in the "rain-shadow" of the big publishers' pricing policies. Thus learned societies' mixed reactions to Finch may stem in part from an entirely understandable wish to keep things - that is their income and its current sources - as they are, and partly from overestimating the scale and impact of the current proposals. As with membership organisations more generally, such bodies worldwide are having to look at their future business models and revenue streams: publishing is not the only traditional source of revenue under threat from changing processes. Those with a "license to practice" element, typically but by no means all in the STEM area, and those whose members perceive them as doing much more than mainly publishing, have considerable inbuilt resilience. Others are less well placed.

18. Alongside this in some cases, there seems to have been a wilful misunderstanding of the interplay of Open Access and APCs with factors such as copyright, Creative Commons licensing, moral rights, journal impact, and academic freedom. Finally, a substantial proportion of scholarly output outside of STEM is not grant-funded except through HEFCE, or if it is fully or partly funded by grants, the grants are significantly smaller than in STEM, so that APCs quite properly loom larger in the minds of individual researchers than is the case in STEM.

### Steps that could be taken

19. Given the above analysis and our own experiences we believe that the following should be considered.

- I Reduce the maximum contribution to APCs that funders will cover to, say, £750 (or less) so as to push universities and scholars into being more discriminating in their choice of journals, and thereby push publishers into reducing their APCs. The focus here needs to be on growing the proportion of PLOS-style Gold Open Access journals across all fields.
- Examine the scope to make a functioning link at the level of individual journals or individual publishers, between the proportion of income raised through APCs and journal subscription rates, so that publishers are actively prevented from so-called "double dipping" that is: increasing income on hybrid journals by generating APC income without reducing subscription rates.
- 3 Put greater effort into "winning hearts and minds" for Open Access more generally and ensure consistency in the information published about its implementation by different agencies (HEFCE and RCUK, for example).

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<sup>&</sup>lt;sup>20</sup> This month's President's Letter to Fellows and Members of the Royal Historical Society, whilst we do not agree with all of it, encapsulates clearly a number of these issues: <a href="http://www.royalhistoricalsociety.org/RHSPresidentE-letter]anuary2013.pdf">http://www.royalhistoricalsociety.org/RHSPresidentE-letter]anuary2013.pdf</a>

- 4 Shift the balance somewhat towards Green Open Access by making it clear in funder mandates that even when a Gold option is offered by a publisher, author self archiving is an acceptable means of making an article Open Access, if, for example, funds are not available to (fully) cover APCs.<sup>21</sup>
- 5 Channel transitional funds to those learned societies who undertake to change their or their journals' publishing models from toll-access to Open Access, as well as to universities for the payment of APCs. The former will accelerate the structural changes that are needed, whilst temporarily cushioning learned societies' valuable field- and discipline-developing activities; whereas the latter will, rather unhelpfully, tend to cement a dysfunctional and inefficient hybrid "half-way house".
- 6 Accelerate the timetable for HEFCE to decide and implement a policy on Open Access for articles arising from HEFCE funded research, on the assumption that HEFCE's policy should be consistent with RCUK's (they need to work in lockstep).
- 7 Actively promote comparable policies in Europe and in other jurisdictions, in particular in the USA, and be seen to be so doing.

### Conclusion

20. We are grateful for the opportunity to respond to the Committee's call for evidence, and we would be happy to speak directly to members of the Committee, or to clarify points in writing if that would be helpful.

<sup>&</sup>lt;sup>21</sup> A trenchant expression of this approach is given by Stevan Harnad here: http://openaccess.eprints.org/index.php?/archives/932-RCUK-Policy-In-Direct-Contradiction-With-BOAI-10-Recommendations-for-Institutions.html

# Association of Learned and Professional Society Publishers (ALPSP) – Written evidence

### Introduction

- 1. The Association of Learned and Professional Society Publishers (ALPSP) is the international organization for non-profit publishers. It has a broad and diverse membership of over 320 organizations in 37 countries who collectively publish over half of the world's total active journals as well as books, databases and other products. ALPSP's mission is to connect, train and inform the scholarly and professional publishing community and to play an active part in shaping the future of academic and scholarly communication.
- 2. ALPSP welcomes the opportunity to respond to the House of Lords Science and Technology Select Committee's inquiry into the implementation of the UK Government's Open Access (OA) policy on behalf of our members. There are a number of very important issues raised and we look forward to discussing these further.
- 3. Where this response indicates publishers, we include Learned Societies, whether they publish themselves or work with a publishing partner.
- 4. ALPSP was very pleased to see the formation of the group led by Dame Janet Finch and in particular the broad constitution of the group. It was very encouraging to see that such a group was able to work constructively together and to reach consensus on the way ahead.
- 5. We were also pleased to see that the UK Government were fully supportive of the findings of the Finch Group and endorsed them all.

# Support for Universities in the form of funds to cover article processing charges and the response of universities and other HEIs to these efforts

- 6. We cannot comment directly on this, but would say that there has been concern expressed by authors to publishers with regards how this model will work. There is obvious concern from those working in the Arts, Humanities and Social Sciences (AHSS) as to the distribution of 'funds for publishing', many feeling that funds would be 'drained' by those working in the Scientific, Technical and Medical (STM) areas, where payment of Article Publication Charges (APCs) are already more common.
- 7. There is concern as to how Universities will distribute such funds and how the work of one researcher might be ranked against another should the situation arise that funds become inadequate for the research outputs of that institution. Who is responsible for deciding who gets to publish when and where and how might this affect the careers of researchers? This question over a researcher's freedom to publish has not previously been brought to the fore in quite such a vivid way.

8. Publishers, particularly small ones, are understandably concerned that their businesses will be under threat should an appropriate level of funding for APCs not be available to support open access publishing. Learned Societies provide much in the way of support to their academic communities and in many cases, the funding for this is derived from their publishing programmes. A survey by the Biosciences Federation in 2009 found that Learned Societies contributed twice as much financially to UK Higher Education Institutions as they received from them<sup>22</sup>. If APCs cannot sustain Learned Societies income, such support to the academic community will be under threat.

Embargo periods for articles published under the green model

- 9. There has been considerable concern amongst ALPSP members regarding the short term embargoes that have been announced as a requirement by RCUK. There is a general feeling that if no contribution is made to pay for the services provided by publishers, then demands on how those services are provided are not appropriate.
- 10. In addition, these short embargoes do not follow the recommendations made in the Finch Group report, nor what the Rt Hon David Willets said in the UK Government's acceptance of Dame Janet's proposals: "Where APC funds are not available to the publisher or learned society, for the publication of publicly-funded research, then publishers could reasonably insist on a longer more equitable embargo period. This could be up to 12 months for science, technology and engineering publications and longer for publications in those disciplines which require more time to secure payback."
- 11. Publishers have made considerable strides towards delivering their side of the 'balanced-package' of measures resulting from the Finch recommendations. Publishers are committed to providing compliance with RCUK's Gold Open Access policy as far as they are able and where it is relevant to their business model, which includes consideration of the global publishing market, not just the UK.
- 12. RCUK have not yet provided clarity with regards their demands on embargo periods where an APC is not paid. Publishers want to be reassured that embargo periods are sustainable in order to continue to deliver what is required to move towards the UK Government's preferences for open access publishing.
- 13. There is a popular misconception that publishers do not contribute to the peer review process and that this is all done by academics. Whilst the actual reviewing and commenting on the papers is indeed carried out by academic peers of the article authors, publishers invest heavily in supporting that process, making it as simple, streamlined and secure as possible for those reviewers. Security of such systems is critical. Some publishers even go as far as to employ subject specialists (qualified most commonly to degree or PhD level) to assist in reviewer selection, ensuring that authors' manuscripts do not end up at the desktop of their competitors. Reviewer details have to be kept secure and maintained, for example when a reviewer changes jobs, location or indeed their subject specialty. Reviewer performance can also be recorded, which can help to ensure that particularly slow reviewers do not continue to hold up the process.

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<sup>&</sup>lt;sup>22</sup>http://uksg.metapress.com/content/rt327514t0126320/?p=ab32a2a5d39843999cde4838e9aec67d&pi=13

- 14. Authors rightly demand swift reviewing times; publishers employ database systems or in some cases, staff, to ensure that reminders are sent to reviewers to keep the peer review process flowing.
- 15. Publishers, or the Learned Societies themselves where they have the in-house staff, will also provide what could be referred to as a 'triage' service, again using appropriately qualified staff to ensure that submissions are of an appropriate subject and conform to the guidelines laid down by that journal.
- 16. All this saves the academic editors and reviewers valuable time, but comes at a cost. Such costs are expended *before* the article reaches the Accepted Manuscript<sup>23</sup> stage, the stage at which it has 'passed' peer review and the comments from reviewers have been incorporated. Recouping this portion of the costs of the overall process is the reason that 'green' open access requires embargoes. Green open access is not free and at the present time is primarily supported by the subscription model.
- 17. If articles are made freely available in a period of time as to warrant that institutions no longer feel the need to purchase subscriptions, they will cancel, as indicated by a survey completed in 2012<sup>24</sup>. The numbers speak for themselves, with only 56% in the STM area continuing to subscribe and an alarming 35% in AHSS indicating they would continue to subscribe to journals where the majority of content was accessible 6 months after publication.
- 18. Academic journal Editors, who are also authors, are also concerned about such short embargo periods. Many such concerns are voiced to their publishers but few have taken a public position on this. However in December 2012 the Academic Editors of 21 History journals made a public statement against not just the policies of Research Councils and other funders, but which expressed their dissatisfaction at the recommendations in the Finch Report of embargoes not less than 12 months<sup>25</sup>. They felt that embargoes of 36 months would be more appropriate. In addition, they were not prepared to sign their Intellectual Property away with CC-BY licences either.
- 19. The Finch Group recognised that short embargo periods have the potential to disrupt the scholarly communications process and recommended that "it would be unreasonable to require embargo periods shorter than twelve months". The guidance in this report is for policy makers to be cautious and to engage with the scholarly publishing community to agree an acceptable way forward.
- 20. It is the opinion of ALPSP that this engagement did not take place as a two-way dialogue with the Research Councils. On the same day as the UK Government announced its acceptance of the recommendations in the Finch report in July 2012, RCUK announced its new open access policy<sup>27</sup>, allowing no time for engagement with others stakeholders in the scholarly communication process.

 $<sup>{\</sup>color{red}^{23}} \ \underline{\text{http://www.niso.org/news/pr/view?item\_key=8a7904a59c448610fac0949fcde7d7d1de9923d7}$ 

<sup>&</sup>lt;sup>24</sup> http://www.alpsp.org/ebusiness/AboutALPSP/ALPSPStatements/Statementdetails.aspx?ID=407

<sup>&</sup>lt;sup>25</sup> http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access

 $<sup>^{26} \; \</sup>underline{\text{http://www.researchinfonet.org/publish/finch/}} \; \#8.29, \#9.10, \#9.11$ 

<sup>&</sup>lt;sup>27</sup> http://www.rcuk.ac.uk/media/news/2012news/Pages/120716.aspx

- 21. Since the announcement of the RCUK policy, there has been confusion as to what the policy actually means in practice. There have also been conflicting statements released on the RCUK website, with a statement at the end of November making it clear that the UK Government's acceptance of the Finch Group recommendations did not apply to RCUK funded research. It appears that this statement has since been removed and RCUK are still discussing how the treatment of embargo periods, as recommended by the Finch Group and accepted by the UK Government, "impacts on the Research Councils' position..."<sup>28</sup>.
- 22. The RCUK policy is meant to be in place from 1 April 2013. This uncertainty does not provide any comfort to publishers that the policies they are implementing to support the UK Government's preferred Gold Open Access publishing model will be met with the same level of support from the research councils.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

- 23. As mentioned above and beyond that of the Finch Group, there has been little, if any, engagement with publishers in the *development* of research council open access policies, though there has been keen engagement to ensure that the policies, such as they are currently understood, are distributed to publishers.
- 24. This lack of engagement has been most clearly demonstrated in the Research Councils belief that one version of mandate is appropriate for all subject areas. Even within the very broad subject areas of STM and AHSS, there are great differences between the individual research communities. For example, Mathematics is grouped within STM, but their publishing practices are much more akin to that seen in the AHSS field. Time to publication in mathematics is necessarily much longer than many of the other STM subjects, and the "life" of papers published in mathematics, meaning the use they have over time following publication can stretch back many decades. Even in the biosciences, often thought of as a very fast moving field, the "cited half-life" of articles can easily be 10 years or more.

# Challenges and concerns raised by the scientific and publishing communities and how these have been addressed

- 25. ALPSP does not feel that challenges and concerns raised by scholarly or publishing communities have been addressed. The policies have been presented as a "done deal", with no room for consideration of individual subject areas, researchers' requirements and needs, or indeed the potential harm that could be imposed on the scholarly communications process.
- 26. It is very disappointing that such agencies feel it is necessary to impose, rather than engage. The Finch Group clearly showed what can be achieved when stakeholders discuss the issues and brainstorm solutions. Views, opinions, thoughts and solutions from all stakeholders can be considered and can reduce the potential for unforeseen

<sup>28</sup> http://www.rcuk.ac.uk/research/Pages/outputs.aspx

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<sup>&</sup>lt;sup>29</sup> http://admin-apps.webofknowledge.com/JCR/help/h\_ctdhl.htm

- consequences to arise. Fruitful conversations have been had with other funding agencies who were prepared to approach the table with an open mind.
- 27. The use of the CC-BY licence continues to concern some publishers, particularly, but not restricted to, those who rely on income from article reprints and reuse rights, most commonly by pharmaceutical companies. Under the CC-BY licence, such commercial companies would no longer require permission to reuse the articles. Publishers need to consider how they will replace this lost income.
- 28. Authors are also very unsure of, or unhappy about, the use of CC-BY licences. In addition to the comments made by editors of history journals (see paragraph 18), a recent study by OAPEN<sup>30</sup> found that the majority of researchers in the humanities and social sciences would prefer the most restrictive form of Creative Commons licence, CC-BY-ND<sup>31</sup>.
- 29. It appears that the requirement for the CC-BY licence derived from a wish to facilitate text and/or data mining of published articles, but the need to extend this to allow commercial entities to make money from the published results of UK-taxpayer funded research has never fully been explained. Indeed, publishers have been working very closely with pharmaceutical companies as an extension to their Pharma Documentation Ring (P-D-R)<sup>32</sup> to facilitate, both via licensing and via technology, their requirements for mining the corpus of literature of interest to them.
- 30. Publishers are also in discussions with institutions to implement text and data mining clauses within existing content licences, without the requirement for CC-BY licences. By this route, access would be much more wide-spread, rather than restricted to the portion of articles published under CC-BY.
- 31. The issue of the cost of transition has been apparent for some time. Publishers have been addressing the transition in the manner most sustainable for them. Some have been able to make the leap into introducing fully OA journals; some have found that introducing a hybrid model allows them to manage the transition of their income more appropriately.
- 32. At the present time, there is simply not a one-size-fits-all model for all authors, subject areas or publishers. Forcing the issue is likely to cause damage to the scholarly communications process; speeding up the journey requires all stakeholders to be 'on board', effectively communicating to find the best solutions for all.
- 33. ALPSP, as always, remains willing to facilitate further discussion on these matters with our members.

<sup>30</sup> http://www.oapen.org/home

<sup>31</sup> http://www.slideshare.net/OAPENUK/oapenuk-hss-researcher-survey-results - slide 13

<sup>32</sup> http://www.p-d-r.com/

# Jeffrey Beall, Scholarly Initiatives Librarian, University of Colorado Denver – Written evidence

Note: These statements represent those of the author only and may not reflect the views of the University of Colorado System or the University of Colorado Denver.

- I. The gold (author pays) open-access model of scholarly communication is corrupting scholarly publishing. This model has a built-in conflict of interest: the more papers a publisher accepts, the more money it earns. Even though a few publishers have managed to maintain ethical standards while employing this model in a business setting, the majority have not. In fact, the number of new gold, open-access publishers is rapidly increasing because people in Asia and Africa have discovered that they can, at minimal cost, set up a counterfeit publishing operation, accepting article processing fees (APCs) from researchers, performing bogus or no peer review, and earn hefty profits. They operate essentially as vanity presses.
- 2. Many of these publishers, which I refer to as "predatory publishers", also set up shop in developed countries, especially Anglophone countries. They do this to fulfill a need in their home countries. Researchers there get more credit for a "foreign" publication than for a national one. So, for example, publishers from Pakistan have created publishing operations in the U.K. tailored mainly to people from their home country. Often, they incorporate the name of the Anglophone country in the company's name or in the journal titles, such as "British Journal of ..."
- 3. The gold open-access model also enables much author misconduct. Because many predatory publishers fail to carry out adequate peer review (or fail to do it at all), much author misconduct is being published and made a part of the scholarly record. This misconduct includes plagiarism, self-plagiarism, duplicate publication, data manipulation, image manipulation, ghost authorship, and honorary authorship, among a few others. This research then becomes a part of the scholarly record, which is problematic because science is cumulative -- new research builds on earlier works.
- 4. One of the important ways that traditional publishers add value to scholarly communication is by ensuring that it is properly preserved, a process called digital preservation. Publishers often contract out this expensive process to companies that specialize in it. Unfortunately, many of the emerging gold, open-access publishers pay little attention to digital preservation and indeed lack any backup mechanisms for the content they publish. It's true that much of what they publish is not worth saving, but the increasing lack of attention paid to this essential scholarly function is worrisome.
- 5. Public policy must seek out and support the best system for scholarly communication, not necessarily the *au courant* one. The traditional print model worked well for centuries. We must seek out a way to duplicate that success in the digital environment. Unfortunately, it's becoming clear that gold open-access publishing is not the way. The traditional publishing model excelled at validating research. Before the advent of the Internet, scholars had confidence in their fields' journals because they knew that the journals ensured that only the best work ever got published. That confidence is now lost, due mainly to gold open-access publishing and the flurry of bogus publishers it has enabled to operate.

### Dr Rick Bradford - Written evidence

### Personal Background

I publish in peer reviewed physics journals, this work being unpaid and unfunded. I also publish in peer reviewed engineering journals, this work being a result of my employment. I am a Chartered Physicist and a Chartered Engineer and a Fellow of the Institution of Mechanical Engineers.

This submission is being made by me as a private individual and does not necessarily represent the views of my employer or the professional institutions of which I am a member.

- [1] The laudable aim of these initiatives is to improve access to UK research. I concur with this objective.
- [2] A premise of the Finch Report is that this access will continue to be provided by journals produced by the traditional, independent publishers. This is a false axiom and invalidates much of the rest of the report.
- [3] One of the Success Criteria stated in the Report is "Financial sustainability for publishing". This follows only if [2] is assumed. But in truth it is not an obligation on UK research to sustain the publishing industry. The traditional publishing industry may have outlived its usefulness to the research community due to the march of technology.
- [4] The internet has made low cost alternatives to traditional publishing simple to implement. The (free) physics preprint arXiv provides an example. A publishing vehicle could be devised along these lines if augmented by peer review (and peer review is contributed free by the community).
- [5] If gold OA were to become universal in some discipline, it is by no means clear that this would enhance accessibility of peer reviewed research. Common sense suggests that having to pay to publish will reduce the number of papers published. Much work which would previously have been published may then not be published in any peer reviewed form at all. This degrades accessibility. This threat is not addressed in the Report, the tacit assumption being that the same work would be published.
- [6] The stakeholders recognised in the Report are the Government and other funding organisations, the universities and research institutions, the publishers and the learned societies. The word "industry" does not appear in the report except in the phrase "publishing industry".
- [7] In the case of the engineering disciplines the omission of industry is of particular concern since companies play the lead role in research & development in engineering. Moreover, whilst the strategy is to make OA cost neutral for the universities, this would not be the case for companies. If gold OA were universal, the amount of R&D being carried out in industry which would be reported in the journals would fall dramatically. The UK engineering industry would, in effect, become disenfranchised from the scientific process. I submit that this could have economic significance. Again this threat is simply not recognised in the Report.
- [8] Not all science is carried out by people who get paid for doing so, or receive any funding. I am personally a case in point as regards my work in physics. Under

- universal gold OA I will become extinct as a physicist. I cannot pay £2000 per paper out of my own pocket. It is profoundly anti-scientific to be prohibited by cost from taking part in the scientific process, regardless of merit.
- [9] Whilst I cannot claim that the loss of myself would exactly bring the progress of physics to a halt, it may be worth reflecting upon the eminent scientists who were also unfunded when their major work was done, including Einstein and Darwin. Under gold OA, Einstein would have remained a patents clerk. Similar circumstances nearly lost the world one of its greatest scientific works, Newton's *Principia*, until Halley stumped up the money for its publication.

## **British Academy - Written evidence**

- The British Academy the UK's national academy for the humanities and social sciences welcomes the opportunity to submit evidence to the House of Lords Science and Technology Select Committee's inquiry on the implementation of open access for published academic research findings.
- We support moves to make publicly funded research more available, including any data collected in that research, and we believe it is right that members of the public are able to access academic research without excessive obstacles. The Academy has hosted two discussions of open access issues in 2012 (one in January, one in October<sup>33</sup>), and issued a formal statement on 26 July<sup>34</sup>.
- 3 Our official position is one of caution. We welcome the policy in principle but, like many others in the higher education sector, we are concerned about how implementation is proceeding. In our view, it is too rapid and without due attention being paid to some unintended consequences of the policy.
- 4 We group our comments under the headings identified by the Committee as being of particular importance.

# Support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

- The Report of the Working Group on Expanding Access to Published Research Findings (the Finch Report) states that Government and the Research and Funding Councils should 'make a clear commitment to support the costs of an innovative and sustainable research communications system, with a clear preference for publication in open access or hybrid journals' (as the first of its recommended 'key actions'). <sup>35</sup> In the run-up to the appearance of the Finch Report, the Minister of State for Universities and Science, the Rt Hon David Willetts MP, had regularly stressed the importance of establishing a financial model that sustained the traditional publishing industry that did what one might call the heavy lifting for the bulk of scholarly journal publishing. <sup>36</sup>
- 6 If there had been an announcement that additional public funding was to be provided to meet the Finch Report's estimate of costs for the transition from a subscription model to the Gold model of open access, then some of the subsequent furore might have been avoided.

<sup>33</sup> A summary of the October event is available on our website at: www.britac.ac.uk/policy/hsslssa-open\_access.cfm

<sup>34</sup> The British Academy's statement can be viewed here: http://www.britac.ac.uk/news/news.cfm/newsid/786.

<sup>&</sup>lt;sup>35</sup> Accessibility, sustainability, excellence: how to expand access to research publications. Report of the Working Group on Expanding Access to Published Research Findings (June 2012), p. 8.

<sup>&</sup>lt;sup>36</sup> For example, speech to the Publishers Association, 2 May 2012: 'Provided we all recognise that open access is on its way, we can then work together to ensure that the valuable functions you [the publishing industry] carry out continue to be properly funded – and that the publishing industry remains a significant contributor to the UK economy. I believe that academic publishing does add value, not least because peer review is at the heart of our system of determining and communicating high-quality research. ... It would be deeply irresponsible to get rid of one business model and not put anything in its place.' (<a href="https://www.bis.gov.uk/news/speeches/david-willetts-public-access-to-research">www.bis.gov.uk/news/speeches/david-willetts-public-access-to-research</a>)

- 7 Instead, in its statement of 16 July, BIS announced that the funding needed for the Article Processing Charges (APCs) required by the Gold model of open access 'will come out of existing research funds', which the Russell Group calculated could cost up to 1000 PhD studentships.<sup>37</sup> The subsequent announcement of an additional £10 million for 30 research-intensive universities has not plugged the gap, and was met with some scepticism from parts of the HE sector.<sup>38</sup>
- 8 Research Councils UK (RCUK) is to support the payment of APCs related to Research Council-funded research, through block grants to selected UK Higher Education Institutions (HEIs). However, it is doubtful whether the funds made available will be enough to support the publication of all Research Council-funded research under the Gold model, should there be the demand for it.
- 9 For the humanities and social sciences (HSS), the Research Councils are not in fact the primary funder of publishable research. Most HSS articles are produced by individual scholars not supported by the large-scale Research Council-type project grant that brings with it the possibility of APCs. For individual scholars in university posts, in many cases APCs would have to be funded through the QR route, made available by HEFCE and the other Funding Councils. It is very likely that this source of funding will not be able to meet all the demand for APCs placed on it.
- 10 HSS journals tend to have a higher rejection rate than STEM journals, and to publish longer articles. Costs of peer review and editing are higher as a result. For these reasons, APCs for HSS journals could be higher than for other journals, and therefore the publication of HSS articles will potentially be more at risk in a constrained funding environment.
- II The Academy is concerned that decisions within HEIs about scholarly journal publication may well in the future be taken away from those academics who understand the research in detail and where it should be published for maximum effect. We fear that a more generalist administrator who may be unduly influenced by the varying levels of APCs and so ration publication through Gold open access, thereby preventing research being made available, will become responsible for these decisions. We are particularly concerned that the publication activities of early-career scholars may be restricted: this would prevent them from building the profile necessary to advance their academic careers.

### Embargo periods for articles published under the green model

12 Because there will not be enough money in the system to pay for all articles to be published under Gold open access, most journals are likely to be 'hybrid' – i.e. they will offer a Gold option, but will continue to rely on subscription income to finance non-Gold content. For this reason, the embargo periods allowed under the Green model of open access – the window in which a journal publisher is able to exploit an article commercially – become a key issue.

<sup>&</sup>lt;sup>37</sup> The Russell Group also commented that 'The Government's plan to reduce shrinking research pots in order to fund open access is robbing Peter to pay Paul' (<a href="www.russellgroup.ac.uk/russell-group-latest-news/151-2012/5324-government-response-to-the-finch-report/">www.russellgroup.ac.uk/russell-group-latest-news/151-2012/5324-government-response-to-the-finch-report/</a>).

<sup>&</sup>lt;sup>38</sup> The 1994 Group expressed reservations that this was approach could risk other research programmes, www.1994group.ac.uk/newsitem.php?item=440

13 The importance of not undermining the viability of journals through the imposition of too limited embargo periods was stressed in the Finch Report. <sup>39</sup> Articles in HSS journals have longer half-lives than those in STEM journals, so HSS journals need a longer embargo period to avoid librarians cancelling subscriptions. The BIS statement of 16 July 2012 acknowledged that the embargo period could be 'longer for publications in those disciplines which require more time to secure payback' – and gave two years as an indicative figure. We are sympathetic to the argument that this figure is realistic for many HSS disciplines, but we also urge that research be carried out to ascertain whether there are in fact disciplines or subdisciplines where this period might be longer.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

- 14 The Academy is concerned that RCUK's policies on open access due to come into effect for work submitted for publication from 1 April 2013 are being implemented too fast, and without a proper understanding of the diversity of academic communities and practices. We worry that RCUK has not taken sufficient account of how different disciplines approach research and publication, and so is being unnecessarily restrictive in applying its new policy.
- 15 The particular concern has been RCUK's position on embargo periods, which speaks of a maximum embargo period of 12 months for the publication of research funded through the Arts and Humanities Research Council (AHRC) and the Economic and Social Research Council (ESRC). Clarification is urgently needed as to why this differs from the stance taken by BIS.
- 16 Our overall view is that RCUK would have benefited from a more extensive consultation before announcing its policy. We believe it is important to use the time between now and April 2013 to understand and address the concerns expressed by many in the sector to ensure the policy meets the government's desire to see research more widely available without unnecessary damage to either the academic community or the published industry.
- 17 In contrast, we welcome HEFCE's decision to conduct a consultation on its future open access policies. Indeed, for HSS subjects, the policies of HEFCE and the other Funding Councils particularly on embargo periods will be crucial. It is important that HEFCE takes care not to repeat some of the apparent errors in judgment made by RCUK.

# Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

18 Overseas journals. Many of the most appropriate journals for academics in the humanities and social sciences are based outside of the UK. The open access agenda is developing in Europe and other parts of the world. But it would be complacent to assume that foreign

<sup>&</sup>lt;sup>39</sup> 'Funders' limitations on the length of embargo periods, and on any other restrictions on access to content not published on open access terms, should be considered carefully, to avoid undue risk to valuable journals that are not funded in the main by APCs.' Finch Report, recommendation (x), p. 8.

journals will quickly become compliant with policies stipulated by UK research funding bodies. If UK academics are pressured into not publishing in leading journals in their field, this both restricts academic freedom, and risks damaging the international reputation of UK research. This would be even more serious for HSS (and also STEM) disciplines were HEFCE to take a similar view to the RCUK when it considers submission criteria for future research assessment (e.g. after REF 2014).

- 19 Creative Commons licences. RCUK's policy mandates that, under the Gold model, articles should be published under a Creative Commons 'Attribution' licence (CC-BY) which allows others to modify or build upon the work. The Academy is aware of the important role that open access publication can play in opening up possibilities for data- and textmining. We understand the value in being able to build on and exploit the data and findings contained in STEM articles. However, many articles in HSS subjects are the product of single-author scholarship, where there is more of a claim on 'moral rights' that are not adequately protected under an unrestricted CC-BY licence. Data-mining as a concept is also irrelevant to a substantial proportion of papers in many humanities disciplines, which present interpretations of data, not the data themselves. We believe that an 'Attribution-NoDerivs' licence (CC-BY-ND) will very often be more appropriate.
- 20 Learned societies. In HSS subjects, as in STEM subjects, much scholarly journal publication is undertaken by independent learned societies. These learned societies use the journal subscription income to support a range of scholarly activities including support for postgraduates, early-career researchers, academic conferences, and research awards complementing the role played by the Research Councils. As journal publishing switches from the traditional subscription model to Gold open access, learned societies may face resistance in setting APCs at the level needed to replace the income they need for those wider scholarly activities. As one member of the Finch Working Group has put it, learned societies have received 'an enormous exogenous shock' from the way the Finch Report is being implemented.<sup>41</sup> The concern of the learned societies was evident at the meeting of the Humanities and Social Sciences Learned Societies and Subject Associations Network, hosted by the British Academy on 22 October 2012. <sup>42</sup> Learned societies will doubtless attempt to adapt their business models, but it would be dangerously complacent to undermine their existence and the crucial role they play in the medium term.
- 21 A dominant mode of research publication in most HSS disciplines is the monograph (i.e. the single-authored academic book) or the book chapter. The Finch Report acknowledged that an established and proven open access publishing model does not yet exist for these formats, and the publication of monographs and book chapters has not been a significant feature of any subsequent policy discussion. In any development of policy regarding publication of academic work, it is important that the key role of monographs and book chapters should be explicitly recognized.

### Conclusion

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<sup>&</sup>lt;sup>40</sup> Issues surrounding data- and text-mining were raised in Ian Hargreaves' 2011 report Digital Opportunity: A Review of Intellectual Property and Growth.

<sup>&</sup>lt;sup>41</sup> Professor Rita Gardner, Director of the Royal Geographical Society, at the Academy of Social Sciences Workshop on Open Access Publishing in Nov 2012: <a href="https://www.youtube.com/watch?v=DM]rkDRN2dA">www.youtube.com/watch?v=DM]rkDRN2dA</a> (from 43:20)

<sup>&</sup>lt;sup>42</sup> A summary of this British Academy event is available at: <a href="https://www.britac.ac.uk/policy/hsslssa-open">www.britac.ac.uk/policy/hsslssa-open</a> access.cfm

22 The implementation of open access policies by Government, the Research Councils and the Funding Councils needs to take account of a range of issues relating to the humanities and social sciences. In his speech to the Royal Society on 12 July 2012, the Rt Hon Dr Vince Cable MP gave a reassurance that 'it is not [BIS's] intention to formulate a one-size-fits-all approach' to open access. We strongly support that and trust that this remains the case.

## British Heart Foundation (BHF) - Written evidence

The British Heart Foundation (BHF) is the nation's leading heart charity. From new discoveries about how the heart develops in the womb, to developing treatments that could mend broken hearts in the future, we are the single biggest funder of cardiovascular research in the UK.

We welcome the opportunity to respond to the House of Lords Select Committee on Science and Technology inquiry on Open Access and express our views on the actions taken by Government and Research Councils UK following the publication of the Finch Group's report.

- I. The BHF funds more than half of all academic cardiovascular research in the UK, with a research spend of around £100 million per year. Our grant holders must comply with our Policy on Open Access. This states that they should deposit an electronic copy of each primary research paper funded wholly or in part by us in Europe PubMed Central (PMC) within 6 months of publication. If extra publication costs are required for publishing full research articles open access in Europe PMC, we will reimburse valid fees, or a proportion of those according to the number of funders acknowledged that also support Europe PMC.
- 2. Because we strongly support the value of Open Access publication and deposition in a well-managed single national repository, the BHF was one of the founding and now expanded consortium of funders (including the Wellcome Trust, Medical Research Council and Biotechnology and Biological Sciences Research Council) who set up and continue to finance UK (now Europe) PMC.
- 3. As a research charity whose funds come entirely from public donation, we (like other members of the Association of Medical Research Charities) do not pay the full economic costs of the research we support, though we do pay the full direct costs. Our funds are awarded to universities, and we expect them to cover the indirect costs of research. The Government recognises this and has provided additional support to universities via the Charity Research Support Fund, which is proportional to research charity income and equivalent in concept to **Higher Education Funding Council for England** quality-related research (QR) funding.
- 4. The recent additional funding announced by the government for Open Access publication and distributed via the Research Councils in a similar way to QR is therefore welcome. However, it does not account for the substantial volume of charity-funded research taking place alongside that funded by the Research Councils. The Government fully acknowledges the importance of charity-funded biomedical research, and we would argue that the level of support for Open Access publication should explicitly take this into account. By doing so, it would remove the disadvantage that the research charities now have by comparison with the Research Councils in paying for Open Access publication, and enable those costs to be re-directed towards new research grants.
- 5. In the longer term, together with other funders of Europe PMC and led by the Wellcome Trust, we hope that increased dialogue with publishers will lead towards an

## British Heart Foundation (BHF) – Written evidence

"author pays" model of scientific publication, with full open access, and an associated gain to universities in their ability to pay for costs of publications by their staff on a per paper basis, as their need to pay for subscriptions to journals diminishes.

## British Medical Journal Group (BMJ) - Written evidence

BMJ Group appreciates the opportunity to contribute to this inquiry. We would be pleased to also provide oral evidence if necessary, and we look forward to the Committee's conclusions.

BMJ Group publishes around 40 biomedical journals, including the flagship BMJ (British Medical Journal). Here is our response to actions taken by Government and RCUK following the publication of the Finch Group's report:

### I. We agree that Gold Open Access is feasible and sustainable.

BMJ Group strongly supports the Finch report's main recommendation that "a clear policy direction should be set towards support for publication of research in open access or hybrid journals, funded by article processing charges (APCs), as the main vehicle for the publication of research, especially when it is publicly funded". We are pleased to see that the Government prefers the "Gold" model of Open Access via publication in peer reviewed journals, rather than the "Green" model of author self-archiving. We appreciate that UK Research Councils (RCUK) will, from April 2013, introduce a block grant to universities and eligible research organisations to for APCs and we note that research grant applications will no longer include provision for these or other publication charges. Providing Gold Open Access via journals is a well established way to widely disseminate publicly funded research that is supported by a range of viable business models; provides professional services for authors, reviewers, readers, librarians, and funders; and provides effective peer review mechanisms.

### 2. We believe that Green Open Access is unfeasible on a large scale.

The PEER (Publishing and the Ecology of European Research) project investigated from September 2008–May 2012 the potential effects of large scale, systematic depositing of authors' final peer-reviewed manuscripts. <sup>44</sup> The PEER project found the "Green" Open Access model to be currently unfeasible and concluded that author self-archiving was unlikely to generate a critical mass of Open Access content. BMJ Group took part in the PEER project and endorses its findings.

### 3. Gold Open Access publishers can support and drive innovation.

Over many years BMJ Group has piloted, evaluated, and developed a range of successful open access publishing models, supported by APCs and using Creative Commons licences. All Open Access articles in BMJ Journals are flagged as Open Access in the metadata, on the table of contents, in the article content box, and in the PDF. Here is the range of BMJ Group Open Access offerings:

• BMJ Open (<a href="http://bmjopen.bmj.com/">http://bmjopen.bmj.com/</a>) is a fully open access "Gold" journal which publishes original research papers and nothing else and is online-only. All of this research

<sup>&</sup>lt;sup>43</sup> Working Group on Expanding Access to Published Research Findings: the Finch group. 2012. Accessibility, sustainability, excellence: how to expand access to research publications. <a href="https://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf">www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf</a>.

<sup>&</sup>lt;sup>44</sup> PEER (Publishing and the Ecology of European Research) Usage Research Reports and Final Project report 2012. http://www.peerproject.eu/reports/

- is published with Open Access. We offer waivers and discounts on the APC when necessary. *BMJ Open* uses fully open peer review, posting reviewers' signed reports alongside published papers.
- BMJ (the British Medical Journal) was the first general medical journal to provide free online access to all of its contents, in 1998. The BMJ is now a hybrid journal with a) pay walled educational articles, debate, and journalism and b) full Open Access to all research papers (<a href="http://bmj.com">http://bmj.com</a>) thus for research the BMJ is a "Gold" Open Access journal. We offer waivers and discounts on the APC when necessary. The BMJ uses signed peer review, so authors know who appraised their paper and vice versa.
- BMJ Journals: the rest of the approx 40 BMJ Journals are all hybrids offering optional "BMJ Open Access" with APCs. Several of these BMJ Journals are co-owned and/or published for learned societies who have embraced the option of Open Access. These journals use traditional peer review.

### 4. We will meet RCUK and MRC requirements on embargo periods for articles.

4.a BMJ Group notes that RCUK considers a journal to be compliant with its policy "if i) the journal provides via its own website immediate and unrestricted access to the publisher's final version of the paper (the Version of Record), and allows **immediate deposit of the Version of Record in other repositories without restriction on reuse...**Or ii) where a publisher does not offer option I above, the journal must allow deposit of Accepted Manuscripts that include all changes resulting from peer review (but not necessarily incorporating the publisher's formatting) in other repositories, without restrictions on non-commercial re-use and **within...no more than six months** between on-line publication and a research paper becoming Open Access." We also note that the Medical Research Council (MRC) requires that "All research papers that have been accepted for publication in a peer-reviewed journal, and are supported in whole or in part by a MRC-funded grant, must be made available from Europe PubMed Central (Europe PMC) as soon as possible, and in any event **within six months of publication**." BMJ Journals will comply with these embargo periods for research funded by RCUK and MRC.

4.b Authors opting for "BMJ Open Access" are already able to place the final published version of their article in the repositories of their choice. And BMJ Journals deposit all Open Access articles in PubMed Central as soon as the article is allocated to an issue. The BMJ and BMJ Open are fully "online first" journal, published continuously on bmj.com, and its Open Access research articles go straight into PubMedCentral on publication.

4.c Non-research articles in the *BMJ* - and all articles in other BMJ Journals that are not published using the "BMJ Open Access" option (including some research) - are behind access controls. However, the BMJ Journals exclusive licence to publish (used since 2000 and available at <a href="http://group.bmj.com/products/journals/instructions-for-authors/licence-forms">http://group.bmj.com/products/journals/instructions-for-authors/licence-forms</a>) allows authors to retain copyright. This licence permits authors to comply with funders' requirements, by allowing the accepted manuscript (but not the final published version) to be self-archived on their institutional repository or PubMed Central twelve months after publication (unless a shorter embargo period is otherwise stipulated by the funder, including RCUK and MRC).

- **5. BMJ Journals will introduce the CC-BY licence by April 2013 for research funded by RCUK and other funders who mandate this.** "BMJ Open Access" articles may be reused by both authors and third parties, in accordance with the terms and conditions of the Creative Commons (CC) Attribution NonCommercial 3.0 Unported licence. Under this CC licence, users are free to share (copy, distribute and transmit) and adapt (make a translation or derivative work) the contribution for noncommercial purposes under the conditions in the full legal code (<a href="http://creativecommons.org/licenses/by-nc/3.0/legalcode">http://creativecommons.org/licenses/by-nc/3.0/legalcode</a>). By April 2013 BMJ Group will also offer the Creative Commons CC-BY licence for authors whose funders (including RCUK) require completely unrestricted reuse.
- 6. BMJ Group is engaging with other stakeholders in the development of open access policies and guidance.
- 6.a **R&D** based on engagement with authors, reviewers, and readers. As an evidence-based publisher, BMJ Group has invested in research and development in peer review and open access publishing (<a href="http://www.bmj.com/about-bmj/evidence-based-publishing">http://www.bmj.com/about-bmj/evidence-based-publishing</a>) and continues to innovate with the help of authors, reviewers, readers, and funders. Completed studies conducted by BMJ Group about open access are listed here (<a href="http://www.bmj.com/about-bmj/evidence-based-publishing/completed-research#oapublishing">http://www.bmj.com/about-bmj/evidence-based-publishing/completed-research#oapublishing</a>).
- 6.b Academic institutions and research funders. BMJ Group is currently in discussion with institutions and funders in the UK and internationally, to learn about their needs regarding open access publishing and to consider a membership model that would provide discounted APCs.

### 7. We are actively working to increase access to research data.

We note the Finch report's call for "a mechanism for enhancing the links between publications and associated research data" and hope that the Government's Open Access policy will give due consideration to data sharing.

The BMJ and BMJ Open are campaigning for greater access to the raw data from original research studies. The journals' editors believe that this is the most important element of the Open Access movement, as it has the greatest potential to improve the evidence base for medicine and healthcare. Both the BMJ and BMJ Open require all authors of original research papers to state in their manuscripts whether, how, and where they will make the data available and what steps they have taken to protect patient confidentiality. Both journals have partnered with the Dryad Digital Repository (http://datadryad.org/) to help authors to deposit their datasets in open, easily accessible files linked to their published articles. Moreover, from January 2013 randomised controlled trials of drugs and medical devices will be considered for publication in the BMJ only if the authors commit to making the relevant anonymised patient level data available on reasonable request. 6

### 8. VAT on e-journals is burdensome and anomalous.

BMJ Group strongly supports the Finch report's recommendation to "work together to find ways to reduce the VAT burden on e-journals" – a financial burden not applied to print

 $<sup>^{45}</sup>$  Groves T ,Godlee F. Open science and reproducible research. BMJ 2012;344:e4383

<sup>&</sup>lt;sup>46</sup> Godlee F, Groves T. The new BMJ policy on sharing data from drug and device trials. BMJ 2012;345:e7888

### British Medical Journal Group (BMJ) - Written evidence

journals that have essentially the same content and purpose. We were disappointed, however, to read Science Minister David Willet's response on behalf of the Government that "in consultation with the Treasury it has become evident that current VAT rules agreed at EU level preclude a reduced or zero rate for e-journals." We hope that these rules might yet be challenged at EU level, and we would be pleased to support this and take part in any consultations.

18 January 2013

# British Psychological Society (BPS) - Written evidence

The British Psychological Society, incorporated by Royal Charter, is the learned and professional body for psychology and psychologists in the United Kingdom. We are a registered charity with a total membership of just over 50,000.

Under its Royal Charter, the objective of the British Psychological Society is "to promote the advancement and diffusion of the knowledge of psychology pure and applied and especially to promote the efficiency and usefulness of members by setting up a high standard of professional education and knowledge". We are committed to providing and disseminating evidence-based expertise and advice, engaging with policy and decision makers, and promoting the highest standards in learning and teaching, professional practice and research.

The British Psychological Society is an examining body granting certificates and diplomas in specialist areas of professional applied psychology.

#### I. Introduction

- 1.1. The British Psychological Society (the Society) welcomes the opportunity to respond to the House of Lords Science and Technology Committee's inquiry into the Research Council UK's (RCUK) implementation of the Government's Open Access Policy.
- 1.2. The Society supports the general principles of open access publishing but feels there remain important elements of the approach, which need to be considered.

#### 2. Embargo periods

- 2.1. The Finch Committee made the important point that any Open Access (OA) system needs to be sustainable. With respect to embargo periods under the Green route, the recommendation was for 12 months for Science, Technology and Mathematics (STM) and 24 months for Humanities and Social Sciences (HSS) journals. RCUK appear to have ignored this recommendation, and mandated 6 months for all outputs except those from the Economic and Social Research Council (ESCR) and Arts and Humanities Research Council (AHRC), for which the embargo period is 12 months. The expectation is that the latter will reduce to 6 months after a transitional period. There has been no explanation of this deviation from the recommendation of the Finch Committee which was supported by BIS.
- 2.2. There appears to have been little or no consideration of the impact of embargo period length on the subscription model upon which the Green route crucially depends for the provision of necessary infrastructure including the peer review system. The only survey we are aware of was undertaken by the Association of Learned and Professional Society Publishers (ALPSP) in 2012 and indicates that widespread cancellation of library subscriptions to HSS journals would take place if a short embargo period were in place. HSS papers are for the most part "slow

- burners" which gather their citations over a long period, unlike many (but not all) in STM.
- 2.3. We simply do not know how the RCUK or, indeed, the Finch recommendations with respect to embargo periods would affect the flow of academic papers into the public domain. To propose mandates without the necessary supporting research would seem, at best, foolhardy, as the sustainability of the subscriptions model which supports the green routes is under threat. A reasonable prediction is that short embargo periods will critically undermine academic publishing in the Humanities and Social Sciences.

#### 3. Arrangements for Article Processing Charge funds

- 3.1. Although there is a preference for the Gold route in the UK, it is becoming clear that there will be insufficient funding to support this so a significant number of publicly funded papers will require the green route to be sustained. Should the subscriptions model be undermined then, not only will the green route for publicly funded research be unsustainable, but significant issues will arise in relation to the ability of young researchers without access to APCs to get their work published. There is also the question how research undertaken without public funding (of which there is a significant amount of high quality) will get published.
- 3.2. With respect to APCs, RCUK has produced a block grant system to fund a proportion of the output from Research Council grants, although information from discussions within HEls indicates that the proportions given by RCUK in its projections are optimistic. There is an expectation that HEls and research institutions will provide support for APCs but where the funding will come from is not clear and there are concerns that internal decision-making may reduce access for some disciplines or groups of individuals.
- 3.3. The move to OA in the UK has not taken into account the complexities of the funding required which has resulted in a lack of consideration of how to maintain equity in access to publishing for researchers at different career stages and across the university system.

#### 4. International issues

- 4.1. The RCUK mandate is presumably based on the expectation that journals across the world will provide the required publication routes. If this turns out not to be the case, then outlets for UK research will be restricted with a resulting reduction in its potential impact internationally.
- 4.2. An additional threat to researchers comes from the adoption of the CC-BY (Creative Commons) license by RCUK for Gold Open Access which effectively means that an author (and the UK tax payer who has funded the research) signs over the potential for monetary gain to anyone in the UK or internationally who wishes to exploit the findings of research. Many funding agencies outside the UK are not following this model which begs the question of why it is beneficial for the UK to do so.

4.3. As a Learned Society with 11 international journals, we bring into the UK a significant amount of income from overseas subscriptions (the majority for our journals). This particular feature of the way in which societies such as ours function has been overlooked in discussions of the impact of OA upon learned societies. It is unfortunate that one view that appears to have prevailed is that the public purse through its funding of research is subsidising learned societies. The substantial income we earn from outside the UK is used for the benefit of the development of our discipline, including support for young researchers, the maintenance and enhancement of standards of practice, the development of the discipline, and the application of the discipline for the public good. Our journals and other work promote the UK internationally.

#### 5. Risks for learned societies

5.1. Journals provide a major income stream for many learned societies including the BPS. Any change in the business model for journal publishing requires learned societies to change their business model and this, in turn, takes time. There is now a real risk that some learned societies may have their viability threatened to the detriment of their disciplines and the UK's presence within these disciplines internationally. For other societies, activities may be curtailed permanently or until some financial recovery has proved possible.

14 January 2013

### British Sociological Association (BSA) - Written evidence

- BSA welcomes the opportunity to submit evidence to the House of Lords Science and Technology Select Committee on the implementation of Government Open Access Policy.
- 2. BSA supports the overall aim of opening up access to the results of academic research to the wider community and notes this can be achieved by a variety of means including the Gold and Green access models that have been put forward as well as schemes to license publications and open HEI libraries to a broader public which so far have received little attention.
- 3. However, we have strong concerns that current policies are being pushed through too quickly, without thinking through all the implications of change, with minimal modelling of the effects of change and little concern for the effects of implementation on universities, research and publication in different disciplinary areas, and the viability and survival of learned societies which are essential to the health of academic disciplines.

# Support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

- 4. Under current proposals limited funds are being made available to universities to pay the costs of APCs. We are concerned that this funding is inadequate to support the current level of research article publication. Many universities will get little or no additional funding to cope with the additional costs of publication in the short and medium term.
- 5. Only 30 research intensive universities received extra funds from the Science budget, meaning that for the majority of institutions there is no extra money to pay for APCs. Other funds are coming from RCUK on a basis that relates to historic funding. These are unlikely to meet the costs of publishing all the papers resulting from RCUK funded research.
- 6. Much research in Sociology, and other disciplines in the social sciences and humanities, is not funded from research council grants and takes place outside of the 30 institutions that received modest extra funding. The publication of this research will not therefore benefit from any additional funding in this transitional period and any APCs would have to be funded from QR money thus reducing the funds available for research. At the same time, the distribution of QR income is becoming increasingly concentrated among the same group of universities benefiting from the additional funding from APCs. Therefore, academics working in sociology and other HSS disciplines may find it very difficult to find funds for the publication of their research.
- 7. Less funding for research is also likely to mean that the paid time of academics at these institutions will be further squeezed, resulting in the reduction of the time given to the peer review and editorial functions which are essential to the health of journals and the proper dissemination of research.
- 8. Institutions are likely to have to pay journal subscriptions for some considerable time given that the amount of funding made available will be inadequate to fund all

publications on a Gold Access basis. There is, therefore, little prospect of any substantial reduction in library budgets because subscriptions are sold primarily in bundles which may include open access and non-open access journals (e.g. international); and there will be a need to maintain access to subscription content (i.e. non-UK research) and to back issues. Academics in many institutions will either be priced out of journal publication or their institutions will have to make cuts elsewhere in order to fund publication. This could lead to a significant drop in the number of articles submitted for publication and a reduction in the dissemination of UK research findings to academics, the government and other stakeholders as well as the general public.

- 9. The concentration of funding for publication particularly threatens the development of postgraduate students and early career researchers in the social sciences. They may find they are excluded from publication and therefore cannot be entered for the REF and will find their research careers stymied today before they can become tomorrow's research leaders. Retired academics and practitioners outside the academy may also be excluded from publication if they are unable to access APC funds.
- 10. BSA also sees a threat to academic freedom as academics will have to compete internally within their institutions for APCs. Publication will therefore not rest on the quality of work done and peer reviewed by subject experts, but will be judged by academic managers and committees, who may be influenced by internal academic politics, subject to the pressures of allocating scarce resources without necessarily being able to make specialist quality judgements which are the business of the journal editors and peer reviewers.
- II. In a hybrid model of open access there is a further danger that there could be pressures on editors to give preference to papers that are subject to pre-payment. This would be an unacceptable development that would undermine the reputation of UK journals and threaten their rating and standing.

#### Embargo periods for articles published under the green model

- 12. It is clear that many journals will offer hybrid models of gold and green open access. The embargo time under hybrid models or under green access alone is, therefore, an important issue for the future of journals.
- 13. There are significant differences between STEM and HSS disciplines regarding the effective useful life of articles. Currency passes much more quickly in the STEM subjects so a shorter embargo period (under green open access) may be appropriate. The useful life of articles in the HSS is significantly longer. In HSS journals, the majority of article usage is to articles older than I year. We do believe that this is the case with sociology and most other social science subjects. The most highly cited articles in the BSA's flagship journal were published between 2002 and 2007. An embargo period of 24 months seems more reasonable than one of 6 to 12 months, if subscription income is to be maintained for journals.
- 14. Embargo periods that enable the maintenance of some subscription income will allow journals to survive during the transition to open access publishing. Without subscription income, the level of APCs likely to be charged in HSS will threaten the viability of rigorously peer reviewed journals and thus the dissemination of the research that they enable.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

- 15. As a learned society, much of the funding that supports the work of the BSA comes from journal subscriptions. The cost of our current range of activities is not met by membership subscriptions and income from events and conferences alone.
- 16. Like other learned societies we face the prospect of drastic reductions in the services we will be able to offer our members and new entrants to our profession such as postgraduates, early career researchers and researchers outside the academy. We currently provide space and opportunities to connect researchers in Sociology, drawing attention to UK academia and attracting international specialists into the UK. We promote, support and nurture our discipline in an independent and dedicated way that no other institution or organisation can do.
- 17. The income received from academic journals is reinvested in the guidance, support, training and networking events, publications, peer review and award schemes which support the future of UK academic disciplines. We also function as a conduit of advice to the government and funding bodies by direct response to consultations and the facilitation of consultation meetings, through, for example, the co-ordination of responses, provision of meeting venues, and funding of travel and accommodation.
- 18. Whilst we are still attempting to model the likely impact of current proposals and policies, it is already clear that many of these important activities are under threat. In particular, the learned society support for peer review, editorial functions, author services and general support/advice on publishing will be some of the first services to be lost. More time is needed for any transition to new systems and for the development of new business models if learned societies and our important contribution to knowledge creation and professional development is to be protected.
- 19. We are also concerned about the future of peer review. Although it is largely done by academics at different HEIs, it is not an activity organised by those HEIs. It depends upon the identification that academics feel for their subject, or for the specific topic of the journal. This, in turn, depends upon a sense of reciprocity that publishing in journals carries a responsibility to review for journals. APCs potentially undermine that responsibility. At the same time, any asymmetry in distribution of funds for APCs will not only undermine the idea of equal access to publish, but also potentially have consequences for the willingness to review, further damaging the rigour and quality of journals.

# Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

#### International Issues

20. The speed with which the UK government is moving on open access does not seem to take account of the international dimensions to such a general change and the very uneven approach to open access issues globally. In particular, there is a danger that UK academics may not be able to publish their research in highly rated journals published overseas, journals in countries with differing or no OA policies, which, like the USA, may not be OA compliant. This will restrict the international publishing

- opportunities of UK academics because RCUK funded research (and possibly in the future all publically funded research) must be published in OA compliant journals. It potentially harms the development of world class research in the UK if publication becomes insular. This will also be critical if the next REF exercise in 2020 imposes similar criteria to those put forward by RCUK.
- 21. The top journals publish a mix of UK and international research, bringing the best research to the UK and the best of UK research to an international audience. To welcome and accept submissions from international academics without funds for APCs, UK journals will need to sustain a hybrid model with a suitable embargo period (24 months). This will be essential to fulfilling the international role of UK journals.

#### Creative Commons License

22. Under the current Open Access policies, research will be published under the CC BY (Creative Commons license) which allows unrestricted distribution, reuse and remixing of any material as long as the original author is credited. This license allows parts or all of a piece of work to be distributed, built upon, changed, remixed, etc. for both commercial and non-commercial purposes and could mean that research and data is used in unintended ways with the original author's name associated. We believe that this is a threat to the intellectual property rights of authors and opens up the potential misuse of academic research. We would advocate instead the use of a CC BY NC ND (creative commons non-commercial non-derivative) licence; that is, it will not allow commercial reuse, or tweaking or reuse of parts of an article.

#### Conclusion

- 23. BSA believes that future developments in open access need to engage much more fully with the academic community, taking account of the range of academic disciplines, their learned associations and their particular issues.
- 24. The BSA believes that further consultation with the learned societies is needed to fully understand the implications of policy developments. The RCUK implementation date of I April 2013 is too rapid and has allowed no time for consultation, research and consideration of the effects of Open Access policies on HSS disciplines and the learned societies.
- 25. In particular, there should be no hasty decisions about REF 2020. We are disturbed by suggestions that all research conducted in UK universities should be defined as publically funded and therefore might come under prescriptive policies by HEFC. Since new funding regimes are steadily reducing the flow of public funds into the social sciences and humanities, this is not justifiable. Only QR, research council or other government grant funded research can in our view be seen as publically funded research. Should QR income be concentrated further after REF 2014, this will mean that significant research activity is undertaken without public funding.
- 26. The implications of making UK research open access to a variety of UK and non-UK for-profit organisations does not seem to have been fully considered. These organisations may include for-profit providers of undergraduate degrees with full access to research materials, but without the research demands. The current UK HEIs may be significantly disadvantaged in a competitive market by the declining

- public funds, the need to meet APC costs while competitors do not have the same demands. The result will not be a level playing field.
- 27. In our view, it is highly problematic that the Open Access policy is being pursued, iust as the proportion of public funding supporting HEIs is declining significantly. We believe that more work needs to be done to develop policies that address the diversity of academic disciplines and the legitimate concerns of all stakeholders. We would support the recommendation of the Academy of Social Sciences for a more detailed enquiry into the implementation of Open Access policies.

18 January 2013

# Abby Clobridge, Clobridge Consulting - Written evidence

Note that in this submission, I am representing myself and my company

- (I) I am writing in response to the actions taken by the UK Government and RCUK following publication of the Finch report. In short, I applaud the stance taken by the UK Government to push authors to publish materials that are publicly, freely, and globally available to all, both in terms of access and usage. Locking up articles behind publisher-created pay walls is a disservice to society: it prevents knowledge from being shared, built upon, improved upon, and learned from. The many benefits of Open Access have been articulated by organizations including the World Bank, UNESCO, and the European Union. The UK Government's attempt to put these principles into action should be supported.
- (2) In general, I am supportive of the approach taken by the Finch Report to implement Open Access. Regarding Article Processing Charges (APCs): the mechanism described in the Finch Report leaves room for excessive inflation of APCs and poses barriers for authors who are not affiliated with universities/Higher Education Institutes (HEIs). Additional steps should be put in place to cap APCs and offer alternatives for authors not affiliated with HEIs.
- (3) Regarding embargo periods: I urge the committee to push for the removal of embargoes for articles being deposited in repositories. Adding an embargo to an already lengthy process of peer-review and publication does not take full advantage of the internet and changing information and communication technologies. It continues to slow down progress in science in an unnecessary way.
- (4) Furthermore, I urge the Committee to consider requiring a CC-BY license on all funded publications. Restricting re-use for "non-commercial" purposes hinders the potential adoption and usage of research. See Peter Suber, Ensuring open access for publicly funded research, <a href="http://www.bmj.com/content/345/bmj.e5184">http://www.bmj.com/content/345/bmj.e5184</a> for details.

18 January 2013

# Dr Stephen Curry, Imperial College London - Written evidence

### Who am I and why am I responding to this call?

- I. My name is Dr Stephen Curry and I am a Professor of Structural Biology at Imperial College London (though I am writing today in a personal capacity). I have been an active research scientist for around 25 years and published over 80 peer-reviewed articles.
- 2. To fulfil a sense of duty as a publicly-funded researcher, I also write regular science blogs at Occam's Typewriter<sup>47</sup> and for the Guardian Science blogs.<sup>48</sup> Over the past twelve months have written extensively on the issue of open access (OA) from the perspective of a working academic.
- 3. Through this I have developed a useful dialogue with many interested parties, including academic colleagues, publishers and funders and a reasonably good understanding of many of the issues that are intertwined with open access. Last September, for example, I summarised the key outstanding questions<sup>49</sup> for UK policy on open access in the light of the Finch Report and the new RCUK policy. I have also written about the severe problem of the over-reliance of journal impact factors<sup>50</sup> as a measure of prestige, which is retarding the uptake of open access scholarly publishing. The committee has my gratitude and sympathy for taking up this important but complex topic.
- 4. I know that other academics have responded to this call so I don't wish to repeat points that are likely already to have been made but I watched the committee take oral evidence from Dame Janet Finch on I5<sup>th</sup> January and was struck by some of the lines of questioning that were taken up. I wanted particularly to respond to these. My comments address the four issues to be considered by the committee's inquiry but do not map neatly onto them because they are interlinked.

# Dame Janet's introduction – the question of sustainability and support for OA through article processing charges (APCs)

- 5. In her opening remarks Dame Janet described one of the criteria for success in meeting the brief of the working group would be to come up with recommendations that would be *financially sustainable* for publishers and universities.
- 6. This statement does not quite make explicit as Dame Janet did when speaking to Research Libraries UK in November 2012<sup>51</sup> that part of the brief given to her working group by the Minister, David Willetts, was not to damage the publishing industry. The question is what is meant by 'damage' in this context and how far did consideration of this constraint affect the resulting recommendations (particularly in view of the fact that publishers were represented on the committee).
- 7. It is in most stakeholders' interests to ensure that the processes of scholarly publication can continue without significant disruption during the transition from subscription-based

<sup>47</sup> http://occamstypewriter.org/scurry/

<sup>48</sup> http://www.guardian.co.uk/profile/stephen-curry

<sup>49</sup> http://occamstypewriter.org/scurry/2012/09/05/key-questions-for-open-access-policy-in-the-uk/

<sup>50</sup> http://occamstypewriter.org/scurry/2012/08/13/sick-of-impact-factors/

<sup>51</sup> http://occamstypewriter.org/scurry/2012/11/24/we-need-to-talk-about-open-access/

access to open access. Publishers and universities therefore have *some* common interests, but it should not be forgotten that 'financial sustainability' will mean different things for the different stakeholders. While publishers quite understandably look to maximise profits, universities (and research funders) should be seeking to get the best value for money from the taxpayer-funded research budget. The large profit margins of some publishers (of the order of 40%) suggest that there is room to extract better value from the current spend on scientific publishing.

- 8. Research funders should seek to extract this value and savings on total publishing costs should be seen as an important driver for the move to OA. Although there are cost implications in the transition, in the long run, economic forecasts suggest that gold open access will be cheaper.<sup>52</sup> I would argue that some loss of publishers' profitability due to the emergence of a more active and transparent market with the rise of OA publishing is not a type of damage that should concern us. Rather it is something that should be allowed to occur as the consequence of technological and cultural changes.
- 9. Nevertheless, there are concerns that the emphasis of Finch and the RCUK policy on adopting a preference for gold OA will make the transition period unnecessarily expensive. The committee will no doubt have received a spectrum of views on that point much debated among OA advocates in the last few months. It is problematic but one thing that should not be overlooked is that RCUK has made it clear that researchers can use green OA repositories to meet the terms of its new policy. These are free to authors but typically involve embargo periods of 6-12 months before the published research is freely accessible, and rely on the continuation of journal subscriptions.
- 10. My view is that the more costly route of preferring gold OA is a worthwhile investment because it offers spending power that can be used as leverage to allow publishers (and learned societies) to wean themselves off subscriptions. It also provides funds to encourage the development of new, more innovative OA journals that will create a more vibrant market, a move that is necessary to help drive down the costs of the article processing charges often required to publish via gold OA.
- 11. There is a risk that by providing funds for gold OA, the UK is locking in advantages for existing publishers and locking in current, relatively expensive APC pricing structures. However the rise in recent years of new OA publishers and journals, such as the Public Library of Science (PLOS), eLife and PeerJ, suggests to me that there could well be strong competition in the OA market. However, that strong competition will only happen if researchers are directly exposed to the cost implications of gold OA. This needs to be a feature of the implementation of the new RCUK policy at university level.
- 12. A related question that came up in the evidence session with Dame Janet. Lord Rees expressed concern about the administrative burden on universities of managing the funds allocated to them by RCUK to pay APCs. To an extent, this administrative burden already exists since several universities (including Imperial College) already have OA funds set up and have established simple procedures whereby staff can apply for monies to cover APCs. These will have to expand as the RCUK policy is rolled out but I don't see the administrative problems as insurmountable. Indeed the expansion of these procedures is an opportunity to ensure that researchers are involved in spending

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<sup>52</sup> http://repository.jisc.ac.uk/610/2/Modelling Gold Open Access for institutions - final draft3.pdf

decisions. Discussions and debates about the levels of APCs at the researcher level will help to create a transparent market that could exert downward pressure on prices. (One problem with the present situation is that researchers are generally ignorant of subscription costs, and this has in part contributed to them spiraling to unsustainable levels).

### Will a move to open access affect the prestige of UK research?

- 13. A more difficult question relates to the role of publishing in establishing and maintaining the *prestige* of researchers and UK institutions. This is an issue that was raised by more than one member of the Science and Technology committee on 15<sup>th</sup> January in questions about the impact of the UK policy on OA of our institutions' international rankings. In particular there was concern that limits on university funds to cover APCs would prevent researchers publishing in 'top journals'.
- 14. These concerns are overstated and misguided. They are overstated firstly since, at least at present, many 'top journals' (*Nature*, for example) enable authors to publish via green OA at no additional cost. Secondly, the entry of leaner, more innovative OA journals at the top end of the market (such as *eLife*) will reduce costs.
- 15. The concerns are misguided because the academic community has come to use journal impact factors as an easy proxy for the quality of a particular piece of research (or a particular researcher) when it is no such thing.<sup>53</sup> Studies have repeatedly shown that the distribution of citations attracted by different papers in any given journal is extremely skewed. On average only about 15% of papers in the journal get large numbers of citations, while most are cited only rarely if at all. This pattern is maintained whatever the ranking of the journal. What this tells us, and it has been widely known for many years, is that impact factors are a poor indicator of the quality of an individual research paper.
- 16. Unfortunately, the widespread reliance on impact factors as measures of the quality of a paper, a researcher, or even a university has created an unhealthy situation that puts excessive power in the publishers of established titles. Until the research community can break its reliance on the impact factor proxy, and focus instead on evaluating and giving credit for the published work itself, the 'top-ranked' journals will be allowed to charge excessively high APCs.
- 17. This is a deep-seated cultural problem within the research community. It is being eroded but only slowly. However, the drive for open access will enable the adoption of article-level measures of quality because, by making the research literature more widely available, more people will be able to access and evaluate it.
- 18. Pre-publication peer-review should be maintained in an OA world in my view, as a check on the technical quality of the work that is being reported. But as the skewed citation distributions for the papers within any journal has shown repeatedly, pre-publication review by just two or three reviewers is unreliable as a determinant of the ultimate impact or significance of a given piece or work. For that evaluation to take place the research must be disseminated widely (and hopefully rapidly) and the response of the research community to it captured and reported.

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<sup>53</sup> http://occamstypewriter.org/scurry/2012/08/13/sick-of-impact-factors/

19. It also needs to be borne in mind that the *primary function* of publishing is to share knowledge with the research community, businesses and the public; contributions to this function should be incorporated into measures of prestige rather than simply looking at the name of the journal.

# How should the Government address the concerns raised by the scientific and publishing communities about the policy?

- 20. There is already some provision for this. The Finch group has been charged with conducting a review of the situation within the year (though I'm not sure a definitive timetable has been published), while RCUK has committed itself to reviewing its new open access policy within two years. It is to be hoped that these reviews will offer scope for input from the research community and other stakeholders.
- 21. However, there is one particular concern that I would like to raise. A key question for the UK (and one that I would like to see the committee put to Mr Willetts) is what impact its choice of a policy that relies heavily on gold OA will affect international cooperation on open access? This is a concern since most other research-active nations, including the US and the EU, appear to have a preference for green OA routes. It seems to me that this policy divergence risks greatly prolonging the process of transition to a system of scholarly publishing that is free from subscriptions and entirely supported by APCs. Mr Willetts has stated publicly that he would be discussing open access policy with 'colleagues' within and beyond the EU.<sup>54</sup> It would be helpful to know what progress has been made in these discussions.

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<sup>&</sup>lt;sup>54</sup> http://occamstypewriter.org/scurry/2012/05/03/willetts-speech-on-open-access-analysis/

## Dr Paola Di Maio, ISTCS.org - Written evidence

Note: Submitting as an individual researcher and as a principal investigator of ISTCS.org, a virtual independent research institute

from the guidelines:

The Committee will consider a range of concerns including: embargo periods; arrangements for article processing charge (APC) funds; international issues; risks for learned societies

The questions targeted by the Committee are important, even more so in the context of more fundamental ones. When around 2008 I started to investigate Open Access (OA), as part of a doctoral research in knowledge sharing, I asked myself:

- I. What do we know, really about open access?
- 2. What facts, data and evidence do we have to evaluate the efficacy of existing policies and other institutional interventions

In attempting to answer these questions – not without challenges – I have constrained my enquiry to a single field (systems engineering research) in a single country, the UK. During the course of the investigation I have come across compelling evidence, excerpts enclosed, which I hope the Committee considers relevant to the inquiry. This brief note provides some context and clarifies why the evidence presented here is of relevance to the Call.

#### I. Lack of data, and of documented facts about Open Access

There is very little or no actual 'data' available in relation to the adoption of open access mandates (in the UK and elsewhere) to evaluate the overall effectiveness of the policies as devised and implemented so far. By this I mean facts and figures (such as how many papers are published under Open Access for example). How is it possible that in the age of open data and 'data driven' decision making, there are no actual figures to support inquiry and policy making?

How can we answer questions such as 'are we taking the right steps to promote open access' and 'are the policies adopted fulfilling their overall purpose of making knowledge more accessible?' is there is not data available? The most common justification provided by informants for the lack of data are:

- no methodology (the questions are not black and white enough to be able to come up with straight quantitative meaningful data)
- no time and money available to devote to get data and facts, no budget for data

The first piece of evidence I submit is therefore: A methodology, validated and tested as part of my PhD called Open Access Monitor, which uses a heuristic benchmark, demonstrating that quantitative data can be collected around certain qualitative parameters to evaluate the extent of adoption of OA. The main conclusions and recommendations are

provided below as a table, and discussed in detail in the Concluding Chapter of my thesis (currently under moratorium) available here: <a href="http://tinyurl.com/coy6zft">http://tinyurl.com/coy6zft</a>.

RESEARCH	-	
COMPONENT	<u>FINDING</u>	RECOMMENDATIONS
Literature review	I. Policies not included in future knowledge sharing research, see p94	R1. Include Policy in future of knowledge sharing research
	2. Challenges for Doctoral Research in SE do not include knowledge access/reuse, see p28	R2. Include knowledge access/reuse to doctoral challenges for system engineering/system sciences
	<u>Fragmentation</u>	R3. Harmonize/Integrate
RCI	<u>Underspecification</u>	R4. Specify Policies
	Contradictions	R5. Fact checking, Linking/Using URIs
RC2	Large numbers (over 50% in the case of this study) of publicly funded projects do not publish knowledge which is shared/accessible on the web, despite the existence of open access policies	R6 Monitor evidence  R7 Legislate (make the policies mandatory by law)
	Research outputs do not adopted structured, explicit knowledge schemas	R8 Adopt shared structured knowledge schemas for research outputs
<u>Overall</u>	KS policies exist, but a) their adherence is not monitored b) they do not support adequately the access requirements of k seekers knowledge seekers	R9 General Recommendations (Inform, Incentivate, Foster Culture of Knowledge Sharing)
	Lack of OA and KS awareness in the Engineering Research	_

See also the following related publication:

First systematic review of Open Access in the UK

2012 – Open Access UK: Challenges, Reality Check and Recommendations Paola Di Maio DR2012-49.pdf – PDF document, 168 kB (172332 bytes) <a href="http://digital-pubment/byth.com/http://digital

research.oerc.ox.ac.uk/papers/open-access-uk-challenges-reality-check-and-recommendations/view

A web service outline, as evidence that state of the art, web based, intelligent solutions can simplify, to some extent even automate the actual data collection around OA adoption at notional cost, demonstrating that appropriate technological solutions can be engineered and implemented to produce real time data, in fact it is the natural thing to do.

2012 – Automating Online Auditing of Open Access Resources With a Web Service Paola Di Maio DR2012-48.pdf - PDF document, 218 kB (223699 bytes) <a href="http://digital-research.oerc.ox.ac.uk/papers/automating-online-auditing-of-open-access-resources-with-a-web-service/view">http://digital-research.oerc.ox.ac.uk/papers/automating-online-auditing-of-open-access-resources-with-a-web-service/view</a>

Both examples lined above are constrained in scope, however they can be considered indicative that meaningful data can be obtained with contained effort if state of the art methods and techniques are adopted, such as the one presented. It is only with data and facts in hand that stakeholders, policy makers can ask informed questions and prioritize actions and concerns.

#### 2. POLICY EVALUATION

Policy evaluation should take into account the broadest context in which the policy its deployed, as well as the breadth of its dimensions. In the course of my inquiry it emerged that the RCUK policy, until 2011 when data collection concluded, has been confusing to the point of being misleading, with RCUK saying one thing: (that all UK Councils mandate open access of publicly funded research) then doing another: (not being able to provide any data as evidence of adoption of such policies). Poor alignment of the various policies, often at cross purpose discussed in the paper below

2.1 Evidence: Overview of Structural fragmentation of Open Access Policies in UK/EU \*lack of alignment

2010 – Open Access Policies from Chaos to Functional Regulatory Interventions (working document) <a href="http://www.academia.edu/786683/Open\_Access\_Policies\_From\_Chaos\_to\_Functional\_Regulatory\_Interventions">http://www.academia.edu/786683/Open\_Access\_Policies\_From\_Chaos\_to\_Functional\_Regulatory\_Interventions</a>

#### 3. BAD PREACHERS?

Third and final piece of evidence I submit is correspondence (see evidence pasted as Annex I in this document (not published here)) showing that publicly funded organisms such as JISC do not adopt open data policies in relation to their research, and do not provide any data to researchers like myself to be able to analyse their archives for the purpose of scholarly enquiry (i.e. data gathering) and auditing. This shows a possible systemic bias of the main actors in Open Access in the UK, or other paradox that needs to be investigated further

These issues altogether contribute to a complex 'systemic' space, with great interdependence between the various factors influencing them.

Fact finding, data gathering and analysis are necessary to answer the fundamental questions to drive the inquiry, even when these are difficult to answer and potentially a huge Pandora's box

Before committing further public resources to open access, in the UK as well as elsewhere, a complex socio-technical systems approach could be advisable to ensure that the inquiry informing policy is not the result of politics alone.

I enclose a summary of the research corresponding to the last chapter of my doctoral thesis which led to the evidence being submitted, for completeness (see attachment summary Hol3 – (not published here))

Thank you for the opportunity to provide evidence to the Committee, in the hope some of what presented may contribute in some way to the enquiry

18 January 2013 (updated 4 February 2013)

# **Economic History Society - Written evidence**

- I. Many academics have been supporters of the open access principle (that peer reviewed academic work should be freely available and easily accessible). However the Finch Report's recognition of "the complex ecology of research" did not translate into recognition of the major differences between the humanities/social sciences (HSS) and bio-medicine (plus some but by no means all other STEM subjects). A potentially disastrous one-size-fits-all approach has emerged in the implementation plans even though such homogenization is not apparent in government policy in other areas, e.g. REF. Gold Access is tailored to the needs of bio-medicine and similar disciplines. The need for a mixed economy, recognised in Finch, has been lost in the rush to implementation without sufficiently wide consultation and consideration. This will have potentially unintended and unfortunate consequences and threaten the UK Higher Education's outstanding achievement in the humanities and social sciences (HSS). The only sustainable model for History is Green Access as explained below.
- 2. The *Economic History Society* (EHS) was founded in 1926 and exists to support research and teaching in economic and social history, broadly defined. It does this through publications, including the *Economic History Review* and a range of textbooks and study packs, through conferences and workshops, through the finance of research fellowships and research grants, and through bursaries and prizes for younger scholars. The Society also acts as a pressure group working to influence government policy in the interests of history, alongside other learned societies, and in concert with professional bodies. The unity manifest in recent collective representations indicates the extent to which anxiety over implementation is shared within HSS. This is no parochial issue with an individual society protecting its vested interest.
- 3. The EHS derives income from publishing and specifically from the premier peer reviewed journal the *Economic History Review*. The *Review* features regularly in the five top social science history journals ranked by citations and is regarded as the outlet of first choice for academics worldwide seeking to publish on the economic history of Europe including Britain. Income from publishing the *Review* and from materials derived from the journal (i.e. JSTOR and paper collections) represent about 75% of total income with membership subscriptions making up the rest. Members enjoy many benefits including but not limited to receipt of the *Review*, see: <a href="http://www.ehs.org.uk/members/default.asp">http://www.ehs.org.uk/members/default.asp</a>.
- 4. The revenue from publishing funds the costs of editing and of rigorous peer review of submissions. Over 100 submissions are received annually, the vast majority of which are sent out to referees. The Editors receive modest honoraria, which fall far short of market remuneration for the time and effort involved. The referees are not remunerated but provide their services gratis because they perceive themselves as stakeholders in the product. Papers are often extensively revised as a result of the peer review and always carefully copyedited. The process is NOT just one of selection. The editorial procedures add value and even if many services are provided gratis, professional copyeditors and translators have to be paid. The production of a top ranked history journal can be relatively expensive especially as authors are increasingly

international. Online submission and refereeing go only some way to reducing costs. Yet editorial procedures are not merely cosmetic. Many papers which prove ground breaking contributions only attain that status in response to the questions and criticisms of referees and the stylistic interventions of editors. This is a major difference between HSS and many STEM subjects. The editorial process seriously enhances the quality and value of publications.

- 5. The Society also uses its revenue from publishing to provide bursaries, fellowships, internships, grants for undergraduate projects, prizes, initiatives and conference funding, research funds for graduate students, a training course, a teaching award, dissertation prizes, and a prize for the best article published in the *Review* by an early career researcher. Information on our various grant schemes and lists of winners can be found at: <a href="http://www.ehs.org.uk/ehs/grantsawardsprizes/default.asp">http://www.ehs.org.uk/ehs/grantsawardsprizes/default.asp</a>. On average, three-quarters of the Society's net publishing income is spent on such awards. Our website provides reports on, and examples of, the kind of scholarly and outreach activities supported. <a href="http://www.ehs.org.uk/ehs/GrantsAwardsPrizes/ICFExemplars.asp">http://www.ehs.org.uk/ehs/GrantsAwardsPrizes/ICFExemplars.asp</a>.
- 6. We regard the support that we give to graduate students and early career researchers through our bursaries, fellowships, conference bursaries, training scheme and new researchers' prizes as vital to sustaining economic history as a healthy and vigorous subject. Interdisciplinary subjects like economic history can easily be squeezed out of University and Research Council allocations and the Society's provision fills gaps. Even though funded at a modest rate, our Postdoctoral Fellowships are much sought after. Last year, for example, we had in excess of 60 applications. Last year, the Society supported five Fellows at a cost of over £70,000 – around one third of our net income from publishing. Similarly, our bursary scheme is oversubscribed: 45 and 68 applications received in 2011 and 2012 respectively. Few of these applications are frivolous. Most are worthy of support. As other sources of funding dry up and students emerge from their undergraduate degrees burdened with debt, such support will become ever more valuable. The Society's ability to provide funding for these schemes and the work done by Society members to ensure that this funding goes to the most promising early career researchers, so getting maximum value for money, is essential if our subject is to flourish.
- 7. The schemes all aim to promote teaching and research in economic history but their targeted constituencies and immediate objectives vary. The Fellowships, as noted above, provide their holders with a start on an academic career. The bursaries enable graduate students who would otherwise struggle to finish or continue with a PhD. Our use of our funds is flexible so we can respond to perceived gaps in the market. Thus when the British Academy proposed to withdraw its small grants scheme which enabled researchers to pilot potential research projects, we could respond by setting up a small in house substitute. Moreover, all awards are made through peer review with members of the Society giving their time selflessly and without remuneration. Their involvement and effort improves the targeting of awards and increases their value added. At a time when the ESRC and AHRC are vigorously encouraging universities and academics to practise "demand management" i.e. the pre-screening of applications for research funding, it is inconsistent to not recognise the ways in which insider involvement in the distribution of funds augments the value of those funds. The Society is not simply recycling public funding when it uses revenues from publishing in these ways, but is adding value though stake-holders' efforts and specialist insight.

- 8. Replacement of the traditional learned society publication model via a "pay to publish" business model risks undermining a system which has been successful and installing one with many uncertainties and drawbacks. A serious concern is the lack of empirical evidence about many key issues. Too often the empirical data used to work up the business case has been drawn exclusively from a STEM context. For example the APC needed to sustain bio-medical journal publishing can be far lower than in History (and other HSS) for reasons advanced in (4) above. APCs at the level cited in Finch would be insufficient to finance the editorial and publishing costs of most of our venerated HSS journals, and would threaten the survival of the associated learned societies, curtail their charitable activities and adversely impact the research environment.
- 9. Serious concerns have been raised about how several categories of HSS authors will fund publication. Most history research remains funded out of QR rather than by RCUK or charitable funders. So the majority of historians will find themselves in competition for scarce resources to secure the funds to publish in the journal of their choice. The allocation of funds to publish within universities is likely to involve non-expert review and the risk of infringement of academic freedom on the grounds of financial necessity. As the submission from the Royal Historical Society notes there is a real danger of replacing one form of unfairness (inequality of access) with another, namely inequality of opportunity to publish. These problems will likely be exacerbated following the 2014 REF when HEFCE funding will be limited to research graded 3\* or 4\*. In addition valuable work is often done by individuals who are without any form of funding. Earlycareer researchers often in temporary posts would be unlikely to be allocated scarce APC funds by university administrators, yet they need to publish before they can move onto, let alone up, the career ladder. Moreover publication would be closed off to emeritus academics and independent scholars unless they were prepared to finance their own costs. This again looks like a backward step when academics are being encouraged to engage with the general public and increase the accessibility of research findings. Finally, history journals publish a range of other material, in addition to articles, especially book reviews. These are crucial to the intellectual vitality of the discipline, especially given that the main way of presenting historical research remains via monographs.
- 10. Questions of academic freedom are also raised if OA publication is to be a requirement for consideration in any future REF as has been suggested. Researchers' publication outlets will be virtually determined by HEFCE; ironically they may be prohibited from publishing in highly-rated international journals by the need to meet HEFCE injunctions: a bad unintended consequence of these decisions would be to undermine the internationalism that British learned societies and many HSS journals have pioneered and introduce a new parochialism. Moreover, from the other side of this issue, non-UK researchers many of whom now publish in UK journals would face a new disincentive in APCs and would likely turn to less costly outlets. Researchers from the developing world would be least able to meet the costs of APCs.
- II. 'Green' OA publication which dispenses with the need for authors to pay upfront offers a preferable alternative to the gold model. With 'green' OA articles must be made freely available on-line but only after an embargo period. The latter, it is suggested would sustain subscriptions and secure sufficient revenues to support publication costs. The debate then becomes one about the length of the embargo needed to retain

subscriptions at or near the current levels. It has been mooted, though significantly with little empirical support, that this period might be as little as six to twelve months, or in the case of the humanities perhaps up to 24 months. Most learned societies doubt that this is sufficient. The open letter from editors of eminent UK history journals, including the *Economic History Review*, affirms the availability of a green route, but argues that 36 months is the shortest possible embargo that would protect the viability of the subscription-funded organisations and the quality and standing of the journals they produce.

12. To conclude: representatives of learned societies, most of which are unanimous about these issues, are not arguing for the retention of vested interests. Nor do they claim that HSS need or should be protected from global innovation. However, the value of the learned societies and their many and diverse contributions to the UKs academic standing must be recognised, along with the differences between HSS and STEM subjects. The development of OA publishing is to be welcomed but the hasty imposition of gold OA in a one-size-fits-all approach, as is presently contemplated, risks sacrificing the many good things about the status quo without being sure of new benefits. A way forward is possible but it has to take seriously the issues raised in this and other stake holder submissions. There must be further consultation and empirical investigation if there is to be an orderly transition to a superior model.

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# **Appendix**

The Finch Report may be consulted at:

http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf

Response to the Finch Report by Mr Davis Willetts, Minister for Science and Universities, dated 16 July 2102, may be viewed at:

http://www.bis.gov.uk/assets/biscore/science/docs/l/12-975-letter-government-response-to-finch-report-research-publications.pdf

RCUK Policy on Open Access is consultable at:

http://www.rcuk.ac.uk/documents/documents/RCUK%20\_Policy\_on\_Access\_to\_Research\_Outputs.pdf

HEFCE's statement on open access can be found at:

http://www.hefce.ac.uk/news/newsarchive/2012/statementonimplementingopenaccess/

For the American Historical Association's blog on open access, see: <a href="http://blog.historians.org/news/1734/aha-statement-on-scholarly-journal-publishing">http://blog.historians.org/news/1734/aha-statement-on-scholarly-journal-publishing</a>

For the British Academy response to the Finch Report, see: <a href="http://www.britac.ac.uk/news/news.cfm/newsid/786">http://www.britac.ac.uk/news/news.cfm/newsid/786</a>

For RCUK 7 September 2012 Press release on additional OA funding from government: <a href="http://www.rcuk.ac.uk/media/news/2012news/Pages/070912.aspx">http://www.rcuk.ac.uk/media/news/2012news/Pages/070912.aspx</a>

### **Electronic Publishing Trust for Development - Written evidence**

The Electronic Publishing Trust for Development (<a href="http://www.epublishingtrust.net">http://www.epublishingtrust.net</a>) has worked for over a decade to facilitate both access to the world's published literature for economically constrained regions of the world (henceforth referred to as the South) and the publication and global distribution of often unique research arising from research in these regions. The Trust therefore provides a different perspective on Open Access in relation to the international issues listed as one of the themes being considered by the Select Committee.

The Finch Report was a UK government commissioned report and is concerned in the main with the impact of OA on UK research output and national wealth. Therefore, while it had no remit to consider the consequences of the recommendations on the rest of the world, as a leading research nation it will have consequences, and the EPT wishes to consider these and how research outcomes can best be made available to fellow-researchers in the South.

The Finch Report refers frequently to the importance of UK research and also acknowledges that research is an international activity, but it does not recognise the crucial impact that the research carried out in the South has on the development of international programmes. Many of the world's most intractable problems are felt primarily in the developing regions and local research, for example on malaria, animal health, agriculture or climate change, is critical to providing appropriate solutions. Without this knowledge, unsustainable recommendations have been made (see examples in 'The chain of communication in health science: from researcher to health worker through open access' L. Chan, S. Arunachalam, B. Kirsop <a href="http://www.openmedicine.ca/article/view/298/245">http://www.openmedicine.ca/article/view/298/245</a>) and the problems persist and even, in the case of infectious diseases, spread. It is therefore important to all that research from the South is supported and well distributed globally. This has been the mission of the EPT and other organisations such as the active and long-established EIFL programme (<a href="http://www.eifl.net">http://www.eifl.net</a>). Understanding this, recommendations by the Finch group for improving access to the latest research findings was a matter of critical interest to researchers in the South.

When the concept of OA was first proposed the consequences of this policy on the progress and success of the work of researchers in the South was almost unbelievable – 'a light at the end of the tunnel' was the most modest of responses, since free access to the world's research findings coupled with the ability to promote their own work globally seemed unattainable. The new concept was of such significance that it took time for it to be believed and over recent years much effort has gone into awareness-raising and training in the new technologies.

The first developments towards free access were tempered with disappointment when the 'author pays' strategy was proposed and adopted by some journals adopting the Gold OA strategy, since the cost of paying to publish was merely a different disincentive to that caused by unaffordable subscription charges — even though it was possible to plead poverty and receive charitable dispensations in some cases. However, the less publicised strategy of Green OA was slowly recognised, thanks to the indefatigable efforts of knowledgeable people in the countries affected.

So, while some publishers\* in the South have adopted the Gold policy of OA journals, meeting their costs by a number of innovative alternatives (providing paid-for publishing

services, online advertising, cost savings by moving to online-only publishing, national and commercial support ... ), others began to educate policy makers on the benefits of Green OA. Institutes held workshops, training programmes, seminars and set up exchange visits, so that gradually a body of repository-literate researchers and policy makers evolved. The comparatively low cost required and the immediacy of establishing repositories have been driving factors in the ultimate acceptance of Green OA by the South and for its huge growth in the North\*\*.

The situation is that there are now nearly 700 institutional repositories in the South (source: Registry of OA Repositories - <a href="http://roar.eprints.org/">http://roar.eprints.org/</a>), rising to 804 repositories if China and Russia are included, collectively holding vast numbers of research articles. Progress has been frustratingly slow, and it is clear that the notion of a Pandora's box of research articles available for accessing without cost has taken time to absorb, and it is the acceptance by prestigious organisations in the North (NIH, UKRC, Wellcome Trust, UNESCO etc) that is now beginning to give the confidence that administrators needed in order to commit to the switch in policy. It is for this reason that the policies of RCUK are important in the South.

While the overall adoption of the international OA movement as the new research distribution mechanism is greatly to be welcomed and will encourage many remaining doubters, it is profoundly disappointing that Green OA has been designated as merely a fringe resource for all manner of writings. The importance of retaining the profits of the publishing service industry tends to dominate what should be the equally important ethical arguments. The results of taxpayer funded research should be freely available not only to our own citizens but in order to support the health and well-being of those in developing countries, to encourage and support international cooperation, and to allow charities, companies and researchers to develop products and services which will benefit the global community. It is all too easy to forget that publishing exists to support and disseminate research and not vice versa. There are now almost 34 million "green" articles deposited in institutional repositories (see <a href="http://maps.repository66.org/for\_their\_location">http://maps.repository66.org/for\_their\_location</a>). The importance of this strategy has been overlooked in a debate which has tended to focus on the economics of the publishing industry rather than the value of UK Science in helping to solve the world's problems

Publishers have responded to this issue with a series of well-intentioned programmes such as HINARI and AGORA. But these go nowhere near solving the problems of access. Our decade-long experience working with researchers in the South (and many of the stories collected for OA Week and which are available from our web site demolish the myth that this is a solved problem. For example, the problems with the HINARI programmes have been well documented – sudden withdrawal by publishers of journals, availability only from designated libraries, selection of journals by publishers rather than according to research needs and so on (see, for example: <a href="http://www.scidev.net/en/features/open-access-archiving-the-fast-track-to-building-r.html">http://www.scidev.net/en/features/open-access-archiving-the-fast-track-to-building-r.html</a>).

We at the EPT are torn between wanting to publicise the Finch report, since it strongly supports OA, and a wish to hide it, since to advocate unachievable strategies and to ignore the 'do-able' will be profoundly confusing to our colleagues in the South. Here is a statement from researchers at the Raman Research Institute, India (source: <a href="http://epublishingtrust.net/oa-stories/">http://epublishingtrust.net/oa-stories/</a>): "Our repository collects and preserves the publications of the institute in a central place – thus making them available to students and researchers whenever needed. ... This is of great value to our researchers as it is like

carrying a no-weight library of all their relevant papers when they travel. It makes collaborative research a lot easier. In this way the repository contributes to the teaching, learning and research of the institute." And again, a posting by Charlotte Webber of BMC: "You won't find the community of Macha on many maps. It's 50 miles from the nearest road in the Southern Province of Zambia, itself a land-locked southern African country - it's pretty much the last place you'd expect to find a community logged on to the Internet. But taking advantage of a satellite link installed by John Hopkins University Malaria Research Institute, the LinkNet Cooperative . . . has established the largest wireless Mesh Network in Sub-Saharan Africa. Now, by researching crop types, local farmers have already diversified ... And doctors and nurses at the local hospital can seek advice on treating patients from specialists in the capital. Screening for malaria has improved thanks to the John Hopkins link and rates of malaria have dropped by 90%. Local people are using the internet for research to establish businesses whilst transaction costs for basic goods have reduced considerably ... There are thousands of communities like Macha across sub-Saharan Africa. Macha proves that access to information is the critical first ingredient in helping local communities to help themselves. We're proud to have the support of BioMed Central to help more and more projects like this." How do you compare the value of access to such resources with that of a publisher's income?

It now seems clear that the argument for OA is irrefutable and it will become the standard route to the exchange of research publications (and data) going forward. But the best means to achieve it remain in dispute. While valuable new trials and usage assessments continue, the EPT urges that the raising of the profile of affordable Green OA and the real needs of the majority of the world's researchers **are** borne in mind as a priority. As a Charitable Trust, the EPT will continue to support this strategy by all means available to it and, as an example of our efforts, we direct people to the announcement of the 2012 winner of the EPT Open Access Award, Dr Frances Jayakanth, National Centre for Scientific Information, Indian Institute of Science, Bangalore, India who, with colleagues, set up a vibrant repository now holding tens of thousands of research articles. The University Grants Commission in India was impressed by the IISC's IR and has directed all universities in India to replicate this effort".

We therefore ask the Select Committee to speak in favour of encouraging the Research Councils and all other bodies supporting research with taxpayers funds to support the Green Route to Open Access as an important mechanism for ensuring that the UKs medical and scientific research is freely available to researchers, notably but not exclusively in the South, to assist in addressing the social, health and environmental challenges which face the global community and to allow UK industry and commerce to develop appropriate and relevant solutions.

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#### **Notes:**

\*Some distributers/publishers of OA journals from the South:

Bioline International <a href="http://www.bioline.org.br">http://www.bioline.org.br</a>

SciELO http://www.scielo.org

CSIR-NISCAIR journals: http://nopr.niscair.res.in/

Indian Academy of Sciences journals: <a href="https://www.ias.ac.in/pubs/journals/">www.ias.ac.in/pubs/journals/</a>

\*\*Facts and figures on OA <a href="http://openaccess.eprints.org/index.php?/archives/905-Finch-">http://openaccess.eprints.org/index.php?/archives/905-Finch-</a>

Fiasco-in-Figures.html

## **Emerald Group Publishing Limited - Written evidence**

#### 1.0 Introduction

- I.I Emerald Group Publishing Limited ('Emerald') was established in 1967 by business and management academics at the Bradford School of Management in West Yorkshire and since then has become one of the world's leading scholarly publisher of journals and books in business and management with a strong and growing presence in disciplines including LIS, social sciences and engineering.
- I.2 Emerald is based in Bingley, West Yorkshire, and currently employs over 300 people in Bingley and overseas. As such, it is a significant employer in the local area, based just five miles from where it originated. Emerald is owned by Dr Keith Howard who is one of the original founders of the company.
- I.3 As a publisher, Emerald chooses to facilitate the global production and dissemination of research that focuses on issues of social importance. Our scope of publishing covers the collection and dissemination of research that is relevant to the fields of management, library and information science, engineering and the social sciences. Emerald's strategy for achieving our long-term sustainable vision involves six key initiatives:
- (I) Support scholarly research
- (2) Make research accessible
- (3) Use technology responsibly
- (4) Sustain and protect our environment
- (5) Support local and regional communities
- (6) Observe high ethical standards in business and employee relationships.
- I.4 Emerald currently publishes 300 journals and 165 new books every year, the majority of which are research-oriented and peer reviewed. Emerald has around two-thirds of its content focused on the business, management and economics fields, and as such is one of the world's leading publishers in these areas. It also covers (BME) other areas in some depth, including engineering, health and social care, education and other social sciences.
- I.5 Emerald also has one of the world's highest quality collections of Library and Information Science (LIS) journals, and owns library and information management association ASLIB. By publishing high quality journals by librarians for librarians, as well as running training events and conferences for this community, Emerald has developed strong links with librarians and understands their needs extremely well this is evidenced by the strategic partnerships it has with them through international organisations such as the International Federation of Library Association and Institutions (IFLA).
- I.6 Emerald works in close collaboration with a number of academic and corporate organizations and associations worldwide among these are the Association to Advance Collegiate Schools of Business (AACSB), the Academy of Management, the International Federation of Library Associations (IFLA), the American Library Association (ALA), the European Foundation for Management Development (EFMD), CEEMAN (Central and East European Management Development Association), and many more.

#### 2.0 Open Access (OA)

- 2.1 Emerald has a strong record in protecting the copyright and intellectual property of its authors, which numbered over 19,000 in 2012, publishing 8,601 articles. It has long held a RoMEO Green status for its journal articles (see 2.2 and 2.3 below), which recognises its generous approach to author access and use of their own work. Emerald has consistently been given high percentages of full copyright clearance from its authors; this has enabled us to disseminate their work as widely as possible through our established channels and with third parties. We clearly explain these benefits to our authors for example in 2012, over 99.4% of articles published had full copyright assigned to Emerald.
- 2.2 Emerald has a number of OA initiatives that it has developed in conjunction with its stakeholders that it has developed and run with some success, balancing the needs of the communities it serves with those of its customers:
  - Emerald has an agreement with strategic partner IFLA that allows it to publish articles from its prestigious conference in Emerald journals, and in return Emerald allows those articles to be made openly accessible just nine months after publication.
  - Emerald also has an agreement with the Bill and Melinda Gates Foundation that allows it to publish articles journals and be made openly accessible, with a similar nine month embargo period to the IFLA agreement
  - Every journals offers two free articles from the previous twelve months on its homepage, which can represent up to 20% of annual content
  - For over a decade, Emerald has adopted the Sherpa RoMEO Green status, which
    enables all its authors to place the non-published PDF versions of their articles on
    websites or in repositories. Importantly, it places no embargo on the ability of
    authors to do so, so they can promote their own work as soon as it is published,
    with the correct attribution to the published version.
- 2.3 Emerald's Green RoMEO status was originally adopted through recognition that its authors would want to promote their research and help support both institutional and subject repositories. In particular, it was informed through its close relationship with librarians, and the status reflects the symbiotic relationship Emerald has with them and other author groups. Emerald recognises the need to share information beyond its direct customers, but without the immense value its Editors, boards, journals, books and peer review networks provide in acknowledging the best research in all the disciplines it covers, this delicate Eco-system would collapse.
- 2.4 Given our position, Emerald cautiously welcomed the Finch Report in 2012, however the RCUK's adoption of it seemed too rapid for a full understanding of all the consequences of the recommendations made.
- 2.5 Furthermore, Emerald has been dismayed by the lack of clear guidance and simple information ahead of the April 2013 deadline for granting OA status to publicly funded research. As this report is being written in mid-January, there are still questions that remain unresolved, which has meant that planning for the changes by the organisation has been almost impossible, which in turn leads to dangerous instability and exposure in the market. These questions include:
- I. What support will be available to authors to cover Article Processing Charges (APCs)?

- 2. What level will APCs be set at?
- 3. Will there be a level set? Will it be determined by discipline?
- 4. Will non-UK-based co-authors be included in the mandates?
- 5. What penalties will imposed on authors who do not make mandated research OA? What penalties would publishers face?
- 2.6 Emerald has been constantly reviewing its options with regard to OA for many months and years, and has undertaken research with its stakeholders in order to understand their needs regarding OA, and how might it best serve them. The research\* it has completed has shown the following:
  - There is a very high recognition rate of Open Access, with 88% of Emerald authors aware of it
  - The most recognised OA model was 'Gold' with over half of respondents familiar with the term
  - Only 38% were aware of 'Green' OA models
  - While 40% of authors were 'very likely' or 'likely' to use either Green or Gold OA options, 42% were 'not very likely' or 'not at all likely' to use Gold OA, and 41% to use Green OA
  - The propensity to pay OA article processing fees (without additional funding for APCs) lags greatly behind the charges being levied the survey showed the most likely price authors would pay to enable their articles to be openly accessible was between \$15 and \$50. Major publishers in the social sciences currently charge a wide range of fees that range between \$395 (Sage Open) to \$3,250 (Taylor & Francis)

[\*Survey completed in June 2012 with 888 respondents]

#### 3.0 Implementation

- 3.1 As part of the announcement of the short enquiry, four key issues were identified by the committee. Emerald will address each of these four issues in turn below.
- 3.2.1 Issue 1: 'Support for universities through funds to cover article processing charges'
- 3.2.2 As noted above (para 2.5), Emerald has been disappointed by the lack of any clear guidance on many issues around the implementation of the Finch Report by RCUK, however the most acute of these has been the lack of clarity around APCs. Like many publishers, Emerald is keen to develop new business models in order to adapt its existing systems and programmes to the new RCUK directive, however this has been made virtually impossible by the absence of any real information around how APCs will be funded, distributed to authors and in turn paid to publishers to enable articles to be published in an OA environment.
- 3.2.3 Specifically, Emerald would like to understand how the following will work:
- 1. The latest information suggests only 45% of APCs will be funded in the first year (2013-2014) why not all APCs?
- 2. Which authors will receive this funding initially? Will it be by subject area? Will these subject areas be, as has been mooted, be the science, technology and medical (STM) disciplines?

- 3. Funding of APCs will apparently increase to 75% after a period of time against what criteria will be funds distributed to authors?
- 4. What is the process for authors to apply for additional funding for APCs? How long will this process take? Will it be done directly by authors or through their universities or research institutions?
- 5. Will there be a minimum or maximum level of APCs? Will publishers be able to levy any fee? Will there be any guidance on acceptable fee structures?
- 6. Will the levying of APCs differ by discipline? Will the type of peer review undertaken be taken into account in the setting of APC levels?
- 3.2.4 It is intolerable for any organisation to have so much uncertainty just a few months ahead of such major changes to the structure of the market it operates in.
- 3.3.1 Issue 2: 'Embargo periods for articles published under open access'
- 3.3.2 It was stated above (para 2.3) that Emerald has for over a decade allowed its authors to deposit their articles in repositories and elsewhere without embargo. The adoption of RoMEO Green status has meant that many authors have shared their work outside of academia with interested third parties, and given the areas Emerald publishes this will have benefited UK organisations and many further afield, as well as British society more widely.
- 3.3.3 The nature of this policy, however, depends on a delicate balance between openly accessible content and the ability of Editors and publishers to define, improve and promote the very best research. Again, there is uncertainty around some of the details of RCUK's implementation of the Finch Report, specifically around embargoes and how workable these will be. While Emerald does not currently operate an embargo, it readily understands the protests by History Editors recently as to the differences their subject area has in the 'churn' of research, and the need to impose a longer embargo period of 36 months.
- 3.4.1 Issue 3: 'Engagement with publishers, universities learned societies and other stakeholders in developing the new open access policies'
- 3.4.2 Emerald has a very strong relationship with industry bodies such as ALPSP and AcSS, and as such has attended several training sessions and fora on the issue of Finch. We have also followed their communications closely, as well as those of the Government, RCUK, university representatives and the many higher education commentators who regularly post information. That being said, the lack of clear guidance from RCUK on the imminent changes, as well as the absence of any direct dialogue whatsoever with Emerald, has been frustrating for the organisation.
- 3.5.1 Issue 4: 'How the Government should address the concerns raised by the scientific and publishing communities about the policy'
- 3.5.2 The rapid nature of the adoption of Finch's recommendations has meant there has been little time for publishers and academics alike to digest the proposed changes. This is not to say the many stakeholders in this process have not raised questions or voiced criticisms of the plans, and this document represents Emerald's thoughts on the matter.

- 3.5.3 Touching on some of the concerns that have been raised, and perhaps some new ones, the following points represent Emerald's communication to the Government and its recommendations as to how it should at for the overall benefit of all parties involved.
- 3.5.3.1 Delay implementation. The speed of adoption has thrown many parties in academia, learned societies and publishing into confusion, especially given the lack of guidance and clarity around the new regulations. As a minimum consideration, we would recommend that the implementation of the Finch Report by RCUK is delayed until 2014 to ensure these problems are navigated successfully.
- 3.5.3.2 Provide clear guidance around funding of APCs. As indicated in the text above (para 2.5), there are still a number of questions outstanding around APCs. Any organisation has to be able to plan at least a few months ahead for major changes to market conditions, and it is both unfair and unjust that these questions remain to be answered just a few weeks before implementation. Emerald therefore recommends that as a minimum requirement, all these questions are answered with the maximum possible speed, or as suggested above (para 3.5.3.1) implementation is delayed
- 3.5.3.3 Recognise major differences in publishing across subject areas. As evidenced by the recent research on OA with Emerald's authors (para 2.6), while there is recognition of OA as an issue, there is a very mixed view in terms of which models are available (ie Green or Gold), which models would suit them and how much they could pay should they choose the Gold route. Emerald believes there is a huge knowledge gap among academics, particularly in fields such as Business and Management where the dynamics around funding of business schools (with more diverse revenue streams and very little public funding) differ markedly to the funding of scientific departments in universities. We therefore recommend that research is undertaken to further understand these differences between subject areas, and any implementation by the RCUK fully takes into account these differences.

#### 4.0 Conclusion

- 4.1 Emerald is grateful for the opportunity to contribute its comments on the implementation of the Finch Report by RCUK, and would be more than happy to take any further part in the inquiry should the committee wish to include it in its further investigations.
- 4.2 In summary, Emerald believes that due to the lack of information and guidance, as well as the speed of adoption of the Finch Report by RCUK, its implementation should be delayed until at least 2014. More specifically, clarity on the processes around APCs is of critical importance, in addition to the commissioning of research to further understand the differences between subject disciplines, especially those unique factors in the business, management and economic areas. Should these concerns be fully alleviated, the potential impact on the delicate balance between research and publishing that has enabled the UK to thrive on the global stage can be maintained, for the greater benefit of the UK Higher Education sector and the UK's interests as a whole.

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### The Working Group on Expanding Access to Research Publications

- I. We are submitting evidence on the basis of our roles in the Working Group which published the report in 2012 entitled Accessibility, Sustainability, Excellence: how to expand access to research publications. This is widely referred to as the Finch Report.
- 2. The Working Group was made up of representatives of the higher education (HE) sector, research funders, the research community, learned societies, publishers, and libraries. It was set up on the initiative of the Department of Business, Innovation and Skills, but operated independently, with its own secretariat. Its remit was to examine how to expand access to peer-reviewed publications that arise from research undertaken both in the UK and in the rest of the world, with a particular focus on articles published in scholarly journals; and to propose a programme of action to that end.
- 3. Dame Janet was appointed as a Chair who had no previous active engagement with debates in this area, and thus came to the process with an open mind. Dr Michael Jubb, on the other hand, has been Director of the Research Information Network (RIN) for the past eight years, and was appointed as Secretary because of his independent expertise in matters relating to research communications.
- 4. The Working Group's remit was completed when the report was published. Neither of us has been directly involved in the implementation of the recommendations. However it has been agreed that the Working Group will reconvene one year after the publication to review progress, again chaired by Dame Janet. In view of the need to remain independent in order to undertake this, she is deliberately keeping an open mind on a number of points which the House of Lords Select Committee has raised in its call for evidence.

#### Recommendations of the report

- 5. Our report was based on the principle that the potential social and economic benefits of high-quality research could be maximized by making the published results freely and rapidly accessible, with minimal limitations on their use. We regarded this principle as compelling and fundamentally unanswerable. It is also widely accepted.
- 6. We also recognised that research communications are already in a period of transition towards open access. Our aim was to find ways to accelerate that transition, but also to sustain what is valuable in a complex ecology with many different agents and stakeholders, by managing the transition in an orderly way.
- 7. In its make-up, the Group sought to represent the key groups of stakeholders with interests in research communications. In our deliberations, we acknowledged their different interests and perspectives, and that there are tensions between them. We recognised, therefore, that there could be no solution that was perfect for all the stakeholder groups. Rather, we sought a best-fit solution based on clear principles and criteria, but which acknowledged the differences and tensions.

- 8. Our strong view was and is that the UK should embrace the transition to open access. We do not believe that the status quo is stable, nor that the process of change could or should be put into reverse. Rather, the Group recommended that we should seek to accelerate the process in a measured way, which promotes innovation but also sustains what is most valuable in the research communications system.
- 9. Some of the responses to our Report have been framed as if our sole focus was on support for a rapid move towards 'Gold' open access; that is, the model where the costs of publishing journal articles shifts from readers to authors in the form of Article Processing Charges (APCs). In fact our key conclusion was that, for the foreseeable future, no single mechanism alone could meet the success criteria that we defined as:
  - increasing accessibility and usability for publications both from UK and overseas authors;
  - sustaining high-quality publishing and dissemination services for both authors and readers; and
  - financial sustainability for publishing but also for HE and research funders.
- 10. So we envisaged a mixed economy, in which measures to expand access would include support for publication in Gold open access journals, extensions to licensing, and the further development of repositories. Within that context, we did indeed recommend that "a clear policy direction should be set towards support for publication in open access or hybrid journals, funded by APCs", and that the Research Councils and others should establish more effective and flexible funding arrangements to that end. A full list of our recommendations is at Annex A.
- II. Thus we presented what we believe is a balanced package of recommendations which involve compromises and trade-offs on the part of each of the key groups of stakeholders in the research communications system, whilst offering a clear longer term vision. We stressed the importance of not taking any single measure in isolation, not least because effective progress depends on continuing co-operation and goodwill between all the parties.

#### **Implementation**

- 12. Our report was framed as a first step in setting the direction for coordinated action on the part of all the key stakeholder groups, in a process which inevitably would be complex.
- 13. In submitting evidence to this inquiry we are mindful that the process of implementation is still at a relatively early stage, and the current tone of debate reflects this. The stakeholder groups in this arena have different interests, and different criteria for their preferred outcomes. It is vital therefore that dialogue should continue, to mitigate the risk that each stakeholder group retreats into a focus on its own interests and to ensure that a focus on the bigger picture is maintained.
- 14. The rest of this submission addresses the specific questions posed by the Select Committee.

# Support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

15. It was fundamental to our recommendations that the costs of publication should be accepted explicitly as part of the costs of research and therefore ultimately be borne by research funders. However we saw Universities, the employers of researchers who

undertake most publicly-funded research, as the parties who should take responsibility for the payment of APCs. It was therefore necessary to devise a mechanism for Universities to perform this role in a flexible way, and the creation of publication funds was our preferred solution.

- 16. Within this overall approach there are two linked elements: (i) identifying funds to be used to pay APCs (ii) distributing those funds. Universities have a key role in both elements, but the creation and operation of publication funds is new territory for them. It is right that they should now be working with research funders and other relevant parties to develop the practical details of how this system will work. It is also to be expected that this will take some time to become embedded in University processes.
- 17. In relation to (i) we envisaged that University publication funds would be garnered from several different sources. The most direct source would be from the Research Councils and other project funders who would allocate a proportion of research grant funding for this purpose (as the Wellcome Trust have been doing since 2007). It is greatly to the credit of Research Councils UK (RCUK) that it recognised the necessity of finding a way, within the constraints of public expenditure rules, to allocate funds that are not hypothecated to meet the costs of specific publications. This is a key element of our recommendations, as it permits Universities to use publication funds flexibly.
- 18. It would be wrong however to assume as some commentators have done that the proposal about publication funds concerns only project grants. Our report anticipated that Universities would build up publication funds from a range of sources, including discretionary income where they wished to do so, and importantly from Funding Council sources (that is, HEFCE QR funds). This stream of research funding is already non-hypothecated, and commonly supports research through the payment of an element of researchers' salaries. This is of particular importance in research funding for humanities and social sciences. It represents an important element of public funding for research and is therefore covered by our proposals.
- 19. In relation to (ii) above we anticipated each University would wish to set its own policies and priorities for distributing publication funds to pay APCs. As we indicated in our report, they will need to take into account how this relates to other aspects of their research strategy (such as their support for early career researchers, for example).
- 20. We do not underestimate the challenges which this poses and we are aware of work under way within institutions to gear themselves up for these developments and to develop the infrastructure which supports them. It was very helpful that the Government recognised the need to fund set-up costs for these new arrangements in the award of a one-off £10M in the September 2012.
- 21. We are aware of some criticisms of the Government's decision to confine these funds to 30 institutions, but we recognise that the effect is differential across the sector. Under an author-payments system, proportionately greater costs will be borne by those who produce the most research-based publications. Institutions which are smaller and/or less research intensive will bear fewer costs as research producers; they would also benefit from the extension of licensing which forms a part of our recommendations. We acknowledge that the allocation of funding reflects these distributional effects across the system.

#### Embargo periods for articles published under the Green model

- 22. The length of embargo periods was a key issue for the Working Group, and goes to the heart of the subscription-based business model. In this model, payment flows at the end of the production process, when a copy of a journal is purchased by a reader, either directly or by a library on her behalf. The business model therefore depends on restricting access to those who have paid for it. If to take the most extreme case a subscription journal were available on the day of publication to anyone who wished to read it, the publisher would soon go out of business.
- 23. It was for this reason, in recognition that the business model can be pushed only so far before collapsing, that we were led to favour the alternative business model which underpins Gold open access publishing. Here the funds flow at the beginning of the process, when an article is accepted for publication. Costs are recouped and surpluses generated at that stage, so there is no reason to place any restrictions on access at the point of publication, thus delivering on our core objectives more sustainably.
- 24. However we anticipated that both models would co-exist for the foreseeable future. That means that, if the Green model is to make any contribution to expanding access, the length and the nature of embargoes needs to be addressed. It is clear that there have to be embargoes. Essentially the judgement to be made is how far they can be limited before they fundamentally undermine the business model. There is clearly potential for disagreement here, and we are not surprised to see that this issue is now being eagerly discussed. Different sectional interests are bound to be prominent in these discussions.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of Research Council open access policies and guidance

25. As neither of us is involved in the implementation of the proposals, we have no direct knowledge of these issues. It is difficult therefore to make any meaningful comments, save to underline that our report emphasized the importance of all parties working together during the implementation period.

# Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed.

- 26. We are aware of a number of challenges and concerns, many of which were also considered during the Working Group's deliberations. They tend to reflect the perspectives of different stakeholder groups, whereas we were charged with bringing different perspectives together in a workable system. In addition to these different stakeholder perspectives we are conscious that, especially within the academic community, there are some passionately-held beliefs about open access (with varying emphases), and these are prominent in current debates.
- 27. Of the challenges raised by scientific communities we will comment on: effects on different disciplines; perceived threats to academic freedom; the costs of the Gold model.
- 28. As we indicate above, we are quite clear that our recommendations apply across the full range of academic *disciplines*, irrespective of how research gets funded; if the publication arises from research funded from the public purse (directly or indirectly) then it is included. However there are big disciplinary differences in publication conventions and modes. Our recommendations are confined to journals and refereed conference papers, and explicitly exclude monograph publishing, on the grounds that currently very little of this is in

electronic form. The balance between books and monographs varies significantly between disciplines, but all disciplines have some publications in journal form. The current take-up of Gold open access varies globally, from around 14% in medicine to around 3% in physics and astronomy (and probably less in the humanities). Given these varying starting points, our report anticipated that there would be different speeds of travel across the disciplines, and recommended that the implementation process should take account of this. We also recognised that embargo periods might need to vary by discipline.

- 29. We were sensitive in the Working Group to any suggestion that academic freedom could be compromised by our proposals; indeed one of our success criteria was that the high quality of UK research and publications should be maintained in any new publishing model. The main focus of currently articulated concerns appears to be fears about how Universities will operate their publication funds. It is primarily for the Universities to address these concerns within the context of their overall research strategies, which already of course include a proper interest in researchers' publications. Our Working Group considered that there is nothing intrinsic in our balanced package of proposals which threatens academic freedom.
- 30. The cost of Gold open access has been the focus of attention by a number of critics, particularly those constituencies which favour the Green model, some of them with passionate conviction. In reality the costs funding of Gold open access are difficult to estimate in either the short or long term, as they depend not only on the price per article but also on factors such as the speed of change internationally. Whilst there would also be cost savings as the proportion of publications in subscription journals reduces, clearly there are additional costs in the transition in period when both systems are running together.
- 31. Under both the subscription model and the Gold open access model, the costs fall more heavily on Universities than on other users of research. It is fair to acknowledge that under the Gold system this is accentuated because Universities are also primarily the producers of research publications. It is also realistic to acknowledge that the UK, which punches above its weight internationally in terms of research publications, will bear a greater proportionate cost in an author-payment system. For this reason it is very important that the costs of subscription journals are controlled as Gold open access expands, in order to keep in check the costs to the UK public purse of the publications system overall.
- 32. Some advocates of the Green-only model argue that it is cost-free, or with very low costs, but our Working Group did not accept this argument. The fully-fledged Green model depends on an effective infrastructure of interlinked repositories as the route for accessing publications, but an infrastructure of this kind is certainly not cost free to establish and run. The Green system also depends on the continued purchase of subscription journals.
- 33. Challenges raised by *publishing communities* tend to focus on: embargo periods (on which we have already commented); the implementation process itself; the potential detriment to learned societies. In relation to the *implementation process*, publishers have been concerned that there is no focus for holding together the process, across the various organisations which have to take action. We agree that coordination is important, and are pleased that there is to be a series of stakeholder forums, the first one of which will take place shortly.
- 34. The position of *learned societies*, in their role as publishers, was considered in some detail in the working group. It was a difficult matter to resolve and has understandably continued

to be a focus for concern. The essence of the problem is that many learned societies use the profits from publishing to fund other academic activities; whilst some might envisage a straightforward switch to a Gold open access business model, realistically others could not expect to generate the same level of profitability if they did so. The Working Group took the view that different solutions will be appropriate for different organisations, but that it is important to allow time in the transition period for learned societies to adapt their business model where that is appropriate.

10 January 2013

#### Annex A

#### The 'Finch Report': List of recommendations

Our view is that the UK should embrace the transition to open access, and accelerate the process in a measured way which promotes innovation but also what is most valuable in the research communications ecosystem. The process itself will be complex, since as the transition develops over the next few years, no single channel can on its own maximise access to research publications for the greatest number of people.

#### We therefore recommend that:

- i. a clear policy direction should be set towards support for publication in open access or hybrid journals, funded by APCs, as the main vehicle for the publication of research, especially when it is publicly funded;
- ii. the Research Councils and other public sector bodies funding research in the UK should following the Wellcome Trust's initiative in this area but recognizing the specific natures of different funding streams establish more effective and flexible arrangements to meet the costs of publishing in open access and hybrid journals;
- iii. support for open access publication should be accompanied by policies to minimise restrictions on the rights of use and re-use, especially for non-commercial purposes, and on the ability to use the latest tools and services to organise and manipulate text and other content;
- iv. during the period of transition to open access publishing worldwide, in order to maximise access in the HE and health sectors to journals and articles produced by authors in the UK and from across the world that are not accessible on open access terms, funds should be found to extend and rationalise current licences to cover all the institutions in those sectors;
- v. the current discussions on how to implement the proposal for walk-in access to the majority of journals to be provided in public libraries across the UK should be pursued with vigour, along with an effective publicity and marketing campaign;
- vi. representative bodies for key sectors including central and local Government, voluntary organisations, and businesses, should work together with publishers, learned societies, libraries and others with relevant expertise to consider the terms and costs of licences to provide access to a broad range of relevant content for the benefit of consortia of organisations within their sectors; and how such licences might be funded;
- vii. future discussions and negotiations between universities and publishers (including learned societies) on the pricing of big deals and other subscriptions should take into account the financial implications of the shift to publication in open access and hybrid journals, of extensions to licensing, and the resultant changes in revenues provided to publishers;

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- viii. universities, funders, publishers, and learned societies should continue to work together to promote further experimentation in open access publishing for scholarly monographs;
- ix. the infrastructure of subject and institutional repositories should be developed so that they play a valuable role complementary to formal publishing, particularly in providing access to research data and to grey literature, and in digital preservation;
- x. funders' limitations on the length of embargo periods, and on any other restrictions on access to content not published on open access terms, should be considered carefully, to avoid undue risk to valuable journals that are not funded in the main by APCs. Rules should be kept under review in the light of the available evidence as to their likely impact on such journals.

#### Professor Dame Janet Finch - Oral evidence (QQ 1-16)

Evidence Session No. 1 Heard in Public

Questions I - 16

#### TUESDAY 15 JANUARY 2013

#### Members present:

Lord Krebs (Chairman)
Lord Broers
Lord Cunningham of Felling
Lord Dixon-Smith
Baroness Hilton of Eggardon
Lord Patel
Baroness Perry of Southwark
Lord Rees of Ludlow
Earl of Selborne
Baroness Sharp of Guildford
Lord Turnberg
Lord Willis of Knaresborough
Lord Winston

#### **Examination of Witness**

Witness: **Professor Dame Janet Finch**, Chair of Working Group on Expanding Access to Published Research Findings.

**QI** The Chairman: Welcome. Thank you very much for coming to speak with us. You understand that we are doing a one-day session on open access later this month and, as a prelude to that, you have very kindly agreed to come and brief us on the Finch report.

Just to be clear, and I think this has been explained to us, we are not questioning the whole open access agenda; we accept that as a given. We are not questioning the recommendations of the Finch report. We are very much focused on the current plans for implementation and the concerns that have been raised with us by various stakeholders, which you allude to in your written evidence. We recognise that you are not able to comment at this stage on implementation, because I believe you will be commenting to BIS later in the year, but what you have kindly agreed to do is, in a sense, give us a bit of background by describing the process by which you reached your conclusions and a summary of what the recommendations were. This is very much for us a bit like a seminar, an information-gathering exercise, and we would like to invite you to kick off with however long it takes you—maybe I0 minutes or so—to set out the recommendations and the process, and then we will pick up on a few points with a few questions after that, but it is not meant to be a cross-examination; it is meant to be information-gathering.

**Professor Dame Janet Finch**: Thank you very much indeed and thank you for agreeing to take my evidence today. I think you know that I will be out of the country speaking on the topic of open access on the 29th, when you are having your main evidence day. I am happy to begin by setting out the issues that you asked me to set out. The first one was how the group was set up. It was commissioned by BIS, but explicitly to be independent of Government and, indeed, independent of all specific interests. The problem to be tackled has been long-recognised but not previously resolved, although there have been previous attempts to try to make progress, I understand. The specific reason for doing it now, I think, is the link with Government transparency initiatives. From a Government perspective, it is part of their commitment to open up information of various sorts that is held by and within Government and funded by Government. That is, to some extent, particularly poignant as far as research publications are concerned, because most research in this country is funded by the taxpayer, one way or another. We are, just to be clear, only talking about publicly funded research here. All our recommendations relate to publicly funded research. There is quite clearly a moral case, which the Government is very seized of, which says that, if the taxpayer has paid for the research, then the taxpayer should have free open quick access to it.

Alongside that, in setting up the group, there was also a widespread recognition that the expectations of how we access information of all sorts are changing so radically. The internet has changed everything essentially, as far as getting hold of information is concerned. Increasingly, it is anomalous that research-based information is not available in a similar way to other sorts of information, unless there is some specific reason, such as security issues. Our remit was that we were charged with recommending how to develop a model that would be effective and sustainable over time for expanding access to the published quality-assured findings of research. This is the published, peer-reviewed essentially, findings of research, and how to expand access to that information. Our remit was the "how", not the "whether". We were not asked to debate whether it was a good thing or not. We were asked to advise on how it would be possible to make this happen to enable more people in organisations outside academia, as well as inside academia, to access research-based publications free at the point of use, whilst avoiding the potential pitfalls of making any changes in this arena. That was a stimulus for the setting-up of the group and what our remit was.

You asked me to say who sat on the group and how they were selected. Well, the template for membership was developed before I was invited to chair it. I had no previous direct involvement on anything to do with open access publishing, and so came with an open mind. I did do it on a pro bono basis, so I was not in any way beholden to anybody in my role as Chair. The Research Information Network was asked to provide the secretariat, on the grounds that they had extensive specialist knowledge of this area, and it was enormously important that they were there. It could not have been done without their input. The template was concerned to ensure that all relevant constituencies were represented on the group, and I was concerned to ensure that the representatives were at a sufficiently senior level that they would be able to speak for their constituencies with some authority. Where possible, we asked representative bodies to nominate suitable people. The actual letters of invitation were issued by Sir Adrian Smith in his previous role.

Membership of the committee included the following: three publishers, who were nominated by the Publishers Association; research funders—HEFCE—Research Councils UK and the Wellcome Trust, which agreed to represent other major charity funders; the academies, with the Royal Society representing the British Academy as well; learned

societies—here we were looking for a disciplinary spread but also learned societies that had major publishing activities, so we had one member from the Society of Biology and the other from the Royal Geographical Society; universities, whose representatives were nominated by Universities UK; and finally libraries, where the nominees came from Research Libraries UK and the British Library. We had a wide-ranging senior group of people who were able to speak for their own constituencies.

What process did we follow? We completed the process in slightly less than a year. We had five full meetings of the whole group. We formed three sub-committees at different points in the process—one on licensing, one on repositories and one on gold open access—and we invited people who were not part of the main group to be part of those sub-groups. We gathered a lot of information through the secretariat and through members of the group, who provided information that they had at their disposal from within their own organisations. Separately, we commissioned some economic modelling from Cambridge Economic Policy Associates. That was how we gathered our information.

In terms of the way in which the process worked within the group itself, we recognised at an early stage that the different parties legitimately have very different interests in this field. We tried to get all that out on the table at an early stage and acknowledge where the different interests lay and recognise the difficulties of trying to reconcile them. We also agreed early on that we would never find a solution that was going to satisfy everyone. Indeed, we also accepted that we were not going to find a solution that would be perfect for any constituency, but that our aim was to try to identify a way forward that everyone could live with. I believe that is what we did succeed in doing.

In order to get there, we developed some success criteria, which we all agreed, and then we sought the best-fit solution against those success criteria. Those criteria were nine in total but fell into three main categories. There should be wider access for more people and more organisations to get quicker and better access to more global publications, free of charge. The second one is that it should be financially sustainable for publishers and affordable for funders and universities. Thirdly, nothing should be done that would undermine the excellence of UK research and publications, or services to readers and authors. At each stage, we encouraged members of the group to take back interim discussions to their own constituencies to test out the conclusions, so that we knew what the reaction was going to be as we went along, and we published the minutes of our meetings quickly on our own website.

The final area is the key conclusions and recommendations. Our main conclusions were that the present system of scholarly publications is unstable and that we need to recognise this, embrace change and manage change in a measured way. We concluded that no single model alone would meet all our criteria, so we should anticipate a mixed economy for the foreseeable future. The phrase "mixed economy" was absolutely central to our recommendations. That means the subscription model of publishing co-existing with the model based on author payments, the so-called "gold" open access. Within this context, we recommended that the policy direction should be set towards gold open access. That was obviously the most eye-catching recommendation, but it was set within the overall recommendation of the mixed economy for the foreseeable future. We envisaged that the balance between the two types of model would shift over time, and our specific recommendations, which you have in the written evidence, were designed to make that mixed economy work to best effect during the transition period. We believe that we put forward a balanced package of measures.

Just finally, perhaps I should say something about our reasons for reaching those conclusions. We asked ourselves the question: could we make the subscription model of publishing work on its own? The answer was no for the following reasons. It is already being eroded by the rapid development of gold open access and we cannot turn the clock back, so we are not starting with 100% subscription model. In order to expand access within the subscription system, we would have to find a mechanism for access by people who are not members of a university. If you are a member of a university, you get ready access via a university library to journals that the library purchases, but people who do not have that access are the ones who we are concerned about. In the subscription model, the recommended route is repositories—institutional repositories and subject repositories the so-called "green" open access, but they can only provide limited progress towards the success criteria that we set out. The reason why access under the green model is bound to be limited is actually the business model that underpins subscriptions. Because a subscription model depends on the funding for the publications coming from the reader, or normally somebody who purchases a journal on behalf of the reader, money flows at the end of the process, and enough journals have to be purchased in order to make it viable. Access has to be restricted under this business model until those who have paid for the journals have done so and the funds have flowed back to publishers. Therefore, we get embargos of various sorts, and I am sure you are interested in embargos. That is why the subscription model, on its own, cannot be made to work against the criteria that we set out.

We preferred the gold model essentially because it has a different business model underpinning it, so instead of the funding of publications coming from the reader, the funding of publications comes from the author or, again normally, somebody paying on behalf of the author, and the money flows at the beginning of the publication process, when the article is accepted for publication. That means that the money is recouped at that stage, with any surplus or profits that are appropriate, and then, once it is published, there is no need to place any restrictions on the published work.

Why did we not say gold would work on its own and forget about subscriptions? Essentially this is to do with the rest of the world and the transition process. If we were going to go only for the gold model, the rest of the world would need to move as quickly as we are. Currently of course, we have a split—these were the figures we were working on at least—with 6% of articles published worldwide by UK authors; and therefore 94% are not. Whilst part of our objective was to ensure access to the 94% that are published by non-UK authors, there has to be a continuing role for the subscription model. That was the main reason why you cannot go for gold on its own; we need to make subscription journals available so that global research outcomes are available within the UK. We also felt that it is self-evident that to try to move very rapidly towards a gold-only publication system would certainly destabilise the publication system, and that is obviously not desirable. That is probably where I should stop, Chairman. Obviously you are going to ask me questions about that and a number of other things.

**Q2** The Chairman: Thank you very much indeed. Maybe I could kick off. Before I say anything else, I should declare interests that are on the printed list of interests available to members of the public. I declare interests as a member of Oxford University, Principal of Jesus College and professor of zoology; as a trustee of the Nuffield Foundation, which is a charity funding research; and as a fellow of the Royal Society and the Academy of Medical Sciences, both of which have expressed views about open access.

I want to go back, Janet, and ask you about evidence-gathering. As I understood it from your description, you did not have a formal call for evidence, but you relied on the networks of the members of the working group and you also did some economic modelling, you said. In preparing the report and now looking several months on at all the objections that are being raised to the implementation, were those things that you had anticipated from the evidence that you had heard? I think you say in your written evidence and you have said again today that you could not possibly reconcile the conflicting aspirations of, on the one hand, commercial publishers, on the other hand, university academics and, on the third hand, learned societies. Have you felt that the protests that have come up are just the kinds of things you would have anticipated when you submitted your report to BIS or have new things come up that you had not anticipated?

**Professor Dame Janet Finch**: I honestly could say that I have not seen anything that we had not anticipated and, indeed, in most cases, already talked about in the working group. From that point of view, I honestly cannot think of anything. It is, however, very understandable that, when this goes live, so to speak, in the implementation process, these various issues are the ones that are likely to be a source of concern and prominence, and I completely understand that. If the implication of your question is whether there was a flaw in our processes in collecting evidence and we missed major things, I honestly do not feel that we did. The report itself indicates that that is the case.

The Chairman: From what I have heard and read, quite a lot of it is about the devil in the detail, particularly around embargos. Did you and the group discuss the devil in that detail, because you did have publishers and you did have learned societies and other stakeholders, for whom these details were incredibly salient at that time? You did make recommendations about embargo periods. Were you aware that that detail would then possibly begin to unravel later on?

**Professor Dame Janet Finch**: We were acutely aware that this would be one of the pinch points, so to speak, if I may put it that way, in the implementation process. We did spend a lot of time, in several meetings, talking about embargos, and the recommendations that we came up with were worked through very carefully, with some rigorous discussion from all parties. We had quite a lot of information about it. I think I said that one of the members of the group was from the Royal Geographical Society, and she kindly produced some modelling from their angle about how they would be affected, and we were able to take that into account in our discussions. Everybody recognises that this is a difficult issue to resolve, but I think that the way that we pointed forward is the right way forward in principle. It was not that we could not; I do not think we should have gone any further than we did in specifying what the detail should be because, after all, it is for the research funders to make their own decisions about their requirements, and that is what is happening now.

Q3 Lord Rees of Ludlow: I declare an interest as a member of Cambridge University, of all four Academies and of the Institute of Physics. I would just like to ask a very general question. I think the academic community and everyone else is in favour of open access in principle, and suspects it will gradually come about in this period of transformation and disruption in publishing, because of the internet, as you mentioned. As regards the implementations you recommend, many people are concerned that they are going to lead to a huge amount of petty accounting within all universities and petty administration and regulation by the research councils, which will have to check what the universities are doing and that every journal is actually enforcing the embargo as they are supposed to. It is going

to be a huge burden. I wonder if you really think it is all worthwhile, given that the goal will probably come about anyway in ways we cannot completely predict.

**Professor Dame Janet Finch**: Do I think it is worthwhile? As to the petty accounting point, I will not comment on that in any detail, because it is for universities and research funders to make sure that they do not get into that downward spiral. Is it worth it, given that it is going to happen anyway? It is the instability of the existing system that persuades me that it is worth taking some action. Although this will probably happen anyway, it will happen in ways that could undermine the excellence of research publications; it could undermine the sustainability of various different parties to that. We felt that it would be better to get hold of some of the levers of change and to try to manage that in a collective way, rather than allowing the situation to drift in which publishers would be doing one thing, universities would be doing another thing, government might be trying to restrain them over there. It is better if we could get the different parties to this very complex publication ecosystem working together to manage the change, rather than letting it just happen.

**Lord Rees of Ludlow:** You could make the counterargument that, if it is going to happen, it is best to let it happen naturally, since you cannot predict the outcome and since it is complicated internationally, et cetera. By impeding the natural endpoint, this may actually lead to greater problems.

**Professor Dame Janet Finch**: I guess you could make that argument, but I think I made it clear that we were given the remit to advise on "how", rather than "whether", so that is what we did.

**Q4 The Chairman:** Going back to another aspect of the cost and benefits, you commissioned some economic analysis. One of the comments, the criticisms I suppose, of the implementation is that money will be taken away from research, because RCUK is dedicating money to support open access. At the same time universities, as you have explained, will have to continue with their subscriptions to journals because the UK is only publishing 6% of literature, so universities are not going to save money on library subscriptions. In other words, there will be a net loss of a few tens of millions to research income for universities, which is now being channelled into open access. I wondered whether the economic analysis you did looked into the costs and benefits of that. Was that a question you addressed?

**Professor Dame Janet Finch**: We did not do a very formal cost/benefit analysis, but we looked at both the costs and benefits. We were actually able to draw on one or two other pieces of work that had been done previously. I think I said that the Research Information Network supporting this had been able to access a number of other pieces of work that were helpful to us here. Let me just say that the costs that we estimated for the transition period, first of all, depend on a number of assumptions, which we made very clear could vary. We provided some sensitivity analysis in our economic modelling. The base case of our economic modelling did actually show that, with certain assumptions that seemed not unreasonable, ultimately the move to go to open access would be cost-neutral for the universities. That is, with 23% of publications going through the gold open access route, if the rest of the world moved at a speed that was reasonably similar to ours and—what was the other assumption? Just let me remind myself. The level of article processing charge is set at the figure that we were using, which was £1,450 per article. These assumptions formed our base case and the modelling showed that, if those assumptions were correct, then the outcome eventually would be cost-neutral.

The costs are in the transition period when, as you say, universities are still buying subscription journals that contain material from other parts of the world and some published by British authors as well, because we do envisage that both models will continue side by side. It is not unreasonable, and we certainly anticipated that this was the sort of thing that would happen, that the cost of subscription journals to UK universities, let us say, might be less under a system where quite a significant amount was being paid to publishers for gold open access. There is a negotiation there that needs to take place. We certainly all anticipated that that would be the sort of negotiation that would take place.

**Q5** Lord Broers: Given the fact that the world is incredibly interested in world rankings of universities, perhaps inappropriately so, did the group consider the potential impact of the world rankings of UK universities, particularly given concerns that there may be financial restrictions on publication in top journals as a result of open access?

Professor Dame lanet Finch: One of our success criteria was that the quality of UK research and publications that arise from it should not be in any way undermined by any changes, so we certainly did from that point of view accept it. In a way, if I may say so, underlying your question there are a number of assumptions about the nature of the publishing environment, which may not necessarily be what happens in practice. We do not know how the publishing environment will change over the next decade, let us say. We do not know how far gold open access journals, especially if some of the existing journals shift to gold or to a hybrid model, will play in the arena of international reputation. We do not know how various journals will react to the need to make sure that they go on attracting the best research and the best researchers, because it is a two-way process; journal reputation depends, to some extent, on continuing to get the best research in those journals. Of course, some of our existing top journals, so to speak—Nature, Science, PNAS—are already compliant with the requirements of green open access, six-month embargos for all those, I understand. We cannot necessarily think that everything else stands still in the way in which reputations of universities and their publications are perceived internationally. It is a moving picture, I would say.

Lord Broers: Is there anything particular going on in China or in India in this area?

**Professor Dame Janet Finch**: I am not an expert on that, I have to say, but my understanding is that there is interest, in China particularly and in India to an extent, in open access. We did ask ourselves whether that would provide a restraint on these changes that we envisaged, and we did not feel, on the evidence that we have, that it would. In other words, you might expect that any university or research institute that is seeking a global high reputation for its work is going to do it through whatever publication routes are currently available.

**Q6** The Chairman: Just to pick up on Lord Broers's question, if you take a ranking like the Shanghai world ranking of universities, which is heavily research-based and looks at the citations and impact factor of publications from those universities, the question is whether, supposing a scientist in a UK university is rationed so that he or she cannot put their papers in the top-ranked journals, because the dean says, "I'm sorry, we have run out of money and the top journal is a gold journal," for example, we would then slip down on the rankings. Your answer to that is: it is all terribly uncertain anyway, so we cannot tell what will happen in the domain of publishing, in the prestige of different journals, as we transition from the current green/subscription-based through to gold/green.

**Professor Dame Janet Finch**: Yes, that is my answer in terms of the big picture. To go right down to the individual case that you mentioned, obviously universities make their own decisions about what they will fund, but I find it very difficult to imagine any university that cares about its reputation, faced with a member of its staff who has had an article accepted in the top journal in his or her field, refusing to pay for it. That does not seem to me to be a terribly plausible scenario, but universities have to work through their own way of doing this.

**Lord Rees of Ludlow:** On that point, they might of course discourage or be seen to be discouraging submissions.

**Professor Dame Janet Finch**: I would make the same comment about that as well.

Q7 Lord Rees of Ludlow: I think the other point we should realise is that things are very subject-dependent, are they not? Frankly, in physics, this all could be irrelevant; we have a very fine system already co-existing with journals and free access to everything. The big problem is probably in humanities and social science, where a long embargo is required by some history journals, et cetera. Do you think that is going to be a problem, and would you like to say how you feel monographs and other kinds of publications, which are deemed important in academia, can be brought into this?

**Professor Dame Janet Finch**: To take the last point first, our recommendations do not cover monographs. They only cover journal articles and, to be quite specific, refereed conference papers where the same applies. They do not cover monographs. At quite an early stage of our deliberations, we came to the conclusion that we could not include monographs, even though it would have been good to do so. The major reason for that is that very few academic monographs are published electronically right now. Until they are, it is very difficult to include them in the sorts of recommendations that we are putting forward, so we do not include monographs in these recommendations, although we do think that, in due course, the same issues need to be looked at in relation to monographs.

In relation to the more general question about humanities and social sciences journals, it is certainly the case that there is a broad disciplinary spectrum of the starting point for gold open access. Medicine and life sciences are at the leading edge, and mathematics actually, in the sense of having a higher proportion already published in gold open access form. Humanities and social sciences would be at the lower end of what is already being done. That was one of the reasons why we emphasised that the speed of the transition is probably going to be different in different disciplines. It will take longer for humanities and social sciences journal publication to move in the direction of having at least a mixed model of gold and green, more commensurate with some other disciplines. We think that is wholly right and that time needs to be taken for those adjustments to be made. During that period, obviously they will be subject to requirements that funders make about embargo periods under green open access. There is obviously a lively debate about what is absolutely necessary there. Our recommendations were six months for STEM subjects and 12 months for humanities and social sciences. Government has actually stretched that a bit, which is fine. The Government's response to our report said that they would find it difficult to justify a period longer than two years for an embargo on publicly funded research, and it is hard to disagree with that.

**Q8** Lord Winston: Dame Janet, thank you. I just wondered whether your committee had considered the issue of how published journals in general help researchers on a slightly broader scale, not only with news and comment, but also focusing on things that are often

very unintelligible, except for the specialised reader, and also the issue of things like advertising in the professional arena, such as for jobs. I wondered whether your publishing colleagues felt that this kind of activity might be jeopardised by open access.

**Professor Dame Janet Finch**: That is a very interesting point that you raise. There already are some examples of journals that have a mixture of subscription and author payments for articles, on the basis that articles are all author-paid and therefore freely available at the point of publication, but they charge for other material, which might be reviews, review articles, some of the things that you mentioned, and analyses that are not research-based but are based on other types of secondary data. Other sorts of content of journals could be charged for; we do not have any opinions about that. Our focus is purely on research-based articles, so it is possible to produce a business model for journals that does that.

**Q9 Lord Rees of Ludlow:** Again, I am worried about all the petty administration of all this and, in particular, how do you decide what is publicly funded research? Does it include anything written by any university academic? Does it have to be on a particular research grant? If someone's on endowment does it apply? Is there not going to be a big uncertainty about what counts as publicly funded research?

**Professor Dame Janet Finch**: I am sure that this will be much debated in matters of detail, but I am quite clear and I think our working group is quite clear that it is both directly and indirectly funded research. That is the directly funded research through project funding from research councils, government departments and others that fund research on a project basis, plus that which is indirectly funded through salary support for academics who undertake research. My personal rule of thumb would be that if an academic is employed by a university and has a research requirement in her contract, then she is being part-funded to do research and it counts. I am sure that others will take a more detailed view of this.

Q10 Baroness Sharp of Guildford: You quoted the figures of 6% of authorship being UK and 94% elsewhere. What assumptions did you make about what was going to be happening in the world outside at the same time? For example, I do not know what proportion of journals are published in the UK of world ranking or ranked journals—the quoted journals that are published in the UK—as a proportion of the total world. In particular, in relation to international developments, in some senses we are giving a great gift to the rest of the world, because some of them have not moved in this direction. There are those journals that depend on subscriptions, of which, if you like, 75% or sometimes even more than that come from the rest of the world, which is getting this gift from us and paying nothing.

**Professor Dame Janet Finch**: It is a consequence of being the first mover, so to speak, that if this country wishes to embrace this policy, which the Government have said it does, then it has to be accepted that we are paying for access to other people's research and allowing ours to be freely available to the rest of the world for a period of time. For this reason, one of our recommendations is that the British Government should be very proactive in working with counterparts in key other parts of the world where major publishing activities take place to encourage similar movements. There are of course discussions, both in the United States and in the European Union, which are well advanced along these lines. That is undoubtedly the case. I am sure you will ask the Minister, when he comes to see you, the same question, but the Government apparently feel that this is worth it. Sorry, did you ask another question in the course of that?

**Baroness Sharp of Guildford:** As I say, it clearly poses problems for some of those journals where you have a very substantial international subscription element and where that journal helps to fund a community.

**Professor Dame Janet Finch**: Yes, the learned society issue, which is what essentially you are referring to, I think, was something that we spent a lot of time over. There is no doubt that there are some, but by no means all, journals produced by learned societies that will have some difficulty in finding a business model that will work in the mixed economy environment that we envisaged. There are some learned societies that are already publishing open access journals very successfully and there are others that seem to feel that they can move reasonably straightforwardly to an open access model or to a hybrid model. There are undoubtedly some, and it is a particular configuration of where the author has come from and where the subscriber has come from that does that, where there will undoubtedly be difficulties. Our recommendation in the end was that, because of that, it is important to give learned societies time to adjust to this. While I am just commenting on learned societies, it is also important to recognise that many of them publish through commercial publishers. It is not very easy to distinguish between commercial publishers' interests and learned societies' interests.

Q11 Lord Rees of Ludlow: Of course, there is an increasing proportion of papers that have authors from more than one country. In fact, I think there was a report by Gareth Roberts, which showed that those papers had, on average, more citations than when it was just people from this country. As you mentioned in your report, there is going to be an extra complication in handling those papers. Is there concern that foreigners will not want British co-authors, because there would be this extra hassle they would have to go through if they bring a Brit in?

**Professor Dame Janet Finch**: Some of them of course may already be publishing open access. These are only just assumptions for the purpose of modelling. I am sure this is one of the many things that will evolve over time. The assumption that we made was that the UK would pay if the main author was UK-based and not if the main author was not UK-based. That was an assumption that we made for the purpose of the financial modelling that we did. Whether that is exactly what will happen in reality, I do not know, but it seemed a reasonable assumption.

**The Chairman:** We have already touched on the issue of learned societies that publish journals, but I think Lord Selborne would like to come in on this.

Q12 Earl of Selborne: First, I should confess that, on the declaration of interest, I have not declared all of my interests, so I should say that I am a fellow of the Royal Geographical Society, which was on your working group, likewise a fellow of the Society of Biology. I am an honorary fellow of the Royal Entomological Society. I think you have suggested that, on your working group, you benefited from the model that the Royal Geographical Society provided. Of course, the Royal Geographical Society has a significant part of its income from publications, but not the majority. It has other income streams, quite considerable income streams, whereas there are clearly, as you indicated, some learned societies that are very much dependent on their publications. I suspect that the Royal Entomological Society would be one such. It is, I know, extremely concerned about how it is going to run its finances in future and its charitable activities particularly. You hinted that there were going to be some losers in this model. What comfort can you give to these learned societies so dependent on their subscriptions?

**Professor Dame Janet Finch**: This is partly about timescale. We do think that there needs to be time to adjust. I do not know anything about the specific example that you quote, but different learned societies will take different views in the end of where their interests lie and whether it is appropriate to modify their business model or not. They will have to take cognisance of what is happening in the rest of the world. If the rest of the world goes in a similar direction, then their healthy income from international subscriptions will obviously diminish. It is a moving picture, and they will need to take a view of how to modify, if they are going to modify, their business model in the light of that. For what we consider to be the foreseeable future, they could decide to remain as subscription journals. They may take that decision, because we do envisage a mixed economy.

Q13 Lord Broers: I have a question about international use of our journals but, before I do that, I have been reminded too that I have to declare my interests. I am a fellow of the Royal Society, the Royal Academy of Engineering, Churchill College in Cambridge, and also an honorary fellow of the Institute of Engineering and Technology, the Mechanical Engineers, the Institute of Physics and the Academy of Medical Sciences. I also chair the board of Diamond Light Source, where we publish a great deal. Having said all that, did you consider, and is it relevant—you talked about lead authors—what happens if the lead authors are from overseas, especially from elsewhere in Europe and America? Is that a significant number, and is their behaviour or willingness to pay under various of these schemes an issue?

**Professor Dame Janet Finch**: The truthful answer is that I do not know. This is the sort of level of detail that I think the various parties have to work out together. We cannot prevent change from happening, even if we did nothing, as I said at the beginning. This sort of knotty little problem, which is at one level of detail and at another level the sort of problem that concerns academics, does need to be worked through by the various parties who are particularly concerned by it, I would say. I cannot give you a straight answer to that.

Q14 Lord Willis of Knaresborough: Can I declare my interests as Chair of the Association of Medical Research Charities and council member of NERC? I am also on the Science Policy Advisory group of the Royal Society, and I know Lord Broers. The thing I am particularly interested in is the issue of quality, because UK's research and our standing depends on a high-quality peer review so that we maintain that standard. I just wondered, during your deliberations, whether in fact you looked at the impact on peer review and how that might have to change as a result of open access and, in particular, the move by people like Wellcome to actually pay their peer reviewers.

**Professor Dame Janet Finch**: I am grateful to you for taking us down that road, because I think it is very important. Our recommendations are wholly about peer-reviewed journal articles; they are not about other sorts of articles that people publish for very good reasons that are not peer-reviewed. It is the quality-assured element that is very important. We regard it as absolutely essential that any changes should not undermine the quality of peer review, because it is the quality of peer review that gives confidence to the reader in the material that they are reading. If one of the purposes of this change is to enable people outside the research community to make better use of the outcomes of research, it is even more important that the quality assurance system should be robust, because they need to be able to rely on it. It is very important that peer review is not undermined by this.

We did not think that there was anything in our recommendations that inherently would do that. Certainly the move towards gold open access journals does not, in any way,

compromise the quality of peer review. The Wellcome Trust is not the only organisation that pays peer reviewers; there are other examples, but it is a relatively minor part of the scene. I do not know whether that may grow or not; if Wellcome takes the lead on it, then it might. There is nothing inherent in our recommendations that would require that, nor that would really alter the standards of peer review in this country.

**Lord Willis of Knaresborough:** Chairman, can I just follow that up? We looked at this a few years ago in the Commons, if you remember that piece of work.

Professor Dame Janet Finch: Yes, I do indeed.

**Lord Willis of Knaresborough:** One of the concerns then was in fact speed and the requirement to part-publish ahead of a completed piece of work. Therefore, the pressure on peer review would grow immeasurably as a result of the speed to actually get it, if you like, into open access. Is that a major issue or has that gone away?

**Professor Dame Janet Finch**: I think that has gone away. I am not aware of any pressure on the speed to publish. Actually, one of the things that may have been relevant when you did that work in the Commons Select Committee was that the research councils, specifically the research councils, were able to fund gold open access—they were able to pay the article processing charges—but of course as part of the research grant. That means that, if publication happens while the grant is ongoing, the funds can be paid from the grant, but they cannot be paid after it has finished because, by definition, it has finished. That was a knotty issue that we tackled at a very early stage in the working group. I have to say I must pay tribute to Research Councils UK on this front; they recognised that they had to find a way around this, which obviously could not breach Treasury rules but which would enable funds to be utilised for publication outside the timeframe work of the grant, and that is exactly what they have done. We were able to incorporate that recommendation in our working party.

Q15 Baroness Sharp of Guildford: Can I pick up a slightly different aspect of this, which is the foreign authors who do not have institutions? I realise that the Government were anxious to kick-start this, as you say we were the first movers, but was there not a worry that, in terms of quality of journals, there might be some foreign authors, let us say a Hungarian author or something like that, for whom there were not similar arrangements available? Confronted by the cost of, let us say, £2,500 for publishing a work, they just could not raise that sort of money.

**Professor Dame Janet Finch**: Our recommendations were and have to be confined to what happens with publicly funded research in this country. The requirements that another Government might make on its own research are, in a way, for that Government, although I know in the case of European countries that that is an active consideration in the European Commission at the moment. Different countries are in different positions in relation to this.

**Baroness Sharp of Guildford:** It obviously could have knock-on effects on the quality of our journals, if it was a limited range of authors who were able to—

**Professor Dame Janet Finch**: You are envisaging a situation where all our journals are gold open access and other people cannot afford to publish in them.

**Baroness Sharp of Guildford:** The big main journals, and particularly science journals, are going in that direction. You have some brilliant scientists in, let us say, some of these Eastern European countries, where £1,000 is a lot more than it is here.

Professor Dame Janet Finch – Oral evidence (QQ 1-16)

**Professor Dame Janet Finch**: Of course, if our main publications were gold open access, then their universities, the universities in those other countries, would benefit hugely because they would no longer be buying subscriptions for journals. It is actually not an unsolvable problem, I think.

**Q16** The Chairman: I think we are drawing to the end of this session, but I would like to thank you very much indeed. I appreciate you making a special effort to come and see us. I know you said you are in Berlin.

**Professor Dame Janet Finch**: Berlin to talk to Academic Publishing in Europe on the 29th.

**The Chairman:** You are in Berlin on the 29th, when we will be taking evidence from universities, publishers, RCUK, HEFCE and David Willetts. Thank you very much indeed. It was very helpful. You gave a very clear exposition and answered our questions very clearly indeed.

**Professor Dame Janet Finch**: It was a pleasure. Thank you very much indeed.

#### Frederick J. Friend, University College London - Written evidence

This evidence is submitted on an individual basis.

### "Support for universities through funds to cover article processing charges"

- The reason this issue requires investigation is that the Finch Report made
  recommendations based upon flawed assumptions about the value and success of
  various options for open access to research reports, recommendations which were
  accepted too hastily by the Government, leading to a situation in which public funds
  will not be used cost-effectively.
- 2. The Finch recommendation which has led to the current concern about funds for article processing charges is: "a clear policy direction should be set towards support for publication in open access or hybrid journals, funded by APCs, as the main vehicle for the publication of research, especially when it is publicly funded" (Finch Report page 7).
- 3. This "clear policy direction" is at odds with the lack of clarity expressed in the text of the Report, cf. para 6.31 "We have noted in our discussion of the success criteria outlined above that each of them could be met in a number of different ways: none of them points unambiguously in one direction."
- 4. The explanation for the mis-match between the Report's recognition of the value of various open access options and the priority given to open access journals in the Recommendations lies in the flawed assumptions made in the Report. These assumptions (for which there is no objective evidence) have
  - over-played the importance of journals and under-played the importance of repositories in the scholarly communication environment
  - over-valued the cost-effectiveness of open access journals and under-valued the cost-effectiveness of open access repositories to the UK taxpayer.
- 5. An example of a flawed assumption appears in para 8.1: "The research communications system is in a period of transition towards open access. We believe that, at its simplest, this is a shift from a reader-pays to an author-pays system, which in turn requires a shift in publications processes and business models." The flaw in this assumption is to identify the research communication system with a choice between reader-pays or author-pays. Even within research communications which are published in journals, across the world there are journals which make no charge to either reader or author and are funded directly from an institutional or research budget. And the Finch Report fails to attach adequate importance to making available the vast numbers of research communications (described briefly as "grey literature" in the Report) which are not handled by publishers. The Finch Report presents a very publisher-centric view of scholarly communication.
- 6. Further false assumptions appear in relation to the success criteria identified in Annex D. In relating the success criterion "More global publications accessible in

UKHE" to the mechanism "Open access journals funded by APCs" the assumption is made "Only if there is a global movement towards publication in open access and hybrid journals". This assumption ignores the contribution made by open access repositories to the growth in global publications accessible in UKHE. Likewise in the success criterion "Financial health of publishers and learned societies" applied to the mechanism "Repositories" the assumption is made of "Risk to publishers and learned societies from subscription cancellations" even though on page 55, in relation to the mechanism "Repositories", the Report states that "the restrictions imposed by publishers seem to have succeeded so far in limiting any potential impact on take-up of subscriptions to their journals". Even if risks began to appear, the profit margins of 30%-40% made by the major publishers would allow for time to take corrective action and the learned societies have an alternative source of income through membership dues.

- 7. In the calculations of the cost of various open access options the Finch Group did not give any consideration to the value for the UK taxpayer from the costs incurred. There is research on this topic which shows clearly that the economic value of open access through deposit in repositories is greater than the economic value of open access through publication in journals (see for example Houghton et al Economic implications of alternative scholarly publishing models: exploring the costs and benefits, JISC, 2009 available at <a href="http://www.jisc.ac.uk/publications/reports/2009/economicpublishingmodelsfinalreport.aspx">http://www.jisc.ac.uk/publications/reports/2009/economicpublishingmodelsfinalreport.aspx</a>.
- 8. The UK Government accepted the Finch recommendations too hastily, without allowing time for comment from organisations and individuals with lengthy experience in this field, thereby facing the Exchequer, the Research Councils and individual universities with the problem of paying APCs. There are no signs that (as the Finch Group hoped) the cost of APCs will be reduced through competition between publishers or through the large-scale adoption of the APC model in other countries. Most authors choose the journal in which to publish on the basis of prestige rather than on the level of APC, and most countries have adopted a mixed model of both gold (including unpaid gold) and green open access.
- 9. The solution to the problems in the current situation is for the Government to return to the previous policy of a balance between gold and green open access, requiring UK researchers to deposit a version of their work in a suitable open access repository and providing funds for as many APCs as can be afforded without damage to the research budget.

#### "Embargo periods for articles published under open access"

- 10. The issue in respect of embargo periods is about the basis upon which the length of an embargo period should be decided, and evidence available for deciding upon the length.
- II. The Finch Group state clearly the basis upon which they believe the length of an embargo period should be decided (page 8 in the Report): "funders' limitations on the length of embargo periods, and on any other restrictions on access to content not published on open access terms, should be considered carefully, to avoid undue risk to valuable journals that are not funded in the main by APCs."

- 12. This recommendation gives absolute priority to the view of a publisher, without any consideration being given to the wishes of users of research content or to the public good.
- 13. A fairer principle would take into consideration the views of all stakeholders and be based upon objective evidence of the effect of short or long embargo periods upon all stakeholders.
- 14. Open access content has been available in repositories across the world for at least ten years, and there is no evidence that the length of the embargo period has been a factor in either the maintenance or the cancellation of journal subscriptions. Libraries take such decisions on the basis of value to their users and on cost, not on the basis of the length of an embargo on open access content. A survey on factors leading to journal cancellation concluded that "availability of content via delayed open access was not an important factor" (Mark Ware ALPSP survey of librarians on factors in journal cancellation 2006 <a href="http://www.alpsp.org/Ebusiness/Libraries/Publication\_Downloads/libraryreport-summary.sflb.ashx?download=true">http://www.alpsp.org/Ebusiness/Libraries/Publication\_Downloads/libraryreport-summary.sflb.ashx?download=true</a> ).
  - "Engagement with publishers, universities, learned societies and other stakeholders in developing the new open access policies"
- 15. There is no question that discussions between various stakeholders are vital in the development of open access policies. From my experience the biggest obstacle in such discussions is the inability or unwillingness of publishers to discuss future business models in any detail. As soon as discussion becomes detailed, issues of confidentiality cause barriers to be raised.
  - "How the Government should address the concerns raised by the scientific and publishing communities about the policy."
- 16. For Government to address concerns from any community there has to be a willingness for officials to engage in dialogue and a willingness to change policies if necessary.

14 January 2013

## Dr Rita Gardner, Steven Hall and the Publishers Association – Oral evidence (QQ 38-51)

Transcript to be found under Steven Hall

#### Geological Society of London (GSL) - Written evidence

- I. The Geological Society is the UK's learned and professional body for geoscience, with more than 10,500 Fellows (members) worldwide. The Fellowship encompasses those working in industry, academia and government with a broad range of perspectives on policy-relevant science, and the Society is a leading communicator of this science to government bodies and other non-specialist audiences. It organises research conferences and public information meetings, and is a globally significant not-for-profit geoscience publisher producing about 11,000 pages of peer reviewed content annually. These are disseminated online and in hard copy through four journals which we own in whole or in part, and three which we publish on behalf of smaller kindred societies; and as books, principally the highly acclaimed Special Publications series (state-of-the-art collections of papers on cutting edge areas of geoscience) and Memoirs.
- 2. The Geological Society supports the principle of Open Access (OA), and believes that publications based on publicly funded research should be made as widely available as reasonably possible. It welcomes the recommendations of the working group led by Dame Janet Finch, which reported in 2012. It is vital that implementation of OA be planned carefully; and that it be carried out on a timescale which allows authors, funders and publishers to understand clearly what is proposed, and to modify their business models and research and publication practices accordingly. There is significant risk of disruption and possibly irrevocable damage to the UK's complex research system if insufficient attention is paid to possible unintended consequences of policy changes, or if these changes are not well understood by all stakeholders, or if they are introduced too rapidly for stakeholders to prepare adequately.
- 3. We note that in her evidence to the Committee on 15 January 2013, Dame Janet recognised the potential financial risk to some learned society journals, and the need to give learned societies sufficient time to adjust. It is not only societies' publishing programmes that are at stake. Rather, many societies including the Geological Society depend on the modest surpluses generated by publishing to fund many of the other activities they support, which contribute significantly to academic, professional and public life in the UK. In our case, these include studentships, research grants, travel bursaries, reduced conference registration fees for students and academics, extensive public outreach and education programmes, and provision of geoscience advice to policy-makers. If publishing surpluses are eroded more quickly than we can substitute them with alternative income streams, continuation of these activities will be at risk.
- 4. We are very concerned that the Research Councils (RCUK) is introducing its OA policy at such short notice, especially as there is widespread confusion regarding aspects of this policy, both among publishers (including ourselves) and academic researchers in the geoscience community which we represent. In order to remain competitive as a publisher to UK geoscience academics, we are having to settle on a new business model and publicise this to our community rapidly, based on very

- partial information and a high degree of uncertainty as to how researchers' publishing behaviour will respond to the new RCUK policy.
- 5. Despite the announcement of RCUK's policy in July 2012, and announcements regarding funding mechanisms later in the year, it is not clear to us how institutions will administer funds provided to cover Gold OA Article Processing Charges (APCs). What is clear is that the funds allocated by RCUK for this purpose will not be nearly sufficient to pay for publication of all research papers resulting from RCUK-funded research. Most institutions will hold insufficient funds to cover APCs for their full research output, and many authors will therefore be obliged to publish their work under Green OA terms. In an effort to maintain both the quality and quantity of papers we publish, we will therefore be offering both Gold and Green OA publishing options from 1 April 2013, although we have little idea of what the uptake of either option will be, nor of any impact there may be on income from subscriptions to our journals and book series as a result of some of their content becoming freely available.
- 6. It is incumbent on RCUK to ensure that researchers fully understand their obligations, and the choices available to them. Authors and publishers urgently need to know how funds will be apportioned and accessed, in order for the UK's scholarly publishing system to operate with the minimum of confusion, disruption and delay. In particular, papers without APC funding will need to be identified as such prior to submission to the publisher. With little more than two months remaining before RCUK's mandate comes into force, it is not clear how this will be done.
- 7. The Finch Report recommended caution with regard to Green OA embargo periods, and government supported this approach in its response to the report. For journals which do not offer Gold OA, RCUK requires embargo periods to be no more than six months (in science and engineering subjects). This appears to be inconsistent with government's statement that suitable embargo periods in these subject areas could be up to 12 months, and with the Finch Report's recommendation that it would be unreasonable to impose an embargo period of less than 12 months where APC funding is not available. It is not clear what conditions will be placed on embargo periods of any journals which accept both Gold and Green OA papers.
- 8. In considering what embargo period is appropriate, it is important to recognise that the effective 'half-life' of published research (judged by citation and other measures of use) varies greatly, not just between natural science, social science and humanities, but also among natural science disciplines. In much of geoscience, research often remains current and relevant for many decades, while in biotechnology, for instance, this is very rarely the case. If embargo periods are as short as six months, libraries may be more likely to pay subscriptions for journals in subject areas with a shorter half-life, where the perceived value attached to immediate access to content may be greater.
- 9. We were pleased to note that Dame Janet's committee included representatives of three learned societies the Institute of Physics, the Society of Biology and the Royal Geographical Society. Although all are relatively large institutions, the committee's recommendations reflect an understanding that learned societies differ widely, and

the challenges and impacts of OA are likely to vary significantly depending on societies' size and subject area. For instance, larger societies may benefit from greater economies of scale, allowing them to offer APCs more competitive with those of large commercial publishers. They may also be better able to fund innovative business initiatives to attract researchers to publish with them. Dame Janet's report recognised the potential risks to learned societies of implementing OA without due care and attention, and with insufficient time for societies to adjust, and she has subsequently reiterated the importance of these considerations. David Willetts also recognised these potential risks, and the importance of avoiding them, in correspondence with the Geological Society in July 2012. Nonetheless, as set out above, we have serious concerns on exactly these grounds regarding the way in which RCUK has sought to implement government's recommendations regarding OA. Despite the central role that publishers will play in enabling authors to comply with RCUK's mandate, we are aware of little if any direct communication between RCUK and publishers, including learned societies, as it has developed and communicated its policy. Anecdotal evidence from academic geoscientists indicates that they and their institutions have similarly struggled to establish meaningful dialogue with RCUK regarding development and implementation of its policy.

18 January 2013

# Government – the Rt Hon David Willetts MP, Minister of State for Universities and Science, Department for Business Innovation and Skills (BIS) – Written evidence

#### **Open Access**

I am writing in response to your letter of 24 December in which you set out your Committee's plans to hold a short inquiry on the subject of Open Access (OA). I welcome the timely initiative that you have taken to discuss this important issue as it enters the implementation of policy phase and will be pleased to accept your invitation to give oral evidence on Tuesday 29 January. I trust that you will accept this letter as the written response that you requested by Friday 18 January.

In your letter you have asked me to address four key areas:

- Support for universities in the form of funds to cover Article Processing Charges (APCs) and the response of universities and other HEIs to these efforts;
- Agreeing embargo periods for articles published under the Green model;
- Engagement with publishers, universities, learned societies and other stakeholders in the development of Research Council OA implementation policies; and
- Challenges and concerns raised to date by stakeholders and how these have been addressed.

I understand that your Hearing on 15 January with Dame Janet Finch afforded you an excellent introduction to the subject. The Finch Group was brought together by BIS as an independent group. Janet Finch has thus provided a comprehensive explanation of the process that the Finch Group went through to arrive at its recommendations. Hence, in this written evidence BIS has focused on these four issues in turn.

#### **Support for Universities and HEIs**

The Government recognised in its response of the 16 July 2012 to the Finch Report (see Annex A) that a Government preference for a Gold OA policy, with the merit of providing free, immediate and unrestricted access and use of published research by the reader, would not come at zero cost. It was accepted that publishers, including Learned Societies, provide a valuable service by both administering a highly respected peer review process and providing the necessary investment and infrastructure for a globally successful UK based research publishing industry. To sustain the advantages of the present publishing arrangements, whilst simultaneously exposing the industry to radical change, requires payment of an Article Processing Charge (APC) under Gold OA. Open Access (OA) needs to be paid for in some way, and given the Government's policy of a strong preference for Gold OA and permitting Green OA (which places the financial burden on users), the Government has facilitated funding for the implementation of Gold OA in two stages.

In the first stage, designed to quickly pump prime the creation of Publication Funds and to identify any 'teething problems' with their formation for subsequent more long-standing and systematic arrangements, an initial one-off sum of £10 million was allocated to support

'Gold OA'<sup>55</sup> publication of research. This was announced on 7 September 2012 (see <a href="http://news.bis.gov.uk/Press-Releases/Government-invests-10-million-to-help-universities-move-to-open-access-67fac.aspx">http://news.bis.gov.uk/Press-Releases/Government-invests-10-million-to-help-universities-move-to-open-access-67fac.aspx</a>). It is providing initial funding for the group of HEls selected by the Research Councils, as listed at Annex B, allowing them to make preparations for the introduction of OA and to identify issues that will need to be addressed by RCUK in their implementation guidance such that the wider group of HEls benefit from their experience.

The funding has provided some limited, but immediate, support to enable research intensive HEI's to begin to plan for and implement Gold OA in preparation for the change that will take effect from 1 April 2013.

The initial £10 million was intended to be a pre-cursor to a more substantive, systemic and ongoing funding allocation to be made by Research Councils to HEIs in support of the Government's (and RCUK's) policy preference for Gold OA. Such financial support will enable Publication Funds to be created at all affected HEIs to allow them to administer their allocated funds and determine how best to meet the APCs to secure free to user Gold OA publication.

As a result of an initiative by RCUK, this more substantive approach has now taken the form of a block funding allocation to over 100 individual institutions for the period beyond April 2013. The details of which they announced on 8 November 2012, as explained in RCUK's summary progress note at Annex C (see <a href="http://www.rcuk.ac.uk/media/news/2012news/Pages/121108.aspx">http://www.rcuk.ac.uk/media/news/2012news/Pages/121108.aspx</a>). HEFCE also intend to consult widely on how research outputs submitted to any REF subsequent to 2014 will be available by OA. HEFCE propose to allow HEIs to use their QR funding, to the extent

The value of APC awards for years 2013/14 and 20014/15 were announced as being £17 million and £20 million respectively. Funding for financial years 2015/16, 2016/17 and 20017/18 could not be indicated at this stage, because of Treasury's constraint on the commitment of funds for the next Spending Review period; but also, the level of funding required will be partly dependent on developments in the research publications market, which will be subject to change.

deemed appropriate by the HEI, to supplement RCUK's direct contribution thereby supplementing the financial resources available to HEIs for their Publication Funds.

We recognise that this re-engineering of free access to published research will take time. RCUK anticipate a five year transition period during which time the level of take up for Gold OA might be expected to rise from an estimated 45 per cent to 75 per cent. Research Councils have estimated that the total allocation that they are prepared to make for APCs over the five year period could be in excess of £100 million. This further demonstrates the strength of their and the Government's commitment to what is a radical re-engineering of the research publications market designed to improve access to research findings, stimulate innovation and contribute to economic growth. RCUK propose to review implementation of the policy in 2014 to make any appropriate mid-course corrections within the Government's overall strategic policy.

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<sup>&</sup>lt;sup>55</sup> Gold OA entails the payment of an Article Processing Charge (APC) to the publisher to ensure that the research is published immediately on a completely free basis to the end user and without restriction.

RCUK's announcement that their level of funding for Gold OA was designed to cover the cost of some 45 per cent of Research Council funded published research in 2013/14 was based on their realistic estimate of the rate of change and initial level of demand from authors for Gold OA. However, RCUK's implementation policy statement immediately raised questions in the minds of publishers and Learned Societies as to what embargo period would apply for Green OA for the balance of up to 55 per cent of research publicly funded by Research Councils? A short period of uncertainty followed. Your inquiry affords me, and RCUK, an opportunity to clarify the settled position which was in the process of being resolved.

#### **Embargo Periods for Articles Published Under the Green OA Model**

The Government's over-arching policy position on embargo periods for Green OA was clearly stated in response to the Finch Report. As stated in the published response, included as Annex A to this letter, the Government stated that:-

"The Government has listened carefully to what publishers, learned societies and the Finch Group collectively have had to say on this issue. We prefer the 'gold' over the 'green' model, especially where the research is taxpayer funded so the Government agrees with the sentiment expressed in the Finch Report. Embargo periods allowed by funding bodies for publishers should be short where publishers have chosen not to take up the preferred option of their receiving an Article Processing Charge (which provides payment in full for immediate publication by the 'gold OA' route). Where APC funds are not available to the publisher or learned society, for the publication of publicly-funded research, then publishers could reasonably insist on a longer more equitable embargo period. This could be up to 12 months for science, technology and engineering publications and longer for publications in those disciplines which require more time to secure payback. Even so, publications with embargo periods longer than two years may find it difficult to argue that they are also serving the public interest. "

The Government stands by this policy statement as published on Gov. Uk ( see <a href="https://www.gov.uk/government/news/government-to-open-up-publicly-funded-research">https://www.gov.uk/government/news/government-to-open-up-publicly-funded-research</a>) which also includes reference to the Decision Tree published on the Publishers Association website, with endorsement by BIS and RCUK in August 2012 (included in this response as Annex D).

RCUK accept, as stated clearly in their own policy statement (see <a href="http://www.rcuk.ac.uk/research/Pages/outputs.aspx">http://www.rcuk.ac.uk/research/Pages/outputs.aspx</a>) that Green OA is a legitimate second best alternative to Gold OA. RCUK also believe that implementation of their published OA policy should be consistent with the Government's over arching OA policy position. In implementing their OA policy RCUK have been understandably concerned to ensure that every effort should first be made by researchers to operate within RCUK's required publishing arrangements. This entails a preference for Gold OA and the use of short embargo periods where Green OA is being offered by publishers and Learned Societies. In some circumstances, publication on the basis of either of these two options may not be feasible. RCUK recognises that we are on a journey. Some researchers, particularly in certain arts and humanity disciplines, may only find it possible to publish in journals that

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<sup>&</sup>lt;sup>56</sup> Generally this will mean six months for research funded in science and technology related disciplines and twelve months for those in the arts and humanities.

because of the traditions of the discipline or its business model, or the availability of funding for Gold OA, may need a longer embargo period. RCUK recognises that the Government's policy on embargo periods allows some discretion for this.

Government and RCUK will, for good reason, not want to weaken the Government's policy preference for Gold OA, which is closely associated with CC-BY licensing<sup>57</sup> conditions, or the alternative of Green OA with embargo periods of either six or twelve months depending upon the research discipline/journal, but where either option is judged by the HEI to not be feasible in the case of a particular research paper, the decision tree published in August 2012 by the Publishers Association and endorsed by BIS will apply. Furthermore, there may even be some cases where a longer embargo period than the 24 months indicated on the Publishers Association's site may be needed and again the Government's stated policy position above allows for this, but, such cases should be the exception rather than the rule. BIS' understanding of the type of agreements on embargo periods being reached by the World Bank with publishers, on an individual journal basis, would reflect this expectation as well.

## Engagement with Publishers, Universities, Learned Societies and other Stakeholders in the Development of the Research Council OA Implementation Policies

RCUK are leading on the development of their implementation policies for OA although BIS officials have engaged with them throughout. Further details are outlined in Annex C.

In addition to the RCUK-led implementation discussions, I am holding my own meeting with stakeholders. We have sought throughout to work with the publishing and research communities on our approach to open access, and success depends on all relevant parties believing the overall approach is workable. The Government's Open Access policy for published research is simple in concept – namely that taxpayers should have access to the research findings they have funded and in a reasonable timescale, but it is undoubtedly complicated to implement. RCUK fully appreciate the fact that this is a journey not an event. The guidance they are providing will need to take account of issues as they arise. All participants in the process will need to accept that compromises will be needed from all sides.

### Challenges and Concerns Raised by Stakeholders and How these have been Addressed

The development and implementation of a radically different OA policy intended to create benefits for all users (researchers, business including SMEs and the public) is a complicated and challenging task. The Finch Group, on which the full range of stakeholders were represented, cultivated an atmosphere of co-operation, sometimes out of initially conflicting positions. By creating a willingness to compromise, the Finch Group was able to produce a set of recommendations which (with the exception of the treatment of VAT for electronic

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<sup>&</sup>lt;sup>57</sup> CC-BY is the licence condition associated with the payment of an Article Processing Charge (APC) for publication on a Gold Open Access basis. Gold OA has the advantage of providing unrestricted search and use of the published information by the user. Welcome and RCUK are proposing to use CC-BY when their research funds are used to pay APCs. See <a href="http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy\_communications/documents/web\_document/WTVM055">http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy\_communications/documents/web\_document/WTVM055</a>

publications which is an EU matter) the Government felt able to accept in full as stated at Annex A.

At the time of the Finch Group's deliberations there was a tension between funders and publishers on the treatment or duration of embargo periods under the Green OA model. It was for this reason that the Government's over-arching strategic policy position for Green OA embargo periods was adopted, which accommodates a range of circumstances whilst making the direction of travel clear. RCUK have pointed out that this will involve a significant transition period of some five years.

Other concerns have included the argument that the cost of Gold OA reduces research budgets. Government recognised this opportunity cost when formulating its policy position and its preference for Gold OA and still believes that the potential benefits that Gold OA affords (under the CC-BY licence conditions directly associated with it) outweighs the opportunity cost of about one per cent of the research budget. There is also positive evidence of universities now moving on to arrange the detailed planning for the new arrangements (see for example <a href="http://www.openaccess.cam.ac.uk">http://www.openaccess.cam.ac.uk</a> ).

There is as yet limited empirical evidence of the quantifiable impact of Open Access on economic growth. Even so, the economic impact could be significant. Battelle's recent report<sup>58</sup> showed that between 1988 and 2010 genome sequencing projects, associated research and industry activity, both directly and indirectly, generated an economic (output) impact of \$796 billion and created 3.8 million job-years of employment (310,000 jobs in 2010), with personal income exceeding \$244 billion. It has been suggested that the economic success of the Human Genome Programme was partly attributable to the adoption of open access for the public programme of research.<sup>59</sup>

Concerns have also been raised that overseas based publications may choose to not adopt a similar OA policy to the UK Government. The concern is that if some leading overseas based journals do not choose to comply with the UK's OA policy, UK researchers could, as a result, be denied publication in them with implications for the perceived credibility and importance of UK research. Whilst it is possible to have some sympathy with this concern, the Government needs to balance it against the wider policy objective to make publicly funded published research available in reasonable time, and preferably immediately, to UK taxpayers. Furthermore, publishers that specialise in OA journals appear to be increasingly attracting researchers and establishing their international credibility. There is also evidence of the global growth of Open Access (OA) for scholarly publications.

A most recent study of global trends has been by Mikael Laakso and Bo-Christer Bjork <sup>60</sup>. This most current analysis of globally published scientific articles indicates that in 2011 some 340,000 scientific articles were published by 6,713 full immediate OA journals, of which some 49 per cent required Article Processing Charges. Hence, OA represents some 17 per cent of the 1.66 million articles published during 2011 according to Scopus, considered to be

<sup>59</sup> See <a href="http://www.newstatesman.com/blogs/economics/2012/04/open-access-science-helps-us-all">http://www.newstatesman.com/blogs/economics/2012/04/open-access-science-helps-us-all</a>

<sup>&</sup>lt;sup>58</sup> See <a href="http://www.genome.gov/27544383">http://www.genome.gov/27544383</a> and <a href="http://www.battelle.org/docs/default-document-library/economic impact of the human genome project.pdf?sfvrsn=2">http://www.genome.gov/27544383</a> and <a href="http://www.battelle.org/docs/default-document-library/economic impact of the human genome project.pdf?sfvrsn=2">http://www.genome.gov/27544383</a> and <a href="http://www.battelle.org/docs/default-document-library/economic impact of the human genome project.pdf?sfvrsn=2">http://www.battelle.org/docs/default-document-library/economic impact of the human genome project.pdf?sfvrsn=2</a> The federal government invested \$3.8 billion in the HGP from 1990–2003 (\$5.6 billion in 2010 dollars) giving a return on investment (ROI) to the U.S. economy of 141 to

<sup>1.</sup> http://www.newstatesman.com/blogs/economics/2012/04/open-access-science-helps-us-all

<sup>&</sup>lt;sup>60</sup> See <a href="http://www.biomedcentral.com/1741-7015/10/124">http://www.biomedcentral.com/1741-7015/10/124</a> This is an Open Access paper published on 22 October 2012

<sup>&</sup>quot;Anatomy of open access publishing: a study of longitudinal development and internal structure."

one of the most comprehensive article-level indexes of scholarly articles. Within this 17 per cent, some 11 per cent were immediately available ('Gold OA') and the balance of six per cent publicly available within 12 months of publication ('Green OA'). Hence, the UK is not as isolated as some have argued. The UK appears to be leading but going with the grain of the academic community and increasingly the publishing world. The number of OA published scholarly articles has grown, according to the same analysis, from a base of only some 20,000 OA scientific articles a decade ago. This is attributed to the growth of commercial publishers becoming key players in Open Access.

Biomedicine is estimated to have experienced a particularly rapid 16-fold growth in OA published articles between 2000 and 2011 but in terms of disciplines overall, the social sciences, arts and humanities (at about 56,000 OA articles in 2011) exceeds the number of OA publications in chemistry, chemical engineering, physics and astronomy combined (although it needs to be noted that there is supporting infrastructure for parallel forms of publication in some of these disciplines, such as physics).

Some Learned Societies have also expressed a lack of trust in HEIs to administer, in an equitable manner, the Publication Funds that they will receive from RCUK (and HEFCE). They are concerned that choices may be dominated by the interests of certain departments or researchers. This is an issue for HEIs to respond to, but the Government has seen no evidence to suggest that HEIs will act irresponsibly. It is important for them to have autonomy and flexibility in such decisions so that they may use their funding<sup>61</sup> most efficiently and in a way that best suits their publication priorities and have the capacity to stimulate further competition and innovation in the research publications market. The most efficient and competitive publishers will rise to this challenge and new entrants may also appear.

There is also the concern amongst HEIs and some publishers that rather than securing a first mover advantage the UK stands to lose out to the 'free-rider' problem, meaning that the UK pays and others benefit. The Government is fully aware of this risk, but as for all first movers it is a risk that has to be accepted. In the worst case, the UK will still benefit from ensuring that eventually 75 per cent of all Research Council funded published research will be immediately available for free to users. This in itself is a prize worth having. In addition to which, in the same manner that the UK is communicating globally the fruits of its research through the recently released beta test version of the Gateway to Research (see <a href="http://www.rcuk.ac.uk/research/Pages/gtr.aspx">http://www.rcuk.ac.uk/research/Pages/gtr.aspx</a>), access to UK research will demonstrate the strength of the UK research base and further encourage international collaboration with the UK and inward investment to our long-term advantage. It is also expected be to the advantage of UK based researchers in terms of their citation rates, increasing their global recognition.

We are not being complacent about the 'first-mover' initiative we have taken and the risk of doing so. Discussions have taken place with the EU and the Commission which has now stated that it will expect all research published under Horizon 2020 to be on an OA basis. The UK have impressed on them the relative merits of Gold OA. The Commission will make open access to scientific publications a general principle of Horizon 2020, the EU's Research & Innovation funding programme for 2014-2020. As announced in July 2012,

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<sup>&</sup>lt;sup>61</sup> Including funds from Research Councils, HEFCE and their own and other sources together making up the 'Publication Funds' now being created within HEIs.

immediately following publication of the UK's OA policy, as of 2014, all articles produced with funding from Horizon 2020 will have to be accessible on an Open Access basis:

- articles will either immediately be made accessible online by the publisher ('Gold' open access) - up-front publication costs can be eligible for reimbursement by the European Commission; or
- researchers will make their articles available through an open access repository no later than six months (12 months for articles in the fields of social sciences and humanities) after publication ('Green' open access).

For Green OA under the Commission's requirements, it is not yet clear how consistently repositories would be used and what version of the paper would be published on them, that is whether it would be the finally published paper in pdf format or the author's manuscript copy (that remains the author's copyright and which can be deposited immediately on ArXiV, Institutional repositorities or EuroPubMed now without any restriction.)

The Commission has also recommended that Member States take a similar approach to the results of research funded under their own domestic programmes. The goal is for 60% of European publicly-funded research articles to be available under Open Access by 2016. That coincides with the level of penetration assumed by RCUK for the UK in 2015/16.

(see <a href="http://europa.eu/rapid/press-release">http://europa.eu/rapid/press-release</a> IP-12-790 en.htm ).

The EU policy position, which is a recommendation and not a legislative proposal, includes the UK's preferred Gold OA. For Green OA the Commission is consistent with RCUK's policy objective. Even so we will maintain with the Commission particularly during the transitional five year period, that where there is no funding available to pay APCs for Gold OA the required embargo periods for Green OA should be 12/24 months as allowed for by the UK not 6/12 months as currently being required by the Commission.

Similarly, attitudes towards the adoption of OA are becoming more favourable in the US. The National Institute of Health (NIH) has recently declared that it will with hold grant awards if research is not published in compliance with its existing OA policy which requires OA publication on Pub Med Central <a href="http://www.ncbi.nlm.nih.gov/pmc">http://www.ncbi.nlm.nih.gov/pmc</a> within 12 months (see <a href="http://grants.nih.gov/grants/guide/notice-files/NOT-OD-13-016.html">http://grants.nih.gov/grants/guide/notice-files/NOT-OD-13-016.html</a> ).

The UK Medical Research Council and the Wellcome Trust have operated a similar repository arrangement for medical research since 2007 requiring publication within six months. In July 2011, the European Research Council became the third European funder to join UKPMC, following Telethon Italy and the Austrian Research Fund. As a result of this participation, the 18 existing UK and European funders agreed that the UKPMC service should be rebranded as Europe PMC which took place on 1 November 2012 further reinforcing the UK Government's policies on transparency and open access. Information on Europe PMC can be found at the new website <a href="https://www.europepmc.org">www.europepmc.org</a>, details of the NIHR's OA policy is available at

http://www.nihr.ac.uk/research/Pages/Research Open Access Policy Statement.aspx

Europe appears to account for some 37 per cent of global OA articles and N. America for about 19 per cent, but Asia is also responsible for some 25 per cent of global OA, and as

stated above the use of OA is increasing and the proportion of Gold OA growing with it. Hence, the fear that the UK may be acting alone is probably unfounded.

The publishers and Learned Societies are a highly valued part of the fabric of the UK's world class research base. Their willingness to collaborate through the Finch Group and to compromise on some of their aspirations (by accepting, for example, the need to offer CC-BY conditions as part of the Gold OA APC transaction) whilst signalling through their public library initiative their desire to contribute to the public good suggests that there is a real prospect of the UK implementing an OA policy, based on the appropriate use of Gold and Green, in a way that allows all stakeholders to prosper.

The Public Library initiative (PLI), proposed by the Publishers Association during the course of the Finch Group's deliberations is an example of how the publishers and Learned Societies contribute to the public good. The PLI represents a valuable concession by publishers to facilitate free walk-in access to all of their research publications in public libraries. This would apply to globally sourced research and not just the 6 per cent of global research that is sourced from the UK (see Annex E). The Government now looks forward to this PA initiative being implemented in 2013.

18 January 2013

Annex A

Letter to Dame Janet Finch on the Government Response to the Finch Group Report: "Accessibility, sustainability, excellence: how to expand access to research publications"

Dear Janet,

Please find enclosed the Government's response to your excellent report on open access to published research.

We are firmly committed to improving access so the Government accepts the proposals in your report, except for one specific point on VAT. Reference was made to the issue of VAT being applied to e-journals but not printed books and journals. Consideration has been given to this, but, in consultation with Treasury it has become evident that current VAT rules agreed at EU level preclude a reduced or zero rate for e-journals. The enclosed note sets out our response in more detail.

I welcome the OA policies being announced by funding bodies. I also welcome the publishers' proposed initiatives for improving access for SMEs and for the public libraries.

You have suggested that your Group should reconvene in a year's time to reflect on progress. That is an excellent idea. I would be pleased to join you for that meeting to review progress made with implementing your excellent report.

Thank you for all you have done to help us open up our world-class research base to more people, which will no doubt benefit all of the UK. Please pass on my thanks to the other members of your group and Michael Jubb (Director RIN) who supported you.

#### **David Willetts**

Government Response to the Finch Group Report: "Accessibility, sustainability, excellence: how to expand access to research publications"

We are grateful to the Finch group for their constructive investigation and we welcome the report. We wish to extend open access to research and so accept all the conclusions in the report (except for one involving tax which will be considered further).

Taking each of the Group's recommendations in turn:-

i. a clear policy direction should be set towards support for publication in open access or hybrid journals, funded by APCs, as the main vehicle for the publication of research, especially when it is publicly funded; ii. the Research Councils and other public sector bodies funding research in the UK should establish more effective and flexible arrangements to meet the costs of publishing in open access and hybrid journals;

The Government agrees with both of these recommendations. We recognise that whilst Open Access (OA) means free access to the user and full right of search, it does not follow

that OA has no cost. Support for publicly funded research institutions will be needed to pay the cost of APCs this funding will will come out of existing research funds.

Funding bodies are now in the process of publishing their respective policy positions on OA, which will include provision for the funding of APCs. Details of the precise funding mechanisms will be included in their respective announcements though they are also cooperating with each other to ensure a co-ordinated approach.

RCUK currently provides support for APCs through both direct and indirect costs as part of grant funding. They will now put in place a simpler, more flexible and transparent mechanism that will allow institutions to set up publication funds to cover such charges. The most suitable payment mechanism is currently under discussion and includes options such as direct cost within a grant application (either open to applicants to make a case or through a formula) or as a block grant to universities.

In all cases universities upon receipt of funding should transfer these charges to their institutional publication fund. A university can then use these funds to pay for APCs for any article resulting from research council funding. Research Councils will monitor compliance with its policies at grant level through its outputs systems.

Once Research Councils have established the payment mechanism, operational details will be set in discussions with the academic community.

iii. support for open access publication should be accompanied by policies to minimise restrictions on the rights of use and re-use, especially for non-commercial purposes, and on the ability to use the latest tools and services to organise and manipulate text and other content;

The Government welcomes this recommendation which is consistent with our aspirations for implementation of the Hargreaves recommendations. Where APCs are paid to publishers, the Government would expect to see unrestricted access and use of the subject content and the details of how this should be best achieved will be addressed in the detailed policy statements to be published by funding bodies.

In relation to Hargreaves, the Government believes any exception on copyright – on which decisions are yet to be taken – must be compatible with the broad approach of the Finch report.

iv. during the period of transition to open access publishing worldwide, in order to maximise access in the HE and health sectors to journals and articles produced by authors in the UK and from across the world that are not accessible on open access terms, funds should be found to extend and rationalise current licences to cover all the institutions in those sectors;

The Government understands and supports the objectives behind this recommendation. The extent to which funds can be made available for this purpose will be a matter for the independent funding bodies.

v. the current discussions on how to implement the proposal for walk-in access to the majority of journals to be provided in public libraries across the UK should be pursued with vigour, along with an effective publicity and marketing campaign;

The Government welcomes this imaginative and valuable initiative by the publishing industry. We encourage the working group that has already been set-up to address it, which includes

public library representation, to press ahead and implement the proposed two-year pilot scheme at the earliest opportunity. We hope it will become a permanent feature of the UK's public library service.

vi. representative bodies for key sectors including central and local Government, voluntary organisations, and business should work together with publishers, learned societies, libraries and others with relevant expertise to consider the terms and costs of licences to provide access to a broad range of relevant content for the benefit of consortia of organisations within their sectors; and how such licences might be funded;

vii. future discussions and negotiations between universities and publishers (including learned societies) on the pricing of big deals and other subscriptions should take into account the financial implications of the shift to publication in open access and hybrid journals, of extensions to licensing, and the resultant changes in revenues provided to publishers;

The Government encourage the various stakeholders to pursue these two recommendations. We look to JISC to contribute its long-standing experience in this field to help in such negotiations and particularly with regard to implementing at the earliest opportunity the proposed extension of licensing to high-technology Small and Medium Sized Enterprises (SMEs).

viii. universities, funders, publishers, and learned societies should continue to work together to promote further experimentation in open access publishing for scholarly monographs;

The Government welcomes this recommendation.

ix. the infrastructure of subject and institutional repositories should be developed so that they play a valuable role complementary to formal publishing, particularly in providing access to research data and to grey literature, and in digital preservation.

The UK Research Councils have already invested in a number of successful repositories. Notable examples include the Economic and Social Research Council's Research Catalogue (see http://www.esrc.ac.uk/impacts-and-findings/research-catalogue/index.aspx) and UKPubMed which has been funded by the Medical Research Council (MRC) and the Biotechnology and Biological Sciences Research Council (BBSRC), the Chief Scientist Office, part of the Scottish Government Health and Social Care Directorates and other funding bodies (see http://ukpmc.ac.uk/About). Indeed, in 2010 just over 40 per cent of the articles published that year, or almost 70,000 articles in real numbers, were Open Access (OA) see http://ukpmc.blogspot.co.uk/2012/05/increasing-proportion-of-ukpmc-articles.html. The Government has recently provided £150 million for the development of einfrastructure that should benefit these OA objectives. It has also committed £75 million to the development of the ELIXIR project at the European Bioinformatics Institute, Hinxton, to create a world-leading repository in bioinformatics but, generally, the development of infrastructure for subject and institutional repositories will primarily be a matter for institutions themselves. Even so, the Government wish to ensure that the UK secures the greatest added value from such developments. The 'Gateway to Research' being developed

by RCUK will provide an additional tool to sign and facilitate public access to the full body of research funded by the UK Research Councils by late 2013.

x. funders' limitations on the length of embargo periods, and on any other restrictions on access to content not published on open access terms, should be considered carefully, to avoid undue risk to valuable journals that are not funded in the main by APCs. Rules should be kept under review in the light of the available evidence as to their likely impact on such journals.

The Government has listened carefully to what publishers, learned societies and the Finch Group collectively have had to say on this issue. We prefer the 'gold' over the 'green' model, especially where the research is taxpayer funded so the Government agrees with the sentiment expressed in the Finch Report. Embargo periods allowed by funding bodies for publishers should be short where publishers have chosen not to take up the preferred option of their receiving an Article Processing Charge (which provides payment in full for immediate publication by the 'gold OA' route). Where APC funds are not available to the publisher or learned society, for the publication of publicly-funded research, then publishers could reasonably insist on a longer more equitable embargo period. This could be up to 12 months for science, technology and engineering publications and longer for publications in those disciplines which require more time to secure payback. Even so, publications with embargo periods longer than two years may find it difficult to argue that they are also serving the public interest.

**BIS 16 July 2012** 

Annex B

#### RCUK Allocation of the £10 Million for the Initial Introduction of 'Gold OA'

- I. RCUK's policy on Access to Research Outputs is available at: <a href="https://www.rcuk.ac.uk/research/Pages/outputs.aspx">www.rcuk.ac.uk/research/Pages/outputs.aspx</a>
- 2. The institutions that will receive the additional funding are:

Cardiff University

**Durham University** 

Imperial College London

King's College London

Loughborough University

Newcastle University

Queen Mary, University of London

Queen's University of Belfast

The University of Manchester

University College London

University of Aberdeen

University of Birmingham

University of Bristol

University of Cambridge

University of Dundee

University of Edinburgh

University of Exeter

University of Glasgow

University of Leeds

University of Leicester

University of Liverpool

University of Nottingham

University of Oxford

University of Reading

University of Sheffield

University of Southampton

University of St Andrews

University of Strathclyde

University of Warwick

University of York

Annex C

#### Update on implementation of RCUK Policy on Open Access, December 2012

#### The RCUK Policy on Open Access

The RCUK Policy on Open Access applies to peer-reviewed research papers that would normally be published in journals or conference proceedings, and which result from research acknowledges funding from the Research Councils. It does not apply to other forms of scholarly output, such as books or monographs. The policy builds on individual councils' policies on open access which have been in place since 2005/6.

Peer-reviewed research papers submitted for publication from 1 April 2013:

- be published in journals which are compliant with Research Council policy on Open Access, and;
- Must include details of the funding that supported the research, and a statement on how the underlying research materials such as data, samples or models can be accessed.

To be compliant with the policy, Journals must offer either a 'Gold' Open Access option, which results in immediate and unrestricted access to the published version of a paper via the journal's web site; or a 'Green' option, allowing deposit of the authors final peer-reviewed manuscript in an institutional or subject-specific repository, with a maximum embargo period on access of 6 months (or 12 months for AHRC & ESRC funded research). In addition, the policy requires publishers to use the Creative Commons 'Attribution' licence (CC-BY), when an Article Processing Charge (APC) is levied.

Summary of the main RCUK actions since publication of the Finch Report (June 2012)

- 16 July: Revised RCUK Policy on Open Access launched, alongside the Government response to the Finch report, to come into force on 1 April 2013.
- 7 September: Announcement of additional £10M provided by BIS to pump-prime activities in Open Access during FY 2012/13.
- 8 November: Announcement of RCUK funding mechanism to support payment of Article Processing Charges for 'Gold' OA, and the length of the transition period.
- 13 November: RCUK workshop for key HEIs on implementation of RCUK OA policy.
- 6 December: Russell Group convened meeting with publishers, learned societies and RCUK to discuss the RCUK OA policy.

#### Reaction to the RCUK OA policy

• Much of the reaction to the revised policy has been supportive and the main concerns are not with the policy as such but its implementation and the speed of the transition to a new 'normal' of Open Access.

Some learned societies in the Humanities, Arts and Social Sciences (HASS) have expressed concerns about making the Gold OA model work for their journals, because of specific issues over the small number of authors and the longer average article length, in relation to the number of subscribers, which would result in what are considered to be unsustainably large APCs. There is also considerable concern in the HASS community that HEIs will spend the RCUK block grant disproportionately on articles in the natural sciences. RCUK has no evidence that this will be the case. Whether it is will be part of the review in 2014.

In addition, there have been objections from some in the HASS community to the requirement to use the CC-BY licence for papers published using the Gold OA model. Some of the issues (for example, use of 3<sup>rd</sup> party material in papers) need further exploration. However, much of the discussion seems to be based on misinterpretation and misrepresentation of what the CC-BY licence will and will not allow. RCUK has concerns that some communities are proposing to use the CC-BY-NC licence, which by disallowing commercial re-use, will impose barriers to the full re-use of published papers, and stifle innovation within scholarly publishing.

Some of the feedback from HEI community gives the impression that they are expecting RCUK to provide all the solutions, rather than recognising that HEIs have a key role to play. For example, by just stating that RCUK is not providing sufficient funding, rather than acknowledging that the HEI community must play a key role in negotiating with publishers to drive down subscription and APC costs to enable the available funding to go further.

There is also a continuing and vocal campaign by a number of OA 'pioneers' who consider that RCUK and Finch have made a major mistake in supporting the Gold approach to OA, in preference to Green. Their concerns are based around cost (Gold is using money that could be spent on research) and, from their perspective, the lack of any demonstrated requirement for re-use requiring a CC-BY licence. The RCUK position is that disseminating research is just as much a cost of research as is hiring researchers, buying consumables, and so on.

#### **Funding for Gold Open Access**

The total amount of funding that RCUK will put into supporting Gold open access is based on estimates of the numbers of publications arising from all Research Council funded research activities. Publications data from 2010 & 2011 indicate that some 26,000 peer-reviewed research papers per year arise from Research Council funded research, of which approximately 90% are produced within the HEI sector and 10% from Research Council institutes. The average cost of an APC has been taken from the Finch report (estimated as £1727 plus VAT). The total value of the RCUK APC fund for supporting the HEI sector has therefore been set as follows:

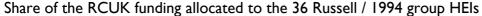
Year	2013/14	2014/15	2015/16	2016/17	2017/18
Value of RCUK	£17M	£20M	£TBD	£TBD	£TBD
APC fund					
Estimated %	45%	53%	60%	67%	75%
papers block					
grant will fund					
as Gold OA					

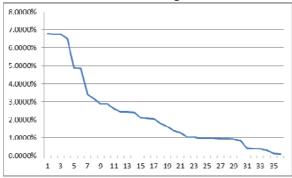
The value of APC awards from 2015/16 onwards are indicative only, and will depend on the outcome of the next Spending Review, and any changes in funding resulting in the review of the policy planned for 2014.

This increase in funding over a five-year transition is a reflection of the time that will be needed for researchers, institutions and publishers to transition into a 'Gold' OA model, as well as to allow existing publication funding already provided through direct and indirect

costs as part of grant funding to be fully utilised. RCUK estimates that the steady-state will be that some three-quarters of research council funded research will be published using the 'Gold' OA route and a quarter using 'Green'. However, we will review this figure during the transition phase as we gather further publication data.

Universities will receive block grants in proportion to the amount of direct labour costs ('directly-incurred' and 'directly-allocated') awarded on grants provided it is above a threshold total of £10,000, that they have received over the three years from April 2009 to March 2012. Direct labour costs have been used as a proxy of research effort leading to the generation of publications, independent of the effects of equipment and infrastructure costs, and overheads. The 36 institutions from the Russell and 1994 groups of research intensive HEIs will receive just over 80% of RCUK's APC funding. Seventy-one other institutions share the remaining funding. In addition, the top 30 HEIs (in terms of total funding from the research and funding councils) have shared in the distribution of the £10M made available by BIS to help kick-start OA developments (to be spent by 31 March 2013).





#### **RCUK Activities to Support Policy Implementation**

- Facilitating a project within the HEI sector to develop common processes and
  procedures, and to share best practice to support implementation of the RCUK policy.
  RCUK will provide funding to support a project manager and discussions are underway
  with a number of organisations about hosting the project office.
- In conjunction with the Wellcome Trust, commissioning the SHERPA-RoMEO group at Nottingham University to develop a support service to provide easily accessible and understandable advice on how journals provide compliance with the RCUK and WT policies.
- In conjunction with the Wellcome Trust, we have written to the top-60 publishers of
  Trust and RCUK funded research to inform them of the changes in policy and to ask
  how they plan to comply with policy. This process has resulted in constructive dialogue
  with the major publishers, and with publisher trade bodies (STM, ALPSP, PA & OASPA).
  Meetings with the trade bodies are continuing on a regular basis.
- RCUK will be holding a series of bilateral meetings with key stakeholders between now
  and mid-February, to discuss details of implementation of the policy. These include a
  meeting with the Russell Group, with a range of Learned Societies and with publishers –
  in The Arts, Humanities & Social Sciences; Biomedical sciences; and 'other' Science &
  Technology. We expect to recognise the outcomes of these meetings in the final

• It is planned to issue updated guidance on implementation of the policy in mid-February, following this process - current guidance is on the RCUK website. We recognise that the funding we are providing to HEIs to implement the policy is based on a number of estimates. We will therefore undertake a review of the policy and its implementation in 2014. We are making it clear that if there is real evidence that the policy is not working, is producing unintended consequences, or that the level of funding we are making available to support it is insufficient, we will take this evidence very seriously as part of the review. However, at present we are of course unable to make any commitments beyond the current SR period.

#### **Sustainability**

A common criticism is that the Research Councils are diverting money that would otherwise be spent on research into paying additional money to publishers in Gold APCs. The Finch Report recommended that 'Gold' is the only long-term sustainable solution for publishers. However, RCUK considers that sustainability cuts two ways. The model also needs to be sustainable for funders and institutions. RCUK will make the data they collect on APC fees paid through their block-grant mechanism publicly available. We expect HEIs, JISC Collections and others (e.g. RLUK) to negotiate hard with publishers to drive down subscription charges to reflect the additional funding that they are receiving to support the payment of APCs. Ideally, we would expect publishers to introduce differential pricing in the UK market to reflect additional income they are earning through APCs.

# **Compliance monitoring**

The Research Councils recognise that implementation of its policy on Open Access will require a major change in the way researchers, institutions and publishers manage the process of publishing the results of the research that we fund. The Research Councils are also asking that this cultural shift takes place over a relatively short period of five years. For these reasons, the Research Councils see this transition to full Open Access as a journey and not as a single event.

During the transition period we expect researchers and their institutions to follow the spirit of the policy and strive to achieve full compliance. As the available funding for Gold Open Access increases during the transition phase, so will our expectations of compliance. At the end of the transition period we will expect researchers and institutions to be fully compliant with the policy, and for 100% of research papers then arising from the research we fund to be published in journals which are compliant with our policy on Open Access.

In the early years, rather than wielding a big 'compliance stick', we want to work with the HEI sector to focus on changing the way researchers publish their research, to help facilitate a sustainable transition to a new 'normal' of Open Access.

### RCUK 17 December 2012

Annex D

# **Decision Tree for the Determination of Embargo Periods**

This flow diagram below was drawn up by the Publishers Association in consultation with BIS and RCUK and is on the Publishers' Association website and available from the Gov.UK website.

http://www.bis.gov.uk/news/topstories/2012/Jul/government-to-open-up-publicly-funded-research and also directly on the Publishers Association site at:

http://www.publishers.org.uk/index.php?option=com\_content&view=article&id=2299:finch-willetts-rcuk-green-oa-and-embargoes&catid=503:pa-press-releases-and-comments&ltemid=1618



Annex E

# Journal publishers consider free walk-in access via public libraries



Scholarly journal publishers collectively are exploring fee-waived walk-in access via the public library network, as part of a package of proposals under discussion in the Finch Working Group on extending access for UK researchers to global published research findings. A number of technical and licensing issues are still under review by a specialist publisher-library group, such as authentication, copying rights, and network security, but the expectation is that these matters can be resolved within an effective and sustainable overall package of recommendations from the Finch process. The repertoire available would be assembled and licensed on an opt-in basis, probably via the Publishers Licensing Society.

David Willetts MP, Minister for Universities and Science, speaking at the AGM of The Publishers Association said: "Open access is the way forward and this proposed PA initiative would be a very useful way of extending public access to the majority of articles currently only available to public libraries through subscription. If agreement can be reached on the PA's related conditions, it would be good for our libraries too."

Steven Hall, Managing Director of Institute of Physics Publishing said: "This is an important initiative to improve access beyond the research libraries and institutions with direct subscriptions. It must be seen however as an element in a balanced package in which evolving effective funding mechanisms to support gold open access and agreeing acceptable embargo periods for green open access mandates will be the critical issues, alongside extending existing licensing arrangements sector-by-sector through separate negotiations."

Graham Taylor, Director of Academic Publishing at The Publishers Association said: "We expect this significant initiative will be a welcome new means of extending access to journal articles for SMEs, entrepreneurs and citizen scholars who might not have ready access to a research library. The repertoire of primary global research has hitherto not been available via the public library network."

#### **Notes for editors**

- I. Finch is expected to report in June. The independent Working Group on Expanding Access to Published Research Findings chaired by Dame Janet Finch was established with DBIS support to investigate how access to global research outputs could be extended for the benefit of UK researchers. The WG has been operating since September 2011 and includes representatives from research libraries, learned societies, the funding councils, the research community, the universities and society, commercial and open access publishers.
- 2. This initiative is confined to primary research journals only. It does not extend to textbooks, research monographs (books), or aggregated databases already available to public libraries, nor would this offer extend to the consumer trade sector in any way.

#### **The Publishers Association**

The Publishers Association (PA) is the leading trade organisation serving book, journal and electronic publishers in the UK. Membership is comprised of 120 companies from across the trade, academic and education sectors. Its core service is representation and lobbying,

around copyright, rights and other matters relevant to members, who represent roughly 80% of the industry by turnover. <a href="www.publishers.org.uk">www.publishers.org.uk</a>.

# Government – the Rt Hon David Willetts MP, Minister of State for Universities and Science, Department for Business Innovation and Skills (BIS) – Oral evidence (QQ 71-83)

Evidence Session No. 5

Heard in Public

Questions 71 - 83

# TUESDAY 29 JANUARY 2013

Members present

Lord Krebs (Chair)
Lord Broers
Lord Dixon-Smith
Baroness Hilton of Eggardon
Baroness Perry of Southwark
Lord Rees of Ludlow
Earl of Selborne
Baroness Sharp of Guildford
Lord Wade of Chorlton
Lord Willis of Knaresborough
Lord Winston

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#### **Examination of Witness**

**Rt Hon David Willetts MP**, Minister of State for Science and Universities, Department of Business, Innovation and Skills (BIS).

**Q71 The Chairman:** It may be that you have to leave us for a short while to take part in the vote. We obviously accept that. You will know that the point of this very short inquiry is not to question the overall policy of open access, but to look at the details of how the recommendations from the Finch review, which you set up, have been and are being implemented by the Research Councils, HEFCE and others. We are very much in the phase of looking at the nuts and bolts of implementation and we would very much like to be able to put some questions around that topic, but before I start the questioning, perhaps for the record you could introduce yourself.

**David Willetts MP**: David Willetts, Minister for Universities and Science. Thank you very much. I should apologise in advance to the Committee; we are expecting a vote at about 4 pm in the House of Commons, so I am going to disappear briefly for that.

**The Chairman:** We will crack on as fast as we can. I would like to start with the whole issue of embargoes in relation to green open access, which, as you will be aware, has been a subject of great debate and contention, and many of the written evidence statements we received pointed to a lack of clarity on the part of RCUK on exactly what their policy was

and whether or not their policy coincided with the one that you have publicly adopted, which follows the decision tree produced by the Publishers Association.

What we have heard earlier on this afternoon from RCUK is that they envisage a period of time over which they will evolve towards a six/I2-month embargo of green open access, but they accept that at the beginning there will be greater flexibility with longer embargo periods for certain subject areas, as has been articulated in the Publishers Association decision tree. They have told us that they envisage a review in the next two years to see how things are going before they decide the pace of further travel towards a six/I2-month embargo implementation. What I wanted to ask you, Minister, was whether you are content at this point that RCUK are following the line that you have set out as BIS policy, or is there a gulf between you?

**David Willetts MP**: No, I am content that they are. The Government policy was set out in our response to Recommendation I0 in Janet Finch's excellent report. It is captured very clearly in the Publishers Association decision tree, which I think does very much reflect our policy. Of course I understand that RCUK have ambitions of going even further, but I think the Research Councils accept that the Government policy is the framework within which they will also be operating before we reach the nirvana of which they dream.

**The Chairman:** Yes, that is very encouraging and I think that in itself will provide a lot of clarity and be very helpful to many of the stakeholders who have written in with their concerns.

Another point, another aspect of this, is the question of whether it should be a one-size-fits-all model, and you will be very well aware that particularly in the humanities and in the social sciences there is concern that the half-life of literature is much longer than in the biomedical and perhaps in the physical sciences, and therefore it will be reasonable, even at equilibrium, to think of differentials in different subject areas in embargo periods. Again, this is something that I guess is implicit in what you have said, but I wondered if you feel that the Research Councils have adequately taken on board the notion that it may not be a one-size-fits-all model, that it may be horses for courses.

**David Willetts MP**: Again, I do, Mr Chairman, and it is not a one-size-fits-all. The so-called half-life of a publication in the humanities is longer than at the other end of the spectrum, medical research, where I am told the world moves on very rapidly indeed. We completely understand that. It is one of the reasons why we formulated that policy in answer to Recommendation 10 the way that we did. I know and I understand that the Research Councils also appreciate this, and we are all keen to work with the humanities and respect that they have a rather different form of scholarly publication than some other disciplines.

**The Chairman:** That is extremely helpful to us. I think I would like to turn to Baroness Sharp to pick up some thoughts about costs and benefits.

Q72 Baroness Sharp of Guildford: I think one of the interesting issues that has become apparent to us as we have moved into this inquiry has been to realise that the gold and the green routes really go side by side, and that many universities, particularly over the transition period, are going to have to pay subscriptions to journals, because a lot of articles are still going to be published in journals, while at the same time the Research Councils are going to be putting funding into the universities in order to pay the APCs for our own researchers, who are accessing the journals through the open access route. This raises the whole question of the costs and the benefits that will derive from this policy, and we

wondered what work the department had been doing in terms of looking at the costs and benefits of the open access route. I think in particular we are quite interested in knowing what you see as being the benefits of the open access route.

**David Willetts MP**: First of all, this is a process, and indeed, if one tries to imagine what the alternative would be, sort of one moment at midnight the existing publishing model disappears and a new arrangement comes in around the world where everything goes gold, it is not going to be like the famous day when in Sweden they shifted from driving on the left to driving on the right at 4 in the morning. It is not what the world is like. It is a process. I think we are already across the world at about 17% of academic research papers being published under open access<sup>62</sup>, and it is clear to me that that is the way the world is heading. It is the Government's view that it is a good thing that the world is heading in that way, but it is going to take time.

For the economics of the costs and benefits, there was economic analysis prepared for the Finch inquiry, which I think is probably available. We have done some economic analysis in BIS, though it has tended to focus on a much narrower set of questions, kind of trying to work out the costs, not least for public expenditure costs of different routes to green and gold. I think what we could do is provide a summary of that very expeditiously; I think the fuller report is due be published and certainly shown to the Committee in the next few weeks.

In a way, taking a lot of steps back, I have been very influenced by thinking about, for example, the industrial revolution. There is that book by the economic historian, Joel Mokyr, *The Gifts of Athena*, which argues that one of the reasons why we had the industrial revolution in Britain was that we had a better means of transmitting information and new technical advances were more rapidly absorbed across British society than any other country in the world because we had a rich network of learned societies, publications, a lively literary life. I see that underlying argument as applying to open access today in just the same way.

The Chairman: Of course, a difference is that open access in the gold model would be access to anybody in the world instantly, so it would benefit industries and entrepreneurs in other parts of the world just as much as in the UK, so we are sort of altruistically sharing our investment and benefits and the fruits of that with everybody else through paying upfront for gold open access. Is that part of the calculation that your department undertook?

**David Willetts MP**: Indeed, one of the things we did reflect on was: is there a kind of first mover advantage or a first mover disadvantage? My view is that there is a first mover advantage. I think this is a change that is happening around the world, and my view is that, setting aside the particular details of Government policy, academic publishing is probably going to go through the same kind of transition that, for example, the music industry has gone through. We cannot pretend that in five years' time it is going to look the same as it did five years ago, so my view is that getting ahead of the curve is better than trying to race to catch up big underlying changes. We also took the view that a clear position from the British Government could help influence the debate elsewhere and would have an influence across the EU and could have an influence in the US, and I think that there is a pretty clear trend in both the EU and the US to move in the same kind of direction.

The Chairman: I think that leads neatly to Earl Selborne.

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<sup>&</sup>lt;sup>62</sup> Note from witness: 11% gold and 6% green

Q73 Earl of Selborne: Going on with the thoughts as to the relative merits of gold versus green and to what extent the rest of the world are likely to follow, am I not right in thinking that in the United States the NIH, although it is certainly promoting open access very staunchly, does not take a stand between green and gold and supports both forms of access? Is it not true also that in Australia, as from I January, they have just announced their own open access institutional response and that again is effectively a requirement to put papers in repositories? That seems to me another example where the green route, which we of course describe as a legitimate second-best, nevertheless has plenty of legs still and it may even be that the direction that the rest of the world is heading is not so clearly demarcated towards gold. Are you convinced that gold will ultimately win this particular battle?

**David Willetts MP**: Of course we ourselves envisage a kind of mixed model for years to come through this transition. I very much agree with Janet Finch: I do think there are some advantages in gold. First of all, it is honesty, it is explicit. There is a cost and a value to publishing and we should recognise it, and it is a legitimate and inherent part of the research process, the costs of transmitting and publishing the work. It is explicitly recognised and I like that about it. I like the fact of course that you do get the work openly accessible straight away. The hidden cost in green is waiting six months, 12 months, 24 months, whatever it is, until the layperson outside the academic community can access a piece of work that he or she as a taxpayer has already paid for once. That is the second advantage.

Thirdly, CC BY and the ability as part of gold to have proper access to the data behind the research I think is another advantage of gold, so I do think there are significant advantages, but we are not purists; we do not expect Britain, let alone the world, to go completely gold anytime soon.

**Earl of Selborne:** Of course, if we accept that subscription journals are going to continue simply because the rest of the world is locked into a system whereby that is one of the main forms of delivering, it is not going to change rapidly. It follows, therefore, that university libraries are going to probably have to continue to subscribe more than they would wish, and of course they complain bitterly, not unnaturally, about the cost of some of these publications. It means therefore that the APCs represent an additional cost. If, therefore, they are able to continue to use green, which is clearly a cheaper option, without the APC, there might be advantages.

I accept in the life sciences, where you are mining data and text and doing all sorts of clever things, integrating the data, that is where the gold is without doubt going to be the preferred option, but of course a lot of people from the humanities and social sciences have said that they really cannot see this benefit for their discipline. They already have the repositories and they do not even necessarily see that the embargo will have to be enforced. There are many ways around it—people can identify the publication that they are interested in and they can get hold of a preprint or whatever—so it is not clear to me that gold will always prevail over green. Is there a danger that we are going to be isolated by being the prime mover?

**David Willetts MP**: I would be very surprised if we were isolated. Two points: first of all, of course we have in the future to think of an academic journal not as a bundled-up physical publication with 10 articles physically stitched together. I think we increasingly unbundle. It will be individual research papers. If it is available on gold we are not also going to have to pay to access it through a pay wall, so the university library, in your case, is not going to be paying twice for the same piece of research. There may be a piece of research from the US

it still has to pay for, and there will be another piece of research covered under gold it does not have to pay for, but it is not going to pay twice for any given piece of research.

I think the second point I would make is that of course I understand there are these distinctive concerns in the humanities. I love the humanities. We partly hear this undercurrent of anxiety that because of the power of the physical sciences, the humanities are being ignored. The humanities have a distinctive model, they have a slightly different form of scholarship and there is no attempt to impose on the humanities a model that, in your own fair example, works probably more in medical research. I am sure that is already reflected in the different proposals on green and I am sure that both the Higher Education Funding Council and the Research Councils will keep in very close touch with the humanities as this policy develops. But I think even for the humanities there is some upside here. This is the way the world is going and they are themselves, I hope, going to potentially be beneficiaries of this direction of travel, but we will work with them and not try to impose uniformity on them.

**Q74** Baroness Sharp of Guildford: Ironically, those in the humanities areas where there are learned societies feel that the particular gold model undermines the economics of course of the learned society itself.

**David Willetts MP**: Yes, I hear that, and I will be having another meeting on all this I think next week at BIS, when the representatives of the learned societies will be able to make this point. I personally would be surprised. The purpose of gold access is properly to meet the costs of publishing a piece of work, so if there is an academic journal produced by a learned society and it costs X thousand pounds to get this piece of work to appear, then that will be reflected in the payment made under gold. It is an open and honest reflection of the costs they face.

**Baroness Sharp of Guildford:** Yes, it does depend very much indeed upon the degree to which the other countries go the same route and authors from other countries go that route or not, because if some authors are submitting articles, there are going to be hybrid journals, some of which come under open access and some do not. At the moment the economics of it really depend on the subscriptions that come from overseas. Many of these learned societies' journals have something like 80% of international subscribers.

David Willetts MP: Indeed, and I think we will. I can envisage that hybrid model, and as I say, it will be unbundling, but are we really saying that British scholars will be at a disadvantage because their work will be the work that is openly accessible and immediately readable, and the other scholars whose work is behind a pay wall for a year or two years or longer are going to be somehow the ones who are enjoying the benefits? It seems to me absolutely clear. I am trying to put myself into the unlikely role and imagine myself as a scholar, and say, "Okay, your article is going to be available around the world to be read, not behind a pay wall, from day one" and it is not immediately obvious to me that being behind the pay wall is the superior option that he or she will look at enviously.

The Chairman: One of the points that was made this morning to us by Dr Rita Gardner, the Chief Executive of the Royal Geographical Society, representing learned societies, was the suggestion that there ought to be some kind of fund, an innovation fund, to enable learned societies to transition from their current traditional subscription-based model—which is often a mixture of library subscriptions at quite a high price and then membership subscriptions for academics, including research students, at a very low price—to a model that may be a mixture of green and gold or may be completely gold. There is going to be

some disruption during the transitional phase. Do you think there is a case for the Government providing a modest degree of support through an innovation fund to learned societies for them to bid into?

**David Willetts MP**: First of all, I recognise the issue of transition. This is a process; it is not a sudden moment when the world completely changes. Part of why it is a process is absolutely to help—to work with the academic community through the process, which I personally think is heavily driven by changes in technology and underlying economics. I have no available public expenditure at this moment. Of course, when we did have a modest amount of leeway, I was able to find an extra £10 million additional to the ring-fenced budget to offer a tiny bit of extra help. I do not immediately see where we would have that resource, but I am very happy to have that conversation and try to understand what their anxieties are about the costs of transition.

**The Chairman:** That may well come in the meeting you have with them in the weeks ahead.

Q75 Lord Broers: Might I just ask you, Minister, how fixed you are in the timetables, et cetera? If you look at the rate of change here—and I do not think any of us disagree with you about the overall benefits of open access—there are very popular journals such as *Science* where we have received conflicting evidence, I must say, as to whether it is going to meet our open requirement and whether it is not. We also hear that the National Science Foundation in the States, which after all is the largest body funding science, is in favour of green. If perchance things do not go as rapidly as we might envisage or you might envisage, do you see us being flexible about that, in delaying the rate of implementation?

**David Willetts MP**: We have said, or the Research Councils have said, already that they envisage reviewing this in 2014. This is a journey and it is a big change, as we were talking about. I do think that the arguments for gold are quite strong. No, more than that, I think they clearly make it superior to green, but I realise there are other people who believe in green. From my conversations with both people in the US and in the EU, I think they understand the particular merits of gold, but yes, we will be reviewing implementation in 2014 and that will give us flexibility on timing and everything else.

The Chairman: One thing apropos of what Lord Broers has just said, and we were told about it by RCUK, is that they have constructed a table of where different countries are in their journey towards open access and whether they are heading towards a gold or a green model. I wondered if this was something that RCUK had shared with BIS so one could keep an eye on what the likely picture was going to be in 2014 and beyond.

**David Willetts MP**: Yes. I do not immediately recall having seen that kind of table, but I should well imagine it has been shared with my officials. We are very aware of the importance of the international scene and monitoring is something that I discussed with the EU Commissioner. It is something I discussed with John Holdren, the President's science adviser, too. But as we have the advantage of a very clear, well-argued report from Janet Finch, I think that gives us an opportunity to influence what happens elsewhere in the world.

**The Chairman:** One other point that has been made to us on the international dimension by the universities is that of course the ranking of our universities in international league tables—which, while one may disagree with the details of it, nevertheless is important to us, and we like to boast about our universities being in the top 10 or top 20—could be affected by the policy because there may not be enough money to pay for all the authors who would

wish to publish their articles in APC-charged journals or there may be international journals that are not compliant with RCUK policy, but nevertheless are high-profile journals that affect our standing in the international rankings. Is that a storm in a teacup or is that something one should be concerned about?

**David Willetts MP**: First of all, I did not properly answer that point that Lord Broers made. My understanding—and I am going on the reports—is that *Science* and *Nature* would both be compliant within our policy. I realise there are different claims about that, but that is what I have been assured by experts, who should know.

More widely, if the funding for gold has run out—and I fully recognise that gold does come with an upfront cost, and with an upfront benefit as well, of course—then the famous publishers' decision tree absolutely shows what the alterative options are, and it would be hard to envisage a major journal that was not covered by the full range of options in that decision tree.

Q76 Lord Rees of Ludlow: Is there a risk of a race to the bottom, in that the learned society journals, even if they budget for open access, have to exist to provide the benefits you need, and they may be under threat if there are a number of rather less austerely refereed journals that start up, charging lower fees? This is already happening. Do you think the market will allow the policy to survive at the risk of the really good journals, many learned society journals, being squeezed out because they have been undercut by journals of, frankly, lower quality and less stringent refereeing?

David Willetts MP: This is fascinating, and it is absolutely analogous to what is happening in other areas as technology advances, exactly the same as the question whether you would pay for a newspaper when you can get so much information directly on Google. It depends on the value that is attached to the editorial function. If the editorial function has high value and is done well and there is saving of time and effort by being told this because it appears in the Journal of the Royal Society and it has a massive value, then the system will carry on as before. If, however, the democratic surge of new forms of availability of science publications through some new mechanisms or portals—if that is a surge—and people, young scientific researchers, find out a better way of accessing the material they want rapidly, then that will indeed be the future model, but we are not pronouncing on that, and it is just the competitive environment within which the publishing industry will be operating.

**Lord Rees of Ludlow:** What could happen is that the top journals are indeed doing a much better editorial job, but those in universities who allocate the funds may be under pressure not to support those expensive journals, but to go for cheap ones, so it is not clear to me that the strong journals will be supported even if in fact they are deservedly so and have higher fees.

**David Willetts MP**: Lord Rees, you are a distinguished academic administrator in your time, having been a master of a college and a vice-chancellor, and also a member of the committee for the defence of the university. Let me just say that this kind of model where university administrators are kind of the enemies of academic endeavour and will push their own scholars, of whom their institutions can take great pride, and say, "No, we are not going to have you publishing in *Science*. We want to publish in a junior journal", I would be very surprised at. They are not the enemy. This is a shared academic endeavour in universities, and I think it is bad to get into a mindset that they will suddenly decide they can save money by instructing a researcher to publish in some undervalued journal. As I say, I think the problem is not oppression by universities. The issue is whether, as the external

environment changes, the editorial value added by these journals is one that is sufficiently valuable or how much it is worth. On that, it is not for Ministers to decide. We will see over the next five or 10 years.

Q77 Baroness Perry of Southwark: You talked about having made an assessment of the costs and benefits of being the first, being the early bird going in this direction compared to other countries, and our earlier witnesses from the publishers' field did say to us that they saw the British scientific publications as a sort of shop window for British science in general, because they are prestigious journals and are seen around the world and it sort of rubs off on the scientific community here. Nevertheless, about 90% plus of what they publish is not British science, it is from overseas. Did you worry at all that by being first in the field with what is an expensive way of publishing we may discourage some of our overseas contributors from coming to British publications? They may take their business elsewhere and we will lose the prestige of our publications.

**David Willetts MP**: If you are an overseas researcher in a country that does not have a gold access policy, then your research paper can be published in the old way. There is nothing that stops that happening. For the British researcher, as we move towards gold open access—and we are certainly a long way off 100%—the British Government will be covering through research funding your publication costs and you can appear with your research being immediately available. I see that as absolutely delivering what you talk about, Baroness Perry. That makes the British research even more prominent, and for the publishing model, insofar as it is financed differently because it is an article from overseas, that will carry on.

**Baroness Perry of Southwark:** What about an American researcher who would normally publish in a British journal? Might they not decide to publish elsewhere?

**David Willetts MP**: I do not know. The truth is none of us can be absolutely sure. The truth is this is a changing environment, and I think the biggest single change is not driven by Government policy, it is driven by wider technological change. But I do not see why that should happen. In 2014 when the Research Councils review it, if they find this is happening, I am sure they would take that very seriously and report it to me and we would all consider it, but I do not myself see why that problem should arise, but we will keep an open mind. If it did, we would certainly have to react.

**Q78** Lord Winston: What about the hiring position, where a research worker is, let us say, working on premises that are funded by EPSRC but the experiment that they are doing is funded by somebody else, a charity or not public money. Does that matter?

**David Willetts MP**: Yes. I think that that is a very fair point and those are exactly the kind of issues that have to be addressed as the policy is developed. We are trying to operate from the basic principle of: if it is research that has been funded by the British taxpayer, we think that it should be publicly accessible, but when there is a blend or an international cooperation, that does make it more tricky and they will have to develop rules of the road through those rather more complicated situations.

Q79 Lord Broers: I think you have already answered this question, Minister, but I will ask it and set it perhaps in a slightly different context. The question that I want to ask is whether you are confident that universities are able to distribute the APCs in a reasonable way. I think you have already pointed out that it was in their interests so to do. However, there could be the situation where a university really did not have enough money to do this

in the money being provided, and there is always a temptation. It was Lord Rees who was telling us in an earlier session that there are repository databases or archives where people can shove their paper in there anyway, and I believe your community uses these quite frequently. People do like that because their first priority is to get their publication out there, as you are saying, and if the obtaining of money is going to delay that, they might just go back to a completely un-peer-reviewed route instead. But my central question is: are you confident that there should not be some rules about how these monies should be distributed?

**David Willetts MP**: May I reflect very carefully on that and report back after I have voted? Would that be all right?

The Chairman: Yes, certainly.

David Willetts MP: I will be back in a moment.

Sitting suspended.

Sitting resumed.

**Q80** The Chairman: We were in the process—Lord Broers, I think—of asking you about confidence in the universities to administer the APC funds in the inevitability of a squeeze, and there being more supplicants to the fund than can be supported by the limited funds available. We know from the RCUK figures that they are not going to fund all publications at APC level, and I think the question was: is this purely a matter for universities to figure out, or should there be some over-arching guide on this?

**David Willetts MP**: My instinct on that is it is largely something for the universities. In general, we try to work on the basis that we trust the universities and that universities have the best interests of their own academic staff at heart, but as I said in answer to the earlier line of questioning from Baroness Perry, we will remain open-minded. This is a journey, and if, for example, in the review in 2014 a problem presents itself, we absolutely undertake to reflect on it. We are not closed-minded. I personally think that some of these anxieties loom large in anticipation and may not prove to be so serious as the system works, but there may be some that are proved to be well-founded. In that case we would absolutely have to engage with them and do our best to tackle them.

**Q81** Baroness Sharp of Guildford: Under the same head comes the question of whether the methods of allocation will exclude those who are at an early stage in their academic careers, where it will be very difficult for the young researchers and young PhD students to get APCs paid for by the university.

The other area where concerns have been raised are for those universities that are not research-intensive and will not be receiving RCUK funds to help fund the APCs and whether they will be at a disadvantage. Bright researchers in such environments who come up with good ideas will be at a disadvantage compared to their peers in other universities.

**David Willetts MP**: Again, I do hear those concerns myself. They are expressed and you are correctly raising them, but I have to say that I think a university that did not want to bring on its talented younger researchers by giving them an opportunity to publish would be operating in a very odd way indeed and I think it is part of a university's responsibility. As I say, we believe in Britain in the autonomy of our universities, and I think by and large they can be trusted to do that. If it became clear that suddenly in the life of a post-doc, which in many ways has quite enough stresses and strains already, they were also suffering from this

problem, we would engage with it. But if I were running a university, one of the things I would want is my university to have a reputation for nurturing their post-docs and pushing them forward to publish.

Yes, sorry, your second point. The fact is that for the universities that have more modest levels of research activity—and I will be honest, we have not been able to find a cost-effective way of directly providing extra funding for them—it cuts both ways. The sums of money involved are very modest so it is not a big cost in the context of their total budgets. On the other hand, it is quite hard for us or HEFCE to find a way of specifically funding down, so it is just a matter of the overhead admin burden of doing it relative to the sums of money involved.

**Q82** Lord Willis of Knaresborough: Just a general question: you produced the Charity Research Support Fund to support the charities in terms of full economic cost. Is there any plan to have a similar approach to invite open access? As I think Lord Winston remarked, a lot of the work that the charities cover is co-funded with NIHR and indeed with other departments. Is there any movement along that line to include it within the charity research support?

**David Willetts MP**: We are not envisaging that at this stage, and of course in some ways we are just following procedures that some of the leading charities like the Wellcome Trust have already introduced.

Lord Willis of Knaresborough: We are very supportive of it.

**David Willetts MP**: Some of them are ahead of us and we are trying to keep up with them. Again, if this proved to be an enormous problem, we would try to tackle it, but we have to see how it plays out, and we do not currently envisage that as being a problem and we do not currently have the funds to do anything about it even if it did emerge, but if it is big, we will look at it.

**Q83** The Chairman: Thank you. Are there any other questions that members of the Committee would like to put? In that case I would like to thank you, Minister, and I think one conclusion that I draw very much from this afternoon's evidence is that things are more flexible and less rigidly set in stone than perhaps many of the people who submitted written evidence had come to believe. That in itself is a very helpful outcome of this afternoon—to understand there is greater flexibility, there is the thought of reviewing things as we move forward, and the policies that are being envisaged as maybe long-term aims will be reviewed over time, and changes of direction or modification of direction may be relevant and appropriate.

**David Willetts MP**: Yes, I think it is a fair summary. The goal was set out not least in our innovation and research strategy back in December 2011, and I do think the world is moving to open access, but absolutely, if particular problems present themselves on this journey, we will do our best to respond to them in a grown-up way.

**The Chairman:** That is very helpful, and thank you very much for your evidence. As you know, you will receive in due course a draft of the transcript to make editorial corrections and we will publish our findings in fact very shortly. Thank you very much indeed.

David Willetts MP: Thank you.

# Government – the Rt Hon David Willetts MP, Minister of State for Universities and Science, Department for Business Innovation and Skills (BIS) – Supplementary written evidence

### Inquiry on Open Access: BIS Economic Analysis

Thank you for providing me with an opportunity to set out the Government's position on Open Access policy when I appeared before your Committee on Tuesday 29th January.

At the hearing, we discussed the economic basis of the Government's policy on Open Access. I confirmed that BIS had undertaken some limited ex-ante economic modelling prior to deciding upon its policy on Open Access. That modelling, or Economic Analysis, was done in mid 2012, while the Finch Group was still deliberating. The Analysis served to examine the potential costs of the various means by which Open Access may be achieved, in anticipation of the Dame Janet Finch's findings. It was not a wider economic analysis of open access.

I agreed to share with the Committee a summary of the BIS Economic Analysis, and informed you that the department intended to publish the full Analysis in the coming few weeks. The full document is now being finalised for publication by the end of February 2013. Meanwhile, I am pleased to enclose a summary paper.

I emphasised that the economic analysis by BIS was not a full Cost-Benefit Analysis, since that was deemed by our economists to be inappropriate given the uncertainties involved. It was instead to assess the potential cost of expanding Open Access in different ways. It reassured me that that an Open Access policy in line with Dame Janet Finch's recommendations was economically feasible. The calculations undertaken by the BIS economists arrived at similar conclusions as the modelling of alternative Open Access options undertaken independently by *Cambridge Economic Policy Associates* as part of the Finch Review.

The key points emerging from our own economic analysis were:-

- In the absence of any idea on how publications and Open Access evolve over time, a linear growth model was assumed for publications and for OA over the 10 years running from 2011 to 2020.
- In the absence of any intervention or policy, linear growth in open access in the UK would imply that by 2020, 51 per cent of UK publications would be either Green or Gold OA. The cost of maintaining this organic linear growth trend from 2011 to 2020 would be £1.8 Billion. The cost of any policy should be judged against this baseline.
- Two alternatives for improving on this organically growing access were considered:
  - Option I: enable all organically growing OA to be Gold OA. This option would not change the total number of articles available in open access, which would still be 51 per cent by 2020 but all of it would be Gold. This option would cost £2.3bn over the decade 2011-2020. That is an additional cost over the baseline of £50m per year over the decade.

- Option 2: increase the total number of publications in OA. This was done by assuming that publications attributable to Research Councils would be funded for Gold OA whilst allowing for organic growth from other funders to continue at the assumed linear rate. This option would cost £2.2bn but it could deliver 64 per cent of UK publications in OA by 2020. This is an additional cost over the baseline of £40m per year over the decade.
- Given the assumption of linear growth, the option of gold access for all publications attributable to Research Councils costs £400m more than the baseline but provides 13 per cent more articles in OA by 2020 than the baseline. This option carries lower deadweight cost for the Government because it allows for other funders to contribute to the expansion of open access.
- Recognising that the assumptions made for the two options conceived by
  economists could not be directly related to the implementation policy finally being
  pursued (which now assumes that initially only 45 per cent of papers funded by
  RCUK will be Gold rising to 75 percent over five years). They indicate that the cost
  of a preference for Gold OA would be in the region of £40 million to £50 million
  per year, or some one per cent of the science base budget.

I hope you find the attached summary a useful addition in helping the Committee reach its conclusions from this Inquiry, and I look forward to receiving your report.

I February 2013

# Economic analysis of cost of alternative options for open access in the UK

Summary of modelling assumptions and findings

## **Background**

This analysis is an ex-ante assessment of the potential cost of open access (OA) policies and was carried out inform policy advice for BIS' response to the recommendations of the Finch Group.

The analysis is therefore not an evaluation of the policy subsequently adopted by RCUK but an assessment of:

- 1) The state of open access to scholarly research in the UK (as per information in the Summer of 2012).
- 2) Two alternative methods for increasing the take up of open access in the UK evaluated on the basis of their cost effectiveness with respect to the current state of OA.

This analysis quantifies the costs of alternative levels of open access, ex-ante, but not the economic and other benefits that open access brings about, which are difficult to estimate. Nevertheless, open access holds potential for enabling **open innovation** and speeding up the rate of technical progress that underpins sustainable long term growth. To support open innovation, the Government has a role in facilitating knowledge flows between the market

and non-market sector. As explained in the BIS Innovation and Research Strategy for Growth (2011), the Government can provide an infrastructure that allows users to exploit the findings of research more swiftly and a suitable open access policy is instrumental in this role.

Evidence on the quantity and quality of open access to scholarly research in the world and in the UK is incipient and scarce. For this reason all analyses on this matter rely on certain necessary assumptions. For the projections in this paper, the starting point is the year 2011, which is derived by applying to publication counts prevailing in 2010 the observed growth rate during 2005-10 and assuming that this growth is approximately constant thereafter. This assumption of constant growth ensures that all changes in cost observed are due to the difference in growth rates of OA and non-OA publications in the UK and elsewhere. Both for simplicity and due to a lack of reliable information, the estimates are not adjusted to account for future price inflation either nationally or in the market for scholarly research.

The analysis compared alternative possibilities for expanding access without reference to a preferred policy option. The comparative analysis is therefore based on projections, not predictions. Unlike a prediction, a projection estimates the possible evolution of open access in the UK and elsewhere on the basis of some stated assumptions. Because not enough is known about the way in which open access expands, BIS assumed the simplest model possible: constant growth departing from a known initial condition, the year 2010. In addition, assumptions on the unit costs of open access were made using actual information available at the time so as to approximate the total national costs of the projected open access policies. All assumptions are clearly stated below but they need not hold in an uncertain future. These projections are valid for the purposes of comparing alternative options because the same assumptions apply to all the alternatives, but should not be regarded as reliable predictions of the future evolution of open access. They do, however, represent the best comparative projections BIS could produce given the information available in the summer of 2011.

Following from the Finch Group's **working definition**, open access is the ability to download, read and print electronically-published refereed journal-articles, leaving aside research content that is accessible in other formats. Text mining is an <u>additional</u> service that may or may not be offered together with downloading, viewing and printing. The presence of the additional service of text mining increases the cost of open access<sup>63</sup>.

In the UK and elsewhere open access (even without text mining) is available only for a subset of published articles. Even so, open access is expanding worldwide at a fast pace<sup>64</sup>. There are many reasons why the findings of research are not immediately available upon publication. The Finch report gives a detailed account of the multiple interests and pressures that come together in the market for scholarly publishing.

# The market for scholarly publishing

BIS economic analysis of options considers only pricing in the market for scholarly publishing: whether a price should be paid for accessing a refereed journal article online

<sup>63</sup> JISC (2012) The value and benefits from text mining

<sup>&</sup>lt;sup>64</sup> Laakso & Bjork (2012) Anatomy of open access publishing: a study of the longitudinal development and internal structure. BMC Medicine

and if a price was justified what determines the level at which this price is set in the market for scholarly publishing. It is worth bearing in mind that in any market price setters may well set a price of zero for access, and the evidence on scholarly publishing is that some open access publishers indeed do. Because the market for scholarly publishing is not price-regulated, BIS took existing business models and price schedules as given in order to calculate the nation-wide cost of alternative policy options.

The main reason why any supplier charges a price is to recoup costs of production. This is no different in scholarly publishing. A refereed journal article is a bundled commodity made up of three elements: a research manuscript, a referee process over the manuscript and the publisher's certification that the referee process has taken place. The costs of the manuscript are borne by researchers and their funders. The costs of refereeing are shared between researchers (and their funders) and publishers who organise the refereeing. The costs of certification, that is formatting the article to the journal specification, are largely borne by publishers<sup>65</sup>. Payments for open access, called Article Processing Charges (APCs), are for recouping the cost of certification, uploading and maintaining the electronic version of the refereed journal article – all of which fall on the publisher who is thus the price-setter for APCs.

This analysis is not concerned with determining a clearing price for APCs, which, even if possible, would effectively imply regulating the market for scholarly publishing, which in turn is a global not domestic market. APCs can be expected to respond to business models and needs domestically in the UK and worldwide and possibly vary by research discipline and by the perceived standing or status of the journal's within any given research discipline. For the purpose of projecting the economic value of alternative policies, certain average APC prices have been assumed at levels explained below.

Property rights over the bundled commodity "refereed journal article" are also different for its components and this matters for open access policy options. Leaving referees aside, the manuscript belongs to the author(s), but the journal referee certification belongs to the publisher. This means there are at least two non-exclusive routes for accessing the findings of scholarly research

- I) the author exercises her property rights and deposits the manuscript (not the refereed article<sup>66</sup>) in an open electronic repository or digital library for free known in this analysis as **GREEN access**
- 2) the publisher exercises its property rights and charges a price (that could be zero) for making the refereed journal article immediately accessible on publication. Two common options for the publishers to collect revenue for access are:
- users pay a journal subscription for accessing articles that are otherwise embargoed for some period of time<sup>67</sup>; and
- authors pay an article processing charge (APC) for the publisher to make the article available to any user immediately on publication- known as GOLD access.

<sup>66</sup> Green access does not always guarantee a referee process has taken place; hence the "quality" of the accessible article has not always been certified.

<sup>&</sup>lt;sup>65</sup> PEER Economics Report 2011, Centro ASK – Universita Bocconi. JISC (2009) Economic Implications of alternative scholarly publishing models: exploring the costs and benefits

<sup>&</sup>lt;sup>67</sup> Confusingly, the subscription option is sometimes referred to as Green OA. For the avoidance of doubt in this analysis point 1) refers to Green OA and the first bullet under point 2) refers to subscriptions.

Note that even if hypothetically the whole of the UK's refereed journal articles were available in open access, under gold or green, UK publications would still account for only 6% of the World output of refereed journal articles, based on figures for 2010. To access publications from the rest of the world which are not available in open access, the UK must pay the price set by publishers, most commonly in the form of subscriptions

### The State of Open Access in Britain and the World

The proportion of OA-articles in the World was estimated to be around 10% in 2010 (Laakso 2011<sup>68</sup>) and growing at annualised rates of 20% in the previous 5 years. If this rate of growth was sustained until 2020, open access would reach 42% world wide by that year.

In 2010 UK researchers published 123,600 articles, attracting a 6% share of World publications (1,936,000). Under BIS assumptions<sup>69</sup>, the UK published 7% of world open access in 2010, which accounted for 11% of UK publications.

In Figure I growth rates are assumed constant to show that if trends prevailing prior to 2010 were sustained, 51% of all UK publications would be open access by 2020. Using this evolution of publications as the baseline it is possible to calculate the costs of maintaining the baseline trend.

There are two components of the total national cost of maintaining the baseline evolution: the costs of maintaining open access and the costs of subscribing to world articles that are not open access.

- The costs of maintaining open access: BIS estimates that for the circa 16,000 open access articles published in 2011, on average UK researchers paid approximately £750 per article<sup>70</sup>. If this unit cost was constant over time, the gross nominal cost of maintaining organically growing open access trends would raise to £25m in 2015 and £63m in 2020.
- The cost of accessing articles that are not open access: Subscription costs are projected to fall because open access worldwide is growing faster than total publication counts. This means that a larger proportion of world articles is available under open access over time and thus subscriptions should not have to be paid for those. If open access were to grow constantly as projected and assumed subscription rates per article<sup>71</sup> were constant, then the total costs of subscriptions would fall from £143m in 2011 to £133m in 2020.

Combining the two above factors into a single net effect, in the baseline scenario, if 2011 trends were maintained, the total UK APC and subscription cost of accessing scholarly research would rise from £155m in 2011 to £175m in 2015 and £196m in 2020.

69 This assumption states that the UK share of world open access is equal to the UK share of journals registered in the Directory of Open Access Journals (DOAJ). There were 533 UK journals in the total of 7600 registered in DOAJ in 2010, giving an assumed 7% share of UK of world OA-articles

<sup>68</sup> Laakso et al (2001) The development of open access journal publishing from 1993 to 2009. PLoS One.

<sup>70</sup> Finch Group reported £12m spent nationally in Open Access in 2010 for around 16,000 open access articles.

<sup>71</sup> Subscriptions are paid per journal not per article but BIS projections are based on article counts. Finch Group reported that £150m were paid in subscriptions in 2010 and Elsevier reported 18,000 journals in their database. Assuming an approximate 100 articles per journal per year gives an average price of £80 per article paid in subscriptions in the UK in 2010. This price is assumed constant so as to illustrate the potential for open access to lower subscription cost. BIS had no basis to argue whether average subscription rates were to go up or down over time.

Adding all estimated expenses from 2011 to 2020 leads to a total cumulative cost of £1.8bn over 10 years. A full breakdown of this and other calculations presented below is provided in Table 1.

# **Expanding access with GOLD open access**

The current state of open access does not guarantee that all open access is text mineable and fully accessible on publication, as dictated by gold open access. One way of expanding access to scholarly research in the UK is to improve the accessibility of the organically growing open access publications so that articles projected to be open access under the current state are gold accessible.

Following the relevant literature (Ambruster, 2010)<sup>72</sup> and the experience of the Welcome Trust, the average APC per article in gold open access was assumed to be £2,000 per article.

- The costs of granting gold access to baseline open access: If current trends were constant over time, provision for charges for APC to guarantee gold access for the organically growing open access in the UK would have required £32m hypothetically<sup>73</sup> in 2011 to provide 13% of all UK articles in Gold open access. Under constant growth assumptions, this cost would be projected to rise to £67m in 2015 and £167m in 2020. These magnitudes compare to current spending estimates of £12m, £25m and £63m respectively in each of those years.
- The costs of accessing articles that are not open access would be the same as in the baseline because the proportions of open and non-open access are the same.

The additional costs of Gold over baseline are £42m in 2015 and £104m in 2020. This is the additional funding required, under the assumptions made in this paper, to guarantee fully minable open access to 51% of all (projected) publications attributable to the UK in 2020.

Adding together the estimated yearly costs of gold access plus subscriptions obtains a cumulative total bill of £2.3bn over the 10 years from 2011 to 2020, which is £500m in excess of the 10 year baseline projection presented above. Year-on-year projections are presented in Table 1.

#### **Expanding access through Research Councils**

An alternative to granting gold access to organically growing open access is to add to the organically growing level by expanding the coverage of open access. The aspiration of having all articles attributable to Research Councils' funding in gold access has the potential for expanding the coverage of open access beyond the current state in the UK. The benefit of this Research Councils' gold option over the gold estimate above is that it implies more articles available in open access than is organically available currently. The average APC is maintained at £2,000 per article so that differences in the total costs are due to coverage not to price differences

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<sup>&</sup>lt;sup>72</sup> Ambruster C (2010) Implementing Open Access Policy: First Case Studies. (SSRN)

<sup>&</sup>lt;sup>73</sup> It would be unfeasible to jump from the current situation to all open access articles in gold in one year, hence these hypothetical calculations for 2011 are not feasible in practice but they are a necessary initial condition for the projections.

Publications attributable to Research Councils account for over a quarter of the UK total, numbering 32,000 in 2010. This is nearly double the estimate of open access in the current state at 16,000. As a result, if all publications attributable to Research Councils were available in gold open access, this would take proportions of all UK publications available in OA to 43% in 2015 and 64% in 2020 (see Figure 2). Associated costs can be projected as follows:

- The cost of granting gold open access to all publications attributable to Research Councils: making all articles attributable to Research Councils available in gold access at an average of £2,000 per article would cost a hypothetical <sup>74</sup> £66m in APCs 2011, rising to £74m in 2015 and £86m in 2020.
- The cost of accessing articles that are not open access. Assuming the same subscription rate per article as in the baseline<sup>71</sup> and given that more articles than in the baseline are now available in open access, subscription costs would fall from a hypothetical £140m in 2011 to £132m in 2020.

Combining the two factors above, Table I shows that the total net cumulative nominal costs of a Research Councils' gold access projection from 2011 to 2020 adds to £2.2bn over 10 years to deliver 64% of UK publications in open access. This is an additional £400m over 10 years, above the baseline whereby it costs £1.8bn to deliver only 51% of publications in open access by 2020.

### **Comparative Analysis**

Disregarding the impossibility of reaching full compliance with either UK Gold access or Research Councils' gold access as a one-off move in 2011, BIS's estimates suggest that, on the basis of a linear growth model, the Research Councils' gold option has the potential of delivering better value for public money than the alternative. This is because the Research Councils' policy would deliver a step change in the level of open access, and thus be more expensive in the early years, but over time Research Councils' publications grow more slowly than organically growing open access. The option of paying (even for a step change initially) for the slower growing publication stream bears lower deadweight cost because the faster growing open access publication stream occurs anyhow in the baseline scenario and would be financed from outside the policy.

Figure 3 demonstrates why Research Councils' proposal has lower cumulative cost. The funder would be paying for Gold access for the Research Councils' gold line, thereby increasing the total open access in the first few years, but after 2018 organically growing open access (non-Gold) would take over in publication counts. The top line with triangles shows the total number of publications in some kind of open access being higher (64%) than the organically growing open access in the current state (51%) by 2020.

In terms of annual cost, for comparison, the total gross nominal cost of the Research Councils' gold (APC and subscriptions) under BIS assumptions would rise from £206m in 2011 to £222m in 2015 and fall to £218m in 2020 caused by the compensating effects of higher open access and lower subscription costs. By comparison the current state of open

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 $<sup>^{74}</sup>$  It is unfeasible to jump to full gold access to all Research Councils publications in a single year; 2011 is therefore an indicative initial condition for the projection.

access indicates UK spends £155m in 2011, rising to £175m in 2015 and £196m in 2020. The <u>additional</u> cost of Research Councils' gold starts at a hypothetical £51m above baseline in 2011 but falls year—on-year, reaching £22m in 2020 (full estimates in Table 1).

Table I - Economic Analysis of Open Access Options (£m)

All gross nominal current £m											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cum
Current State of Open Access in UK											
APC	12	15	17	21	25	30	37	44	52	63	316
Subscription	143	145	148	149	150	150	1 <del>4</del> 8	145	141	133	1452
Total	155	160	165	170	175	180	185	189	193	196	1768
OA/UK	11%				24%					51%	
Gold Access to organically growing OA in UK											
APC	32	39	47	56	67	80	96	116	139	167	839
Subscription	143	145	148	149	150	150	1 <del>4</del> 8	145	141	133	1452
Total	175	18 <del>4</del>	194	205	217	230	2 <del>4</del> 5	261	280	300	2291
OA/UK	11%				24%					51%	
Gold access to all Research Councils' publications											
APC	66	68	70	72	74	76	79	81	84	86	756
Subscription	1 <del>4</del> 0	143	145	147	1 <del>4</del> 8	1 <del>4</del> 8	1 <del>4</del> 6	143	139	132	1431
Total	206	211	215	219	222	224	225	225	222	218	2187
OA/UK	35%				43%					64%	

#### UK refereed publications in OA and total

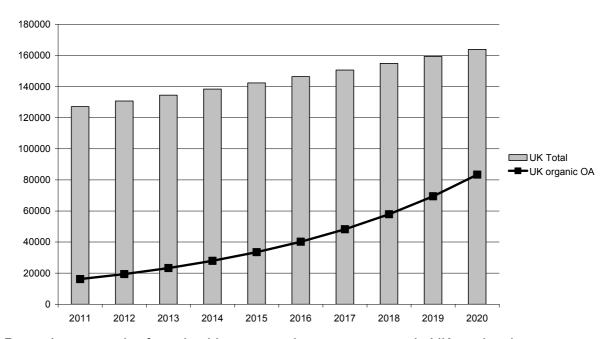


Figure 1: projected refereed publications under constant growth. UK total and organic open access.

#### UK refereed publications in OA and total

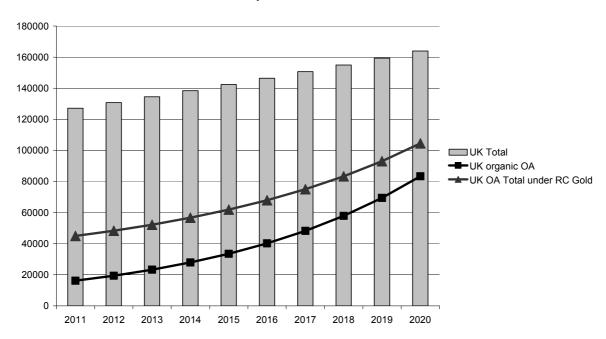


Figure 2: the potential impact of Research Councils' gold option for increasing overall OA. Projected publications under constant growth: UK total publications, UK OA organic if no RC gold is implemented and UK total (organic plus RC publications) if RC gold is implemented.

#### UK refereed publications in OA and total

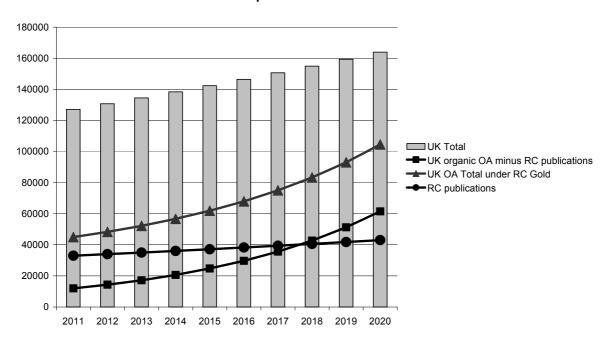


Figure 3: Research Councils gold potential. Pay for gold access to RC publications line (circles), allow for organic OA to overtake (squares) to add to a higher total than organic OA alone would achieve (triangles). RC publications would all be gold, and other publications may be gold or green but OA.

#### 31 January 2013

# Steven Hall, the Publishers Association and Dr Rita Gardner – Oral evidence (QQ 38-51)

Evidence Session No. 3

Heard in Public

Questions 38 - 51

# TUESDAY 29 JANUARY 2013

Members present

Lord Krebs (Chairman)
Lord Broers
Lord Cunningham of Felling
Lord Dixon-Smith
Baroness Hilton of Eggardon
Lord O'Neill of Clackmannan
Baroness Perry of Southwark
Lord Rees of Ludlow
Earl of Selborne
Baroness Sharp of Guildford
Lord Wade of Chorlton
Lord Willis of Knaresborough
Lord Winston

#### **Examination of Witnesses**

**Steven Hall**, Managing Director, IOP Publishing and member, the Finch Group, **Richard Mollet**, Chief Executive, Publishers Association, and **Dr Rita Gardner**, Director, Royal Geographical Society, Chair, Academy of Social Sciences working group on open access, and member, the Finch group.

**Q38** The Chairman: I would like to welcome our second witness panel this morning. In a moment I shall invite you to introduce yourselves for the record. As you will gather, we are on a tight timescale; we are doing this Inquiry today and we want to get as much clarity in the evidence as we can. I would appreciate, as the previous witness panel did, you keeping your answers focused and succinct. Without further ado, let me invite the three witnesses to introduce themselves, starting with Steve Hall.

**Steven Hall**: I am Steven Hall. I am Managing Director of IOP Publishing, which is the publishing arm of the Institute of Physics. It is a medium-sized publisher, publishing around 65 journals in physics and related sciences.

**Richard Mollet**: I am Richard Mollet, the Chief Executive of the Publishers Association, which is the representative voice for trade, academic and education publishing in the UK.

**Dr Rita Gardner**: I am Rita Gardner, Director of the Royal Geographical Society. Like Steven, I am a former member of the Finch review group and I am currently chair of the Academy for Social Sciences's working group of learned societies on open access publishing.

**Q39** The Chairman: Thank you. Perhaps we can kick off with a general solicitation from you of the concerns that you have about the implementation of Finch. As I explained at the beginning of the first session, we are not questioning the principle of open access in this short Inquiry. We accept that open access is here to stay and will grow. Our interest is on the very specific issue of how the recommendations of Finch are being implemented and whether there are specific concerns about the process, the clarity and the presumed endpoints. This is your opportunity to lay those out for us—perhaps starting with Steven Hall.

**Steven Hall**: Different stakeholders will have different concerns over the speed of change, the costs and benefits to the UK, the disruption to scholarly communications, the ability of authors to choose where to publish and so on. The Finch working group considered all of these and came up with a balanced package of recommendations to mitigate the risks and to give the best possible chance of a successful transition. My concerns in the implementation of that balanced package, which Government endorsed in its policy statement in July, are to do with three or four things: the non-compliance of RCUK with Government policy on green embargos, which sadly is still evident in its submission to this Inquiry; the lack of consultation and co-operation with other stakeholders; the blanket requirement for CC BY; and the emerging demand that we are seeing for all the costs of open access publication in the UK to be set off against UK subscription charges, which is impossible to achieve. I would be very happy to explain to the Committee further why that is so.

**The Chairman:** Let me recap on those. Your concerns are around the RCUK position on green embargoes; on the CC BY licensing position; and the third point was to do with recouping the costs of open access from reduced costs of subscriptions.

Steven Hall: Yes.

**The Chairman:** That is the thought that there could be less money spent over here to compensate for more money spent over there.

**Steven Hall**: Both Finch and the Government accepted that if the UK were a first mover in embracing gold far ahead of the rest of the world there would be additional costs to the UK. What we are starting to see from RCUK—and also in the RLUK submission to this Inquiry—is the idea that somehow all of the costs of APCs in the UK can be set off against the costs of subscriptions in the UK. That cannot be done because we will be reducing subscription prices in line with the growth of open access content for customers around the world. We cannot both compensate customers around the world whilst paying back the full costs of APCs to UK libraries in reductions in their subscription rates. I have a very nice worked example, if the Committee would like to hear that later.

**Q40** The Chairman: Thank you. Let us move on and ask the other witnesses for similar outlines of their main concerns. We can then dig into those in a bit more detail.

**Richard Mollet**: Chairman, I think I would echo everything Steven has said and reiterate that all publishers involved in the Finch process did so in an atmosphere of engaging positively. There were compromises to be made along the way, which publishers were happy to do and are happy to stand by those compromises now that we are at the

implementation stage. We are nervous in case all of the members of that Finch review process are not equally ready to stand by the obligations they made as part of those discussions. This is to echo Steven's points that we must not see—and we hope not to see—any hint of backtracking from what we and the Government also believes is a balanced package of proposals that will work.

**Dr Rita Gardner**: I am here in a somewhat different role, in the sense of representing the learned societies and the learned societies as publishers. My concerns are the following. First of all, as a matter of principle I am concerned that the implementation of policy is not wholly consistent between the three pillars that Finch specified: of excellence, access and sustainability. The sustainability one is critically important to the learned societies. They derive a significant proportion of their income from the journals that they publish and that is ploughed back, in a non-profit way, into supporting the Academy.

My second concern echoes those that have already been raised around RCUK policy interpretation and implementation, specifically the length of embargo periods and the sustainability of those and the way in which they align with the Finch and BIS recommendations. Secondly, under the policy interpretation, there is concern over the preference that RCUK has for one-size-fits-all across the sciences, the social sciences and the humanities. Thirdly, I echo my colleagues' CC BY concerns.

The third area is in the approach and the practicalities by which the policy-makers have sought to implement their policy recommendations. The speed at which it is happening is very difficult for the learned societies to adjust to. I can say more on that later. Particularly, the lack of consultation by RCUK has been, quite frankly, depressing. They introduced their policy within a few hours <sup>75</sup> of the Finch report without consultation with the learned societies, who will be significantly affected as a major part of the Academy. Also, there was a delay between RCUK announcing its policy and HEFCE. What HEFCE does is also going to have a significant impact on the outcome of this. We are in a position where RCUK has a policy, but HEFCE has still not reached the point of doing its consultation. That mismatch in practicalities and approach is unfortunate.

Lastly, my concern is one that is more about values and respect. The learned societies engaged with this process, through Finch, openly and in full support of the principle of open access. We have very little power in this at all. We are on the receiving end of most other people's decisions about this process. That is fine, but we do believe that the position that the learned societies find themselves in—some more than others; this is not special pleading—has not been fully considered by those who are implementing policy.

The Chairman: Are you saying, Dr Gardner, that I April is too soon?

**Dr Rita Gardner**: I April presents real difficulties. There need to be some policy changes. I am sure we will go into those in terms of my view of RCUK's policy coming into line fully and clearly with Finch and BIS recommendations on green embargoes. It is very difficult to implement a policy through RCUK with HEFCE's position unknown, unclear and unlikely, probably, to be clear and fully evaluated by I April.

**Q41** The Chairman: Could I just go back and start at the first of the concerns, which we have obviously heard a lot of in the written evidence, about the lack of clarity on the green open access embargo periods? What the Science Minister says in his letter of

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 $<sup>^{75}</sup>$  Note from witness: Dr Rita Gardner clarified after the session that it was a few days after the report was published.

evidence is that BIS endorses the decision tree produced by the Publishers Association in August 2012. That is the Government's position. Can I be clear that you would be happy if RCUK adopted the Government's position, but at the moment you are not clear whether or not RCUK is adopting the Government's position?

Richard Mollet: That is correct. Their policy statements to date have shown that they are not keen to comply with Government policy and the decision tree, which is a graphic representation of that. Some of their written evidence to this Committee, which we have had a chance to see, might go some way to assuaging that concern because they do, in that, acknowledge that there might be an longer embargo under green where there is an APC being offered. They do not, however, go as far as we believe both Finch and the Government's endorsement go—i.e. that there could be even in excess of 24 months in some areas where that was required. They seem to be getting close, but there has not been the very clear, ringing endorsement, which everybody in the community who needs to see this implementation happen really has to hear.

The Chairman: Looking at their evidence, in paragraph 3.5 they repeat that there is a maximum embargo period in excess of six months or 12 months for AHRC- and ESRC-funded research. They then go on to say they accept that too sudden a change will be hard to manage, especially in the disciplines supported by AHRC and ESRC and, therefore, the details have been finalised in guidance to be published in late February. Is this the opportunity for RCUK to be absolutely crystal clear that they do accept the BIS position?

**Richard Mollet**: It would be a wonderful outcome of this Committee's Inquiry if RCUK were able to be that crystal clear. This also speaks to the point that Dr Gardner was making just now about the lack of consultation. It is a shame that this has had to be or is being played out in a rather public forum where there have been requests to meet with RCUK to discuss this, which have not been met. We find ourselves in this position, nearly two months before the implementation date, with this uncertainty in the air.

**Dr Rita Gardner**: Can I just add that there is another aspect to this? It would be very helpful to have the clear and unambiguous recognition, as was in Finch, that the humanities and social sciences are not the same as STEM in the sense of the nature of their publishing. Rather than saying that RCUK would like to move the humanities and social sciences to the STEM position after five years, to recognise, actually, properly, that they are different and to seek to move them after five years is disingenuous.

**Steven Hall**: We have seen some progress. At least RCUK no longer has a statement on its website that it does not comply with Government policy on green open access, which it had until late last year. However, there is still an ambiguity to their requirements. For instance, the paragraph that you quoted, 3.5, suggests that there might be a special problem in relation to the humanities and social sciences and, by implication, there is no problem in STEM. That is simply not true. From April, we are looking at, on RCUK's own estimates, 45% of papers being funded for gold. That is assuming the universities put in their 20% as well; I understand that they may not be required to do so. There may also be some administration cost to come out of those block grants. However, let us assume that the money does go in and 45% of papers have funding available from April. My estimate of the number of papers published in the humanities and social science subjects is between about 10-15%. On the latest data I have, I I% of RCUK funding goes to AHRC and ESRC. The latest Scopus data I have seen show 15% of all papers published in a year being from humanities and social sciences. The rest is from STEM. Even if it goes entirely to STEM,

that 45% will only cover the cost of half of the STEM papers. There is still inadequate funding, even at 45%, for STEM. It is not just a humanities issue.

The other point I would make about the Research Council's submission is it carves out an exception for the MRC on the basis that the MRC already has a mandate for six months and they do not want to step back from that. That ignores a number of things. That mandate is hardly complied with. In theory, the MRC also provides full funding for gold open access. Publishers have agreed that if a funder provides full funding for gold open access and we do not support it through our journals, that short embargo is fine. In theory, under the current model that is okay. Under the future funding model, however, RCUK will give a single block grant to each university and the MRC will no longer have control as to whether its own papers are funded for gold. The MRC needs to move back to that I2-month embargo as well in cases where an MRC-funded paper has no funding for gold publication.

**Q42 Earl of Selborne:** Perhaps I should start by declaring an interest as a Fellow of the Royal Geographical Society and, indeed, other learned societies. If I could pick up on Dr Gardner's concerns about the sustainability of her journals. We have had, as she will know, massive evidence from any number of learned societies all pointing out that their business model needs a lot of time to adjust. Incidentally, they all start their evidence by saying, "We are very much in favour of open access", but they then go on for page after page saying why it is not going to work in their case. Indeed, the historians, for example, as you will know, are asking for 36 months' embargo. I am wondering whether that is not a bit of an oxymoron; if you have a 36-month embargo, is that compatible with anyone's concept of open access?

Going on to the model, if we assume that the learned societies will say they need more time to develop a model that develops this sustainability and ensures that the income streams the learned societies rely on through their publications can be retained in a different form, does this mean inevitably going for the green route rather than gold? Green appears to be less expensive and it appears to be favoured in America by the NIH—or it is accepted by the NIH. It is accepted by the Australians. Is there any reason why open access and green should not continue indefinitely in this country?

**Dr Rita Gardner**: There are two levels of issue with the learned societies that sometimes get confused. The first of those is how to adjust their publishing model in order to be compliant but also to be sustainable, recognising that, as with most of the commercial publishers, the learned societies will probably lose some publishing revenue. I will come back to that in a moment to answer your question.

The second issue is much more about the longer-term strategy of the learned societies to manage risk. Clearly, the publishing activities have now become much more uncertain and much more risky, in a sense, to societies in an environment where—for some societies, but not all—they are highly dependent upon their income from publishing. Those are two separate issues. One is the long-term strategic planning; I am happy to discuss that later if you have a question about what we can do to support learned societies. There is then the question about the shorter-term adjustments to uncertainty and risk that the learned societies need to make to sustain publishing activities. Before answering that one fully, I would just say that this is not just about money. This is not about the bottom line of funding the learned societies. It is also about the reputation and standing of those journals, many of which are very highly regarded, internationally peer-reviewed journals and which are UK flagships for our disciplines globally. They stand as a measure of UK excellence.

They are also equitable ways in which people from across the community can seek to publish based purely on excellence. This is not just about money.

To answer your question about green, in the humanities and social sciences the green route will—either by design or default—be the major route by which humanities and social sciences publishing occurs in the future. This is partly because there will not be the money available to support gold. Half of the individuals returned as category-A staff in the last RE exercise were in humanities, arts and social sciences. 10% of the research funding allocation is given to the ERSC and the AHRC. We simply cannot make those two match to suggest there will be enough gold money available to pay for gold as a majority route for the arts, humanities and social sciences.

Secondly, publishing and publishers—the learned societies—will have to be more conscious of costs, perhaps. That is not to say they are inefficient at the moment, but because of the nature of publishing in humanities, arts and social sciences, we tend to have longer papers. We tend to have fewer papers. They tend to cost more in terms of their APC charges, therefore. That is another reason why more will chose to go down the green route. The green route, of course, will be equitable. Anyone, as an academic, can submit their article through publishing in that way and it also does not disenfranchise international academics from publishing in those journals. I do not have a magic wand and I cannot look into the future, but I would be very surprised if the green route was not the major route for publishing in arts, humanities and social sciences. Therefore, the issues of embargo period and CC BY licences are critical in making that sustainable.

**Earl of Selborne:** If I could follow up, if the RCUK logic is followed to its conclusion and they are able to do what they describe as a journey towards open access, it implies in their evidence to us that they see green as a sort of halfway house towards gold. I think you are telling us that you need to keep green indefinitely: it will be a more economic route and it will be more appropriate for some of the disciplines

**Dr Rita Gardner**: I think so. I cannot see us moving to anything other than a mixed model in the long term if we want to keep our high-quality, high-reputation journals in a sustainable way. That is before we discuss HEFCE's approach to funding QR.

**Q43** The Chairman: Do the publishers agree with what Dr Gardner has just said?

**Richard Mollet**: Very much so, yes; it speaks to the wider point. One of the great things about the Finch report, its recommendations and subsequent Government policy is that it is a nuanced report and it does not try to approach the whole world of UK academic research and publishing with one solution but acknowledges that there are differences between disciplines and between different types of publishers. It tries to account for those; that is why a subsequent attempt to make some things mandatory—when, actually, Finch recommends that a great many things be worked through and different approaches taken—is really important. I totally agree with everything Dr Gardner says, of course, with regard to different embargo period and different approaches being taken in different areas.

**Steven Hall**: To expand on that a little, there are certainly virtues to gold over green. Gold gives you immediate, universal access to the final published version in a form that may be reused by others in whatever way they want; green does not do that. However, there is a cost to gold. It may be that if the whole world and the whole of scholarly publishing transitioned to gold, the costs would be no higher than they are in the subscription model today and may even be lower. We are a long way off a universal worldwide transition. We are looking at a situation in which the UK will be ahead of the world in gold for some

considerable time. The difference with green is that green relies absolutely on the subscription model being maintained, because it makes no contribution to the costs of publishing. That is why the length of the embargo is critical.

However, publishers as a whole are not opposed to the gold model. In the case of my own company, we have published a fully open access journal since 1998, before the phrase even came into common use. It is a model that can be made to work; there is a question as to whether it can be made to work across the whole of one country at a fairly rapid pace if the rest of the world is not moving in the same direction.

**Q44** Lord Rees of Ludlow: We know that things are discipline-dependent, even within the physical sciences. I have a question for Mr Hall, really. In physics and space science, as you know, there is a well-organised archive and repository, which is used by almost all of the community. It would seem that that has coexisted with journals to a surprising extent. I wonder if you would like to comment on that as an example.

**Steven Hall**: Yes, thank you for the opportunity. When I speed-read the pile of submissions on the train last night I noticed at least three references to the success of the arXiv and its lack of impact on physics publishing. There are a number of myths about the arXiv and it would be good to deal with those here. First, it does not at all cover all of physics. There are certain sub-disciplines where there are very high levels of deposit in the arXiv; there are others where there is none whatsoever. To come back to your point, even within a discipline like physics there are real differences of approach.

The other thing about the arXiv is that it is essentially a workflow tool. Much of physics is highly collaborative. Physicists will deposit early versions of their paper so that they can be looked at by their colleagues. It is a means for physicists to distribute to their immediate peers those early results of their research. It is a sharing tool. Most of the content of the archive is pre-print, though. It is not accepted manuscripts; it is not works that have gone through peer review. My own company's policy there is the author can do whatever he or she likes with the pre-print, before we have added any value to it. We take a different view once we have added some value to it. The arXiv cannot be compared directly to, say, typical institutional depositories, which might have lots of accepted manuscripts in them. It coexists with formal publishing. The vast majority of physicists who use the arXiv would say that it is complementary to formal publication.

**Lord Rees of Ludlow:** Formal publication gives the accreditation, but I think most read the arXiv and would like to see it extended to other fields. It seems to be a rather good model, which, one would hope, would extend a bit more to other areas of science.

**Q45** Lord Winston: I have a couple of things. I want to turn one question my Lord Chairman asked previous witnesses on its head. One of the questions is whether or not British academics might be dissuaded from publishing in journals that do not comply, like *Science*, for example. Is the reverse not more likely to be true? Particularly with collaborations, for example, in the United States, people like myself will absolutely want to continue to publish in *Science* because of its high impact. That breaks the mould of what we are trying to do anyway and makes the whole system a bit of a nonsense. That is one question I would like you to address. The other issue is this: do you think there will be any effect on the quality and speed of peer-review for respective journals?

**Steven Hall**: Shall I start? I cannot speak for *Science*, of course; I can speak for IOP. In our case, we have made all of our owned journals compliant with the RCUK policy in terms of

accepting hybrid open access articles and introducing the CC BY licence for open access papers. About half the journals we publish are owned or co-owned with partners. We are working with each of our partners—particularly those in the US who are not as close to UK open access politics—to persuade them to make their journals compliant with the RCUK requirement on gold, not on green. We do not want those journals to be deprived of the opportunity to publish UK authors.

We practice exactly the same peer review on our open access journals as we do on our subscription journals. We have high rejection rates, proper peer review and so on and so forth. I see no reason why open access, per se, should change the way that peer review is done. However, what we have seen with the growth of open access is the emergence of what are known as low-threshold journals, i.e. journals which assess a paper only for the soundness of its methodology and not for its quality or importance to its discipline. They may also not do things like copyediting and so on, which we usually do. Some of those journals have grown very quickly. They tend to have quite low rejection rates. They might reject 30% of the papers. My own journals typically reject 70%, regardless of whether they are open access journals or subscription journals.

The danger here is that, in a rush to gold open access that is not adequately funded, authors will be pushed towards the cheapest option. Those cheapest options will be those journals that practice that lesser form of peer review. One only needs to look at PLOS to see the difference in its pricing. PLOS ONE rejects around 30% of the papers submitted to it and has a publication fee of \$1,350. PLOS Medicine and PLOS Biology, which have much higher rejection rates and practice a much more traditional form of peer review, have an open access-publication fee of \$2,900. If there is too much pressure on authors to choose the cheapest option, there is a real danger that is where they will end up. There could then be some unintended consequences for science.

**Dr Rita Gardner**: The evidence at the moment in geography is that internationally there will be some leading journals—published in the United States, for example—that have no intention of complying and have gone public in stating they have no intention of complying with the UK requirements. If it persists, this will limit the opportunity of UK academics and their research to be read in a wide number of high-quality, international journals, potentially. I can only give you that one example, but I think it is something that is worth following up.

**Q46** Lord Broers: I do not know whether to address this question to Steven Hall or to my neighbour here, Lord Rees. How many of the articles or publications that end up in the repository archive finish in peer-reviewed journals?

**Steven Hall**: I have no idea. My own editorial staff do look at the arXiv and try to identify papers that we believe are worthy of formal publication. Our editorial system enables a direct submission from the arXiv to our editorial system, but I have no idea what that proportion is.

**Lord Broers:** Those articles sit out there in the public domain without peer review.

Lord Rees of Ludlow: Most of them are put on the archive at the time of submission or even at the time of acceptance. That is why most of us in my subjects look at the archive and not at journals. I am surprised that the journals do survive—certainly in astrophysics and, as you said, some fields of physics. I do not quite see why that model cannot be extended more widely. The final version that appears on the arXiv is essentially the published version.

**Steven Hall**: Often it is not. It is often the version before peer review. This idea that there is this wonderful system of informal—or formal, even—post-publication peer-review is not really true. If you go back to the model of *PLOS ONE*, again, *PLOS ONE* only assesses papers for the soundness of their methodology. In theory, it relies on the community and post-publication peer review to assess them for importance and quality. In fact, when I last looked only about 5% of papers in *PLOS ONE* have any kind of comment on them. Frankly, if it is a five-star rating from an anonymous contributor, who could be the author's mother, the soundness and reliability of that comment is marginal. PLOS themselves would agree that, so far at least, post-publication peer review is not working.

**Lord Rees of Ludlow:** To clarify, I am not talking about that. What happens on the archive is that an author may put the paper on the archive when it is submitted, but after it has been refereed by the journal they will put the accepted version on the archive.

Steven Hall: They may do that.

**Lord Rees of Ludlow:** The refereeing is done by the official journal, but the archive does include the corrected version.

Lord Broers: Do they have to do that, or do some people do that?

**Lord Rees of Ludlow:** Most people choose to do that, because the archive is more read than the journal.

**Q47 Baroness Perry of Southwark:** My question is looking at yet one more aspect of the disparity between what the UK is doing in its rush for gold and what is happening in other countries. It is the flipside of your anxiety about British scientists being published in other countries' journals. What will happen to other countries' scientists being published in British journals, particularly if they are in countries that are either saying, "We are not going to comply with the British model," or where they perhaps are not very well-off universities that simply cannot meet the costs?

**Dr Rita Gardner**: If I may start with that, the clear solution to that is having a hybrid model where they can submit their articles under the green approach, in which case they are not disadvantaged and are not being required to pay an APC charge. It is truly much more equitable in a sense internationally. It will still require those individuals to sign up to whatever the licensing—CC BY, CC BY-NC or ND—of that journal is. I do welcome RCUK's clarification that when publishing in the green mode in a journal that does offer a gold route, the journal may use the CC BY-NC-ND form of licensing. It is only those that go to the gold with APC charges which the CC BY at the moment is being insisted upon.

In short, it is the green route for persons such as that. It is the maintenance of quality of peer review and excellence in those journals and it is ensuring that the flexibility that RCUK currently has over licensing for that type of green route is retained.

**Baroness Perry of Southwark:** How will RCUK police this? I have reduced our witnesses to silence.

**Steven Hall**: We do not know. We have had very little formal engagement with RCUK since it announced its policies. There are some stakeholder meetings coming up, in which we would hope to get more clarity on that. To come back to your question in relation to my own company, only 5% of the authors we publish are from the UK. Unless authors' funders from other countries try to impose mandates we cannot live with, there is no

impediment to a US, German, French or Japanese author publishing in our journals because most of them are hybrid and are still largely dependent on subscription income.

The Chairman: For the foreseeable future, do you envisage that hybrid status continuing?

**Steven Hall**: If one looks around the landscape, it looks to us at the moment as though only the UK will have a really strong pro-gold mandate. We heard about Horizon 2020 earlier, which offers gold or green. The problem with Horizon 2020, if it reflects the model that the European Union has used so far, is that it looks as though funding for gold will need to come out of an author's research grant. As RCUK recognised, that does not work in promoting gold open access because publication often happens long after the life of the grant. The grant can then not be used for that purpose. I applaud RCUK moving to these block grants, because it really will free that up. Horizon 2020 foresees gold or green, depending on how this funding issue works.

Other countries in Europe are a bit of a patchwork. Denmark has announced a gold or green policy, as has Ireland; in Germany, the Deutsche Forschungsgemeinschaft funds gold, but under certain conditions. I think one can fairly and reliably say that Britain, in its gold mandate, will be well ahead of any other country for a period of time.

**Dr Rita Gardner**: It is reasonable to add that the NSF has more sympathies in the US with the green route than with the gold route.

**Richard Mollet**: If I may add something on Horizon 2020, it is welcome to see the Minister's comments in his letter to the Committee and the remarks he has made elsewhere that the green embargoes envisaged by Horizon 2020 are different and lower than those in Finch and Government policy and that he will be working as best he can to bring those into alignment. The first-mover advantage we have in the UK will work best if other countries do catch up, but it must be, hopefully, in the same system.

**Q48 Baroness Sharp of Guildford:** From what you are saying, it sounds to me as though almost a majority of journals are going to be on this hybrid model, in which there will be some articles published, for science, under the gold OA and others, particularly those from foreign authors, which are going to be published on the subscription route. This notion of a mixed economy that universities will have requires a transition whereby university libraries are going to have to take out subscriptions in order to access these journals. Those articles that are submitted by UK authors will be available immediately online, but others will not be. Is that what we will be seeing?

**Dr Rita Gardner**: In some of the hybrid journals, you will see there will be a lot of UK green-route academic papers. It will not be a split between overseas being green and UK being gold, because of the funding limits and the support, in particular, in terms of funding for humanities and social sciences.

Baroness Sharp of Guildford: Is this seen as a viable route for the journals?

**Dr Rita Gardner**: In terms of the leading international journals for the learned societies—I cannot speak for all the learned societies, but certainly for ours—it is seen as the only viable route. A reliance purely only on gold will not be affordable or sustainable. There will of course be a new suite of journals. Many learned societies are looking to this as well to consider whether, in addition, they offer a fully open access journal as a lower-cost journal.

**Steven Hall**: Hybrid must be a means to transition. If you look at our starting point today, with around 10% of all papers published immediately under gold open access and 90%

published under the subscription model, even if the entirety of the UK output went to gold overnight that would be 10-16% or whatever of global output. That is a very long way to go in the rest of the world. If authors are to have a choice where to publish, it seems to me the hybrid model will be essential to get us from where we are today to any more broadly gold model, rather than us all creating new journals that they will not want to publish in. They will want to publish where they have traditionally published. It is our job, as publishers, to support them in that according to the business model required by their funder.

**Baroness Sharp of Guildford:** When you say that the Institute of Physics's journals are now all OA compliant or are moving in that direction, is it largely to the hybrid model?

**Steven Hall**: We have some pure open access journals, but our subscription journals are hybrid in the sense that they will accept a paper on a gold open access basis and make it immediately available within the subscription journal but free to the world as a single article under a CC BY licence. We will take the income from that APC payment into account when setting the subscription price of the journal.

**Q49 Baroness Hilton of Eggardon:** I am pursuing the same topic, in a sense, about the hybrid model. Universities' concern is they may have to pay twice: both to subscriptions to learned journals and also to pay for their student publication. Do you foresee that the pressures of finance may distort the hybrid model in one particular direction or another or not?

**Steven Hall**: I think it is time for my worked example, but, before I impose that on you, it comes back to this matter of the UK being ahead of the rest of the world. If the UK is ahead of the rest of the world in its adoption of gold, it will have additional costs. May I give you this example?

The Chairman: Please do.

**Steven Hall**: Here is something I prepared earlier. Let us take a hypothetical journal. Let us call it the *Journal of Open Access Publishing*, which publishes 500 papers a year and has an income of £I million. Let us assume that the journal today is entirely subscription-based. Let us assume that, in line with the world averages, 6% of its papers come from UK authors. Just to keep things simple, let us also assume that its APC is £2,000, which is the average income it today receives in subscription income per published article. It therefore would be reasonable to assume, if 6% of its papers moved to a gold open access model, the subscription pricing would fall by 6%. The income from subscriptions would fall from £I million to £940,000. That £60,000 of savings, though, would be spread across its subscribers throughout the world.

Let us—again, for the purposes of simplicity—assume that 6% of its subscription income comes from the UK. The saving for the UK subscribers is 6% of £60,000, which is £3,600. However, the UK will be paying for 6% of the papers on an open access basis: 30 papers a year at £2,000 each. The UK cost of publishing is £60,000. There is a net increase in UK costs of £56,400. The total income for the journal remains the same, because it has reduced its subscription pricing globally, but there is an increase in the cost to the UK. That is why we cannot reduce our subscription prices in the UK alone by the quantum of the APC payments, because we have to reduce them globally.

If we look at that on a macro scale, the UK higher education libraries spend around £150 million a year on subscriptions and licences to journals. If they saved 6% of that, it

would be £9 million. If all 120,000 papers a year that are published by UK authors move to open access, at the average APC that Finch and RCUK use in their modelling of £1,727, the cost to the UK would be £207 million, less that £9 million saving. That is an enormous increase in costs. Of course, that is a completely extreme example. We are not going to be so black and white, because the additional cost to the UK will not be £198 million but it will not be zero.

It comes back to Finch and Government accepting that there will be this additional cost to the UK during this period of transition, as long as we are ahead of the rest of the world. Finch modelled it, assuming the rest of the world slowly starts to move in the same direction, at an additional cost of £50-60 million per year. The pity is that Government has not been able to make that additional money available to speed up this transition. Therefore the cost is falling on funders and universities. If I might just add one extra wrinkle to this, a considerable part of publishers' subscription income today comes from the corporate sector: from GlaxoSmithKline and other pharmaceutical companies. Potentially, that income is lost in a gold open access environment. There is potentially a transfer of cost from the corporate sector to the public sector.

**The Chairman:** Could you just explain why? Is it because they will stop their subscriptions?

**Steven Hall**: There are two reasons. First, the bulk of research publishing comes from the public sector and not the corporate sector, so it is more of a consumer than a producer. The consumer benefits from the gold open access model. The other reason is the possible unintended consequence of the adoption of CC BY. CC BY allows unlimited commercial reuse of a paper. Today, publishers of clinical medical journals will earn a very substantial part of their income from reprint rights licensed to pharmaceutical companies. It could be 15-20% on average across their medical list. Some journals will have more than 50% of their income from reprint rights. Under a CC BY model, the ability of publishers to sell these reprint rights disappears. They will have to find that income from somewhere else. It is a consequence we have not looked at in any great detail, but I think it needs to be recognised.

**Earl of Selborne:** Is it always true that all of those reprint rights have disappeared? Are there not some gold open access models on which there are still some digital and other derivative rights that can generate income, alongside the gold open access?

**Steven Hall**: CC BY potentially takes it all away. If you use the CC BY-NC licence, the non-commercial version of it, you retain those rights. It is possible that we will see an increase in APCs with the introduction of CC BY. Publishers today are typically charging an APC based on a CC BY-NC licence. If they are required to use a CC BY licence alone, which retains no commercial rights whatsoever for the publisher, it is possible they will need to see those APCs increase. It is not an issue for IOP, because, as a physics publisher, we have very little secondary income. We have adopted the CC BY licence, but it is an issue for medical publishers.

**Q50 Baroness Sharp of Guildford:** Will the CC BY licence apply, in the case of a hybrid journal, to articles that are submitted by foreign authors?

Steven Hall: No.

**Baroness Sharp of Guildford:** Going back to your example of the corporate subscriber, they will get access to anything published from the UK on a CC BY licence.

**Steven Hall**: A corporate subscriber will get unpaid access to anything that is published on a gold open access basis. The CC BY on a hybrid journal will only apply to gold open access articles and not to the rest of the content.

The Chairman: Richard, did you want to add anything?

Richard Mollet: No, I did not.

**Q51** The Chairman: I wonder, Dr Gardner, if we could return to the impact on learned societies. Earlier on, you referred to the importance of sustainability, which was one of the three planks of the Finch recommendations. You talked eloquently about the impact of too-hasty transition on learned societies. Can you briefly give us your view on the longer-term sustainability model? Do you think you have said enough about that already, in that you feel that a green model would be sustainable for learned societies, but probably not a gold one?

**Dr Rita Gardner**: This begs the question of what the end point is. Is the end point in the whole process a continuing mixed model? If that were put in place with a proper embargo period—at least 24 months in the humanities and social sciences, because of the half-life of readership and citation of those publications—and were the endpoint, either because the rest of the world does not all follow or because there is simply not the funding available globally for gold, the hybrid model would be, with care, a sustainable model for many learned societies. If the end point is a rush to low-cost, pile-them-high gold publishing, learned societies are in deep trouble, because their ability to generate revenues from that endpoint is very limited.

Mindful of that, many or all of the learned societies for whom a significant proportion of income comes from publishing—some have very small incomes of 5%; some have 95% of their income from publishing—will be taking the time to look at their longer-term policies of income growth and diversity of income sources. They are variably placed to do that. One of your questions here was what support should learned societies be asking for. In terms of the longer term, I think it would be extremely helpful if there were a small fund available for those learned societies—perhaps the smaller ones that do not have the resources—to bid for to support them in their strategic planning exercise. The learned societies, as charities, are risk averse. We do not have the resilience. We do not, in many instances, have the resources that the commercial publishers can fall back upon.

The Chairman: Thank you. That is very helpful. I think we should draw this session to a close, but if there are any points that you wish to follow up in writing, please feel free to do so. They will be included in our evidence. Otherwise, I would like to thank you very much indeed for the extremely helpful comments that you have made to us. You will receive a draft of the evidence session for you to make minor corrections too—hopefully within the next week or two. Thank you very much indeed.

# Steve Hall, Institute of Physics (IOP) Publishing – Supplementary written evidence

#### Cost and savings in the transition to gold open access

This worked example addresses the demand from funders and libraries for the full cost of UK APCs to be offset against the cost of UK subscriptions and licences

- 1. Let's consider a hypothetical journal the *Journal of Open Access Publishing* publishing 500 papers per year with an annual income of £1M.
- 2. Let's assume that the journal is today entirely subscription-based.
- 3. Let's then assume that, in line with the world average, 6% of its papers come from UK authors and that these papers move entirely to gold open access, but that the rest of the world stays, for now, with subscriptions.
- 4. Let's also assume, just to keep things simple, that the journal's APC is set at £2,000, so that what it earns on average per published paper remains the same under both subscription and gold open access models (500 papers @ £2,000 = £1 M).
- 5. It would be reasonable to assume that if 6% of its papers moved to gold open access, then its subscription pricing would fall by 6%, saving libraries £60,000 per year on subscription charges. These savings would be spread across libraries in all parts of the world, and if UK libraries contributed, on average, 6% of the publishers' income (again to keep it simple), then the savings for UK libraries would be £3,600.
- 6. But the costs to UK funders would be 30 papers @ £2,000 = £60,000.
- 7. So the costs to the UK increase by £56,400. The rest of the world saves £56,400.
- 8. If we followed the demands for a complete offsetting of the open access costs, then UK subscription charges would be reduced by £60,000, but the journal would still need to reduce the 94% of income its receives from the rest of the world by 6% to account for the reduction in subscription content, as libraries elsewhere would expect to see the subscription price reduce in line with the reduced subscription-only content. The UK's costs would remain the same but the journal's total income would fall by £56,400 (6% x 94% x £1M). It's easy to see that this gets worse as it scales up: if five countries each contributing 6% of the journal's content each moved to open access, and APC costs were entirely set off against local subscription charges, then the loss in income to the journal would amount to £210,000 (30% x 70% x £1M). This is clearly an unsustainable transition model.
- 9. If we look at the macro picture, UK higher education institutions today spend around £150M per year on journal subscriptions and licences. A 6% reduction in that cost would give a saving of around £9M, again assuming that the UK moves to open access and the rest of the world doesn't. The UK produces around 120,000 papers per year. The cost of all of them moving to gold open access at the average APC of £1,727 used by RCUK (and Finch) in its modelling would be £207M. UK HE and funders would therefore see an increase in costs of £198M. UK corporates, for example the pharmaceutical sector, would see a 6% saving.

- 10. Of course, this is all highly simplistic, in assuming a full transition by the UK and no transition elsewhere; the UK transition will not be full and immediate and there will be transition elsewhere, though it currently looks likely that the UK will be ahead of the rest of the world for some time, in its adoption of gold. While there is no so-called double-dipping by publishers in these examples, whose income remains at current levels, there is a considerable increase in costs for the UK. The actual increase in cost will be less than £198M of course but rather greater than £0.
- II. Finch and Government both foresaw this. Government recognised that there would be additional costs to the UK during such a transition, and for as long as the UK is ahead of the rest of the world in its adoption of gold open access, but thought it was a price worth paying to stimulate such a transition. Publishers agreed in Finch to support the transition if UK Government and funders wanted to make it.
- 12. The demand from funders for UK subscription prices to fall by an amount equivalent to what the UK is spending on APCs has no basis in fact or logic. It formed no part of the Finch recommendations, nor of Government policy.
- 4 February 2013

Professor of Web Science, University of Southampton Canada Research Chair in Cognitive Sciences, Université du Québec à Montréal Professor of Psychology, McGill University

- 1. **Open Access (OA)** means free online access to peer-reviewed research journal articles. (There are <u>about 28,000 such journals</u>, in all fields and languages.)
- 2. Most research journals recover their publication costs via institutional subscriptions.
- 3. No institution can afford to subscribe to all of most or even many of the 28,000 journals, only to a small fraction of them, a fraction shrinking because of rising journal costs.
- 4. As a result, all researchers today, at all institutions, are denied access to articles in many journals, because subscriptions are unaffordable to their institutions.
- 5. As a result, the research that is funded by public tax revenue, and conducted by researchers employed by publicly funded institutions (universities and research institutes) is not accessible to all of its primary intended users the researchers who can use, apply and build upon it, to the benefit of the public that funded it.
- 6. The Internet and the Web have made it possible to remedy this access-denial problem, which had been a legacy of the Gutenberg era of print on paper, and its associated costs.
- 7. Researchers can continue to publish their research in subscription journals, but they can <u>self-archive</u> their final, peer-reviewed drafts in their institutional repositories, as a <u>supplement</u>, for those users whose institutions cannot afford subscription access to the journal in which the article was published.
- 8. Author self-archiving is called "Green OA."
- 9. Sixty percent of journals (including most of the top journals in most fields) already endorse Green OA self-archiving by authors, immediately upon publication (no embargo).
- 10. The remaining 40% of journals request an embargo or delay on providing OA for 6-12 months or more; the publisher rationale for the embargo is that it protects journal subscription revenues that Green OA might otherwise make unsustainable.
- 11. There is as yet no evidence at all that immediate, un-embargoed Green OA self-archiving reduces subscriptions, even in fields, such as physics, where it has been practiced for over 20 years and has long been close to 100%.
- 12. The second way to provide OA is for the journal rather than the author to make all of its articles freely accessible online immediately upon publication.
- 13. OA journal publishing is called "Gold OA."
- 14. About 20% of the world's 28,000 journals are Gold OA journals, but very few of them are among the top journals in any field.
- 15. Most Gold OA journals continue to cover their costs from subscriptions (to the print edition) but the top Gold OA journals have no print edition and instead of charging the user-institution for access, through subscription fees, they charge the author-institution for publishing, through publication fees.

- 16. There are also hybrid subscription/Gold journals, who publish non-OA articles and continue to charge institutional subscription fees, but offer authors the option of paying to make their individual article OA if they pay a Gold OA fee.
- 17. Paying Gold OA fees is a problem for authors and their institutions because as long as most journals are still subscription journals, institutions have to continue subscribing to whatever journals they can afford that their users need.
- 18. Hence paying for Gold OA today increases the financial burden on institutions at a time when subscription costs are already barely affordable.
- 19. Paying for Gold OA while subscriptions still need to be paid is not only an extra financial burden, but it is also unnecessary, because *Green OA can be provided for free while subscriptions are still paying the cost of publication.*
- 20. If and when Green OA becomes universal, and if and when that in turn makes subscriptions unsustainable, then all journals can convert to Gold and institutions can pay the Gold OA costs out of their annual windfall subscription cancelation savings.
- 21. There is every reason to believe that Gold OA costs after universal Green OA will be much lower than they are today: the print edition and its costs as well as the online edition will be gone, the worldwide network of Green OA Institutional Repositories will provide access and archiving, and journals will only need to manage peer review (all peers already review for free).
- 22. It remains to explain how to achieve universal Green OA, in order (1) to provide universal OA, (2) to induce a transition to universal Gold OA at an affordable price and (3) to release the institutional subscription funds in which the potential money to pay for Gold OA is currently locked.
- 23. The way to achieve universal Green OA is for institutions (universities and research institutes) and research funders to <a href="mailto:mandtate">mandate</a> (require) that all research that they fund, and that they employ researchers to conduct, must not only be published, as now ("publish or perish"), but the peer-reviewed final drafts must also be deposited in the researcher's <a href="institutional repository">institutional repository</a> immediately upon acceptance for publication.
- 24. Optimally, access to the deposit should be made OA immediately; in any case any OA embargo should be as short as possible.
- 25. However, if necessary, an embargo of 6 months or even 12 months or longer can be tolerated in the case of the 40% of articles published in journals that do not endorse immediate Green OA.
- 26. The repositories make it possible for authors to provide "Almost-OA" to the deposits that are under OA embargo by automatically forwarding reprint requests from would-be users to the author, who can then decide, with one click, whether or not to email the reprint to the requester.
- 27. Researchers have been fulfilling reprint requests from fellow-researchers for over a half century, but in the online era this can be greatly facilitated and accelerated through universally mandated repository deposit.
- 28. In 2004, the <u>UK Parliamentary Select Committee</u> recommended that UK universities and UK funding councils mandate Green OA self-archiving.
- 29. With this, the UK became the world leader in OA and OA policy.
- 30. Green OA self-archiving has since been mandated by funding councils and universities in the EU, Canada, and Australia, including the National Institutes of Health, Harvard, and MIT in the US (over 250 Green OA mandates worldwide to date).

- 31. Green OA policies are growing worldwide, guided by the UK model; to accelerate adoption all that is needed is <u>a few practical upgrades</u> (such as upgraded compliance mechanisms and fuller integration of institutional and funder mandates).
- 32. But in 2012, instead of building on its 8-year success in worldwide OA leadership, the UK took an abrupt U-turn on OA, with the recommendations of the <a href="Finch">Finch</a> Committee.
- 33. The Finch Committee declared Green OA a failure, and recommended downgrading it to just preservation archiving.
- 34. In place of mandating Green OA (which is almost cost-free, while publishing is still being paid for worldwide via institutional subscriptions) the Finch Committee recommended paying even more for publishing, by redirecting scarce UK research funds to paying for Gold OA.
- 35. One can only conjecture as to the causes underlying this inexplicable about-face when Green OA mandates are growing worldwide:
- 36. The cause may have been subscription-publisher lobbying BIS against Green OA or Gold-OA-publisher lobbying for Gold OA.
- 37. There was perhaps also some pressure from a vocal minority of OA advocates arguing that there is an urgent immediate need for something stronger than the free online access mandated by Green OA (the additional re-use rights conferred by a CC-BY license) for which it is worth paying Gold OA fees.
- 38. The outcome has been significantly to weaken instead of strengthen the RCUK OA policy:
- 39. RCUK researchers may still choose between paying for Gold OA or providing costfree Green OA, but RCUK expresses a preference for Gold and does not permit researchers to choose Green if their chosen journal's OA embargo exceeds 6-12 months.
- 40. This policy has the perverse consequence of giving subscription publishers a strong incentive (I) to add a hybrid Gold option just in order to collect the extra UK revenue, and (2) to adopt and extend Green OA embargoes beyond the UK's allowable 6-I2 months, to make sure that UK researchers must choose the paid Gold option rather than the cost-free Green one.
- 41. The rest of the world cannot, need not, and will not follow suit with this perverse, needless and profligate UK policy.
- 42. In Europe, the Americas and Asia, low-cost Green OA mandates will continue to grow, while the UK loses its leadership role in worldwide OA, needlessly squandering increasingly scarce research funds in order to pay publishers even more in order to make UK research output (and UK research output alone) OA, while the rest of the world makes its research output OA at next to no extra cost.

The Australian economist, John Houghton, has analyzed OA policy in country after country. The House of Lords Select Committee is urged to look at the outcome of these analyses, which is that it is far cheaper to mandate Green OA first, rather than to pay pre-emptively for Gold unilaterally. That not only provides OA, but it paves the way to affordable, sustainable Gold OA.

Houghton, J. & Swan, A. (2013) Planting the Green Seeds for a Golden Harvest: Comments and Clarifications on "Going for Gold" D-Lib Magazine Volume 19, Number 1/2 <a href="http://www.dlib.org/dlib/january13/houghton/01houghton.html">http://www.dlib.org/dlib/january13/houghton/01houghton.html</a>

**Conclusion:** RCUK OA policy should adopt <u>a few practical upgrades</u> (such as upgraded Green OA compliance mechanisms and fuller integration of institutional and funder Green OA mandates) instead of following the Finch Committee's recommendations to require and subsidise Gold OA.

#### **Appendix**

## support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

If there are UK funds to spare to subsidise Gold OA, fine, make them available, but mandate (require) Green OA self-archiving in all cases (ID/OA) and do not require researchers to choose a Gold OA journal unless they wish to.

## embargo periods for articles published under the green model

The shorter the better, but always require immediate deposit (ID/OA) in the author's institutional repository, even for embargoed articles, and implement the "Almost OA" Button during the embargo.

engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance
Publishers should endorse immediate Green OA, but ID/OA mandates are compatible with embargoes.

Universities should mandate Green OA too; funder and university mandates should be convergent, requiring deposit in the institutional repository, with the institution monitoring and ensuring compliance. Deposits or their metadata can then be harvested to any desired central repositories. Repository deposit should be designated the sole mechanism for submitting publications for institutional performance review of national research assessment. Learned Society publishers, like all publishers, should endorse immediate Green OA, but ID/OA mandates are compatible with embargoes. If and when universally mandated Green OA makes subscription publishing unsustainable, publishers can convert to Gold OA and institutions can pay for it out of the windfall subscription cancelation savings freed by the Green-OA-induced cancelations.

## challenges and concerns raised by the scientific and publishing communities, and how these have been addressed.

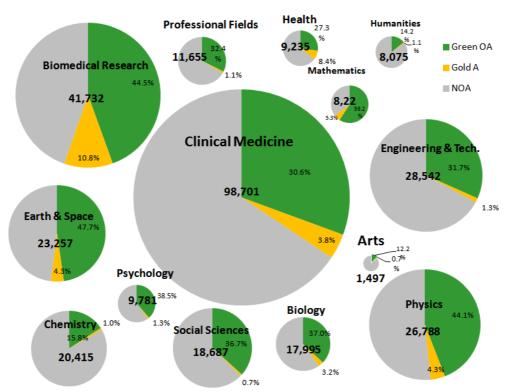
The UK scientific community has rightly expressed concern about not being allowed to publish in their journal of choice, and about having to pay for Gold OA. The solution is to mandate Green OA and not to require Gold OA except if the author wishes it. The UK subscription publishing community is being paid in full for publication, via worldwide subscriptions. If and when universally mandated Green OA makes subscription publishing unsustainable, publishers can convert to Gold OA and institutions can pay for it out of the windfall subscription cancelation savings freed by the Green-OA-induced cancelations.

#### international issues

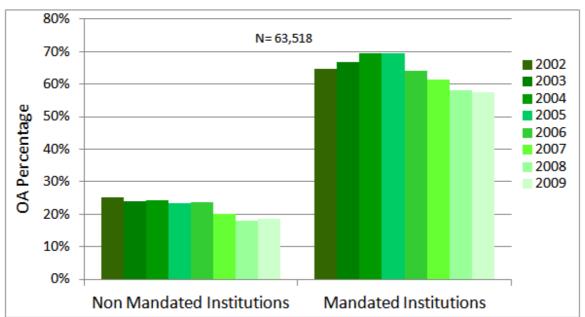
The rest of the world need not, cannot, and will not follow the Finch Committee's recommendation to pay pre-emptively for Gold instead of mandating Green OA. It would be best if the UK returned to the direction it set in 2004, otherwise it is simply using UK research funds to provide (Gold) OA for the UK and the world at a much higher cost than necessary, and at the cost of inducing perverse effects in publishers (such as subscription publishers offering hybrid Gold in order to attract double payment for UK's Gold subsidy,

and adopting and increasing OA embargoes in order to ensure that UK researchers must pay extra for Gold OA).

## UK %Green and %Gold (2007-2011)



**Figure 1**. The percentage of Green and Gold OA in the UK (2007-2011, Web of Science). Note that most OA is Green OA. From: Gargouri, Y, Lariviere, V, Gingras, Y, Carr, L and Harnad, S (2012b) <u>Green and Gold Open Access percentages and growth</u>, by discipline. In: 17th International Conference on Science and Technology Indicators (STI), Montreal, CA, 05 - 08 Sep 2012. 11pp. <a href="http://eprints.soton.ac.uk/340294/">http://eprints.soton.ac.uk/340294/</a>



**Figure 2.** The effect of Green OA mandates (comparing nonmandated vs mandated OA provision: 2002-2009). Data from Gargouri, Y, Lariviere, V, Gingras, Y, Brody, T, Carr, L and Harnad, S (2012a) <u>Testing the Finch Hypothesis on Green OA Mandate Ineffectiveness</u>. Presented: *Open Access Week* 2012 <a href="http://eprints.soton.ac.uk/344687/">http://eprints.soton.ac.uk/344687/</a>

#### Hellenic and Roman Societies - Written evidence

We endorse without reservation the Evidence submitted by the Royal Historical Society of the UK, adding a number of points, and concentrating above all on the impact of Open Access on the maintenance and enrichment of research libraries.

We of course like the Royal Historical Society wish to make the results of research and of general intellectual creativity as widely available as possible; but there is no evidence for our subject areas that Gold Open Access is the best way of achieving this or that when the whole pattern of our activities is considered, above all in an international context, the subscription model for learned journals is in itself flawed or unsatisfactory; the problem lies rather in the pricing policy of a small number of publishers, who have (principally in the sciences) established in relation to some of their journals a near-monopolistic position (see, e.g., The Guardian, 25/04/12, on the attitude of Harvard to such publishers; or THE, 01/11/12, on "feral" publishers). The Finch Report indeed appears to propose transferring the cost of generating publishing profits from readers to institutions of authors.

In the arts and humanities, in particular, the subscription model delivers both high quality results in general, heavily subsidised by the contributions and freely given time of the members of learned societies, and very conspicuously the creation of great research libraries, open for consultation by all *bona fide* researchers.

#### **Subscriptions**

Individual members of the Hellenic and Roman Societies currently pay subscriptions of c. £50 a year, which in real terms is about half of what they would have paid a century or so ago, when the Societies were founded; institutional subscribers, who were not then a separate category, pay about 20% more, but receive access to an online archive of all back issues. It is of the highest importance that, although the journals have recently been transferred to publication by CUP, the Societies have retained the right of controlling the level of subscriptions. It is completely irrelevant that businesses have had their business model destroyed by the internet: learned societies, most of which are charities, do not take risks in order to make money, but use their members' subscriptions and time freely given, in order to create a variety of public goods. High quality publication, including electronic, is expensive in time for organising and undertaking peer reviewing, and in the arts and humanities this is mostly undertaken without financial reward, out of loyalty to the society and the discipline.

Each journal also provides a crucial service to research by publishing some 100 reviews a year, APCs for which would be an administrative nightmare.

In addition, most learned societies already operate forms of Green Open Access, after an embargo period of 36 months, which forms only a tiny percentage of the period over which important papers need to be read; and authors in UK HEIs are usually allowed to post their own papers on their institutional web-site immediately.

#### The international context

In terms of content, the Journal of Hellenic Studies and Journal of Roman Studies, which are the leading journals in their fields, contain between half and two-thirds of articles by authors

who are not in UK HEIs, often by UK citizens who are not in post in a HEI: to impose a system of APCs would be a major obstacle to equality of opportunity.

In terms of diffusion, the distribution of the two main journals is about 10% to institutions in the UK, 90% in the rest of the world; the same is true of *Archaeological Reports*; even in the case of *Britannia*, the split is 40/60%.

#### Libraries

In the case of all the journals of the two Societies, as well as the *Bulletin of the Institute of Classical Studies*, the *Journal of the Warburg and Courtauld Institutes*, and the journals of the foreign schools, the existence of a subscription + exchange system has enabled the creation of a major public good from private support, namely the creation of great research libraries, open for consultation by all bona fide researchers, including members of the general public, who thus have access to learned journals, at the most in return for a small fee to cover the cost of reader administration. The library of the Institute of Classical Studies, 2/3 of it formed by the Joint Library of the Hellenic and Roman Societies, is one of only two fully comprehensive research libraries in the UK for the Greco-Roman past, and one of a handful in the world; the library of the Warburg Institute needs no description; the libraries of the foreign schools are world-class in their respective fields.

Institute of Classical Studies: c. 450 exchanges out of c. 700 titles taken

Warburg Institute: c. 300 out of c. 1000 British School at Rome: c. 250 out of c. 650

British School in Athens: c. 200 exchanges out of c. 500; c. 100 copies to Greek archaeological service and Greek universities in exchange for all publications

British Institute in Ankara: c. 100 out of 150

Both in the case of the libraries in London and in the case of the foreign schools, the vast majority of exchanges are with non-UK journals, very often of the highest importance for the libraries in question, but journals that cannot conceivably go over to Green Open Access in the foreseeable future. The loss of the exchange model would probably generate a total need for c. 200K additional annual funding. We have also been informed, in the context of the future security of electronic journals, that in the case of the British School in Athens, the four existing archiving services archive less than 10% of the titles taken, at an additional cost of c. E4,000 p.a.

18 January 2013

# Emeritus Professor John R Helliwell, University of Manchester – Written evidence

This submission is being made by me as a private individual and does not necessarily represent the views of any of the below organisations.

### Personal Background

I publish in peer-reviewed crystallography, chemistry and molecular biophysics journals. My research work has been funded throughout my nearly 40 years academic and scientific civil service career by a variety of UK funding bodies (SERC, then EPSRC, BBSRC, The Wellcome Trust and The Leverhulme Trust) and EU, as well as by NATO and The British Council. I have also received numerous UK (SRS and now Diamond Light Source), ESRF-Grenoble and overseas synchrotron radiation beamtime awards in this period, and in the last 10 years beamtime awards at the Institut Laue Langevin in Grenoble. I have supervised approx. 20 PhD and 5 Masters students as well as undergraduate research project students; these have been funded by HEFCE, the Research Councils, the Institut Laue Langevin, overseas governments and, these days, student fees: the students themselves pay a sizeable fraction of their costs. My salary has been paid by HEFCE, whilst an academic, and by SERC or CCLRC whilst a scientific civil servant. Most recently my income is derived from my USS pension.

I have published over 200 research articles, properly linked to the experimental data where appropriate, two research book monographs and edited three more books. My h-index including three of my books is 40. As a possible perceived conflict of interest, as I speak up below for journals and peer review involving an editor and their selected referees, I declare:- (i) I have been an editor for the International Union of Crystallography (IUCr) journals (a 'learned-society publisher') since 1990, including being Editor-in-Chief of *Acta Crystallographica* and Chair of the IUCr Journals Commission between 1996 and 2005, and currently am a Co-editor of the *Journal of Applied Crystallography*; (ii) I am a Joint Main Editor of *Crystallography Reviews* published by Taylor and Francis. I receive remunerations currently from these commissions.

I have also been a Director of a synchrotron radiation facility, the SRS at Daresbury Laboratory, and am a Past President of the European Crystallographic Association. I currently represent the IUCr at the International Council for Scientific and Technical Information (ICSTI) and at CODATA. Finally, I would like to mention that I have been a Professor of Structural Chemistry since 1989 at the University of Manchester and assumed the title Emeritus Professor at the University from last August.

## [1] I consider the core question involving Open Access:-

How can science communication publication survive in an author-pays era? I especially address the needs of authors who cannot afford Gold Open Access fees for the 'quality assured publications' method of science communication commended by the Finch Committee as its strategic imperative [Ref A] and which will commence for RCUK funded research in April 2013.

- [2] The RCUK [A] seeks to make all its funded research, whose results are to be published, to be Gold Open Access for readers, including the tax-paying public. The difficulty for authors, who would of course generally welcome the usually doubled readership for such Gold Open Access publications, is a restriction on how many of their RCUK funded research publications they can afford and, secondly, which journals they can publish in, as RCUK seek to control this too. The third difficulty for UK authors is that, based on research grant proposal rejection statistics, approximately 3/4 of academic research is not funded by RCUK (see e.g. these statistics for the UK Medical Research Council [Ba]) or The Wellcome Trust. Similar, perhaps worse, research grant success rates exist in the USA (see e.g. as quoted by NIH [Bb]); of this, much is adventurous research the funding agencies avoid [C]. Much of this 'agency unfunded' research is then pursued piecemeal, in my experience, basically on essentially starved budgets by Principal Investigators (PIs) themselves and/or their research students, and over longer than ideal time periods. It is not ideal to take too long over a piece of research given the competitive nature of research. It will be said that academic PIs are paid by HEFCE, but this does not apply to non-academics or to retired academics; recall also that students and their families are these days paying large fees for their courses, and not tax payer monies via student grants.
- [3] These challenges for authors must be balanced against the current difficulties with accessing publications for readers, which have become increasingly severe, and with which the Finch Committee has apparently been preoccupied.
- (i) The most obvious difficulty is that readers are effectively denied access to articles held behind a journal subscription wall. This is most notably the case for tax-paying members of the public. A simple solution would be for Public Libraries to arrange electronic access as a simple extension of the existing inter-library loans from Boston Spa. This access could also be readily extended to remote access from people's homes via a Virtual Private Network.
- (ii) Researchers, who are readers themselves of course, have been somewhat insulated from the subscriptions costs paid by their libraries. These costs have steadily escalated, especially from some commercial publishers. This is exacerbated by the additional tactic of some publishers of bundling of popular journals with others that are 'rarely read'. This approach has also been increasingly resented by librarians [D].
- (iii) A significant clarification of the author-pays versus reader-pays issues is available from M Taylor [E], who estimates that the costs for an average publication to readers is 4 times higher (~\$2000 per publication) than under an Open-Access, author-pays, driven regime (~\$500 per publication).
- (iv) The conclusion of the Finch Committee to address the challenges for readers with a Gold Open Access approach is not the solution opted for in other countries such as Australia [F], which commends the 'Green Open Access' approach. The USA NIH also 'allows' Green Open Access [G]. Green Open Access is a major achievement of the last few years whereby a hard won agreement that publishers provide publication copies after I year is a very pragmatic solution that I firmly support.
- [4] If the RCUK and Wellcome Trust Gold Open Access policies take hold globally it is important to consider the possibility that reader-pays, subscription-based journals could actually disappear. The passionate stances taken by individual researchers [E], Librarians [D] and the RCUK [A] indicates that such a phase change may be approaching. There is a high risk that many authors do not have a suitable (i.e. affordable) forum for communicating their research results. Not only do journals arrange a peer review process but they, in effect,

organise the sharing of costs via the readers, actually an advantage. These are paid either as institutional subscriptions or personal subscriptions or pay per view. Instead, it is envisaged that authors alone will shoulder the burden of these costs in the Gold Open Access vision [A]. This approach has major risks (see [5] and [6] below).

- [5] If the vision of authors alone having to pay for publication of their results comes about globally, as envisaged by the Finch Committee, only a small fraction of what we discover in our research will be published in future. What is the alternative for communication of the non-funded research results?
- (i) Perhaps the preprint server? In the science research communities the physicists have the most advanced and long running tradition in Open Access via the preprint server arXiv, which is an e-print archive serving various areas of physics, mathematics, nonlinear science, and computer science. It has also in recent years been receiving e-prints in the areas of biomolecules and biological physics. However, would Einstein's theory of special relativity put into a preprint server have been noticed? NB Einstein was a clerk in the Swiss Patent Office; would his employer have found the Gold Open Access article processing fees to allow him to send it to a journal? I think we can readily imagine they would not have given Einstein \$3000 to submit to *Annalen der Physik*, his preferred journal.
- (ii) Perhaps the Article Processing Charge (APC) can be waived for a given author's article? This is potentially a very important point that could be insisted upon in RCUK policy for any given journal where an author requires it. Whether it is a commercially viable approach for a given journal to survive is a moot question. However why not let readers help by contributing to the costs via a subscription?!

## [6] In conclusion

- (i) Where a researcher for some time, perhaps forever, does not have the author fees to pay for submission to a journal of a given research result the preprint server or applying for APC waivers would become the only viable means for an author's dissemination of their unfunded research results. The preprint server is not the ideal of a peer-reviewed journal publication, the tried and trusted way to arrive at a 'milestone version' where the reader can read without anxiety and trust the results. (There are some peer reviewed publications that are eventually retracted but these are a tiny proportion of the total.) The APC waiver application method is in any case solved instead by the readers contributing to the costs of publication.
- (ii) Where a researcher does have funded research, with a budget for APC fees disbursed within a larger allocation to the researcher's university, one would have to put forward a proposal to a University Committee. These will be set up to approve the choice of journal by a researcher, who will also have to spell out whether this will be the only article to be submitted or whether others can be expected. Late publications, i.e. well after the end of the project, will no doubt be frowned upon by such a University Committee as one will no longer have live funding. Overall the number of publications from a given research project can be expected to be rationed.
- (iii) Where a researcher has funded research with the publication fees budget at their immediate disposal the same rationing of publications mentioned in 6 (ii) above will also apply.

[7] So, this Gold Open Access vision for readers is a strange world for authors. This massive change is to do what:- finally kill off for-profit publishers? Surely there are easier ways to exercise proper controls whilst allowing the commercial publisher to take part in the science communication enterprise? In my own research I have worked hard to support my learned society in its not-for-profit community-service research publications; that is my solution for communicating most of my research results. (Of course not all learned society publishers are not- for-profit, community-service oriented; a significant complication.) However, where I need to communicate to a very general audience I publish in the 'wide audience journals', which are very skilled in helping authors communicate to many different science disciplines, besides one's own, and to general readers.

## [8] Overall

- (i) the Australian Research Council [F] has plainly spelt out a much better alternative vision to that of the Finch Committee. Their vision is to the benefit of readers and authors, is also 'live and let live' to the wide spectrum of publishers, and respects tax payers whilst sharing costs with readers, and without altogether jeopardising the science research enterprise.
- (ii) I also note that the USA NIH public access policy [G] doesn't take a stand on Green vs Gold and supports both forms of access: Green in that the policy requires that a copy of a final manuscript or article be deposited in the PubMed Central repository where it must be made accessible to the public not later than 12 months after the date of publication; Gold in that NIH has clarified that grant funds may be used to pay open access fees charged by publishers. NIH funded researchers/authors are free to decide which type of journals to publish in.

19 January 2013

#### References

[A] The RCUK 'Finch Report' 2012

http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf

#### [Ba]

http://www.mrc.ac.uk/Fundingopportunities/Applicanthandbook/Successrates/Applicationsuccessrates/index.htm

[Bb] http://report.nih.gov/success\_rates/index.aspx

- [C] Joshua M. Nicholson & John P. A. Ioannidis Research grants: Conform and be funded Nature 492, 34–36 (06 December 2012) doi:10.1038/492034a
- [D] D Shorley (Imperial College Librarian) Research Fortnight Dec 2012. It's time for universities to reclaim publishing rights: Unless universities are bolder, open-access policies will leave control of publicly funded research in commercial publishers' hands, says Debby Shorley.

http://www.researchresearch.com/index.php?articleId=1262730&option=com\_news&templa\_te=rr\_2col&view=article&utm\_term=%23oa&utm\_source=twitterfeed&utm\_medium=twitt\_er\_

[E] M Taylor What does it cost to publish a Gold Open Access article? An emerging preference for Gold Open Access publishing has been stirring emotions. **Mike Taylor** highlights where the Finch Report goes wrong on cost and argues that academics should redirect their anger at publishers taking \$1973 from academia in return for each paper they receive. <a href="http://blogs.lse.ac.uk/impactofsocialsciences/2012/12/19/taylor-cost-publish-gold-open-access/">http://blogs.lse.ac.uk/impactofsocialsciences/2012/12/19/taylor-cost-publish-gold-open-access/</a>

## [F] http://www.arc.gov.au/applicants/open access.htm

The ARC has introduced a new open access policy for ARC funded research which takes effect from I January 2013. According to this new policy the ARC requires that any publications arising from an ARC supported research project must be deposited into an open access institutional repository within a twelve (12) month period from the date of publication.

## [G] <a href="http://publicaccess.nih.gov/">http://publicaccess.nih.gov/</a>

Overview The <u>NIH Public Access Policy</u> ensures that the public has access to the published results of NIH funded research. It requires scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to the digital archive <u>PubMed Central</u> upon acceptance for publication. To help advance science and improve human health, the Policy requires that these papers are accessible to the public on PubMed Central no later than 12 months after publication.

## Professor Tony Hey, Microsoft Research - Written evidence

## The Case for Open Access to Publicly-Funded Research Publications

Note: I am responding in an individual capacity not on behalf of Microsoft Research.

## 1: Green open access for over 20 years

My education into open access began over 40 years ago, when I was a practicing theoretical high energy physicist. This was in the 1970's - in the days of typewriters - and in those days we typed up our research papers, made 100 xerox copies and submitted the original to Physical Review, Nuclear Physics or whatever journal we wanted. The copies were sent round to our 'peer' high energy physics research groups around the world and were known as 'preprints'. While the paper copy to the journal was undergoing refereeing, these preprints allowed researchers to immediately build upon and refer to work done by other researchers prior to publication. This was the preprint tradition in the fast moving field of high energy physics. When papers were accepted for publication, the references to preprints that had since been published were usually updated in the published version. It has always baffled me - now that I work in the field of computer science that if anything is even faster moving than high energy physics - that there is no similar tradition. In computer science, it can take several years for a paper to get published in a journal - by which time they really only serve an archival purpose and as evidence for tenure committees. In contrast to the physics preprint system, the computer science community uses refereed workshop publications to provide a rapid - or at least more rapid - publication vehicle.

With the widespread availability of the Internet, and with the advent of the World Wide Web, theoretical physicist Paul Ginsparg set up a web site to save high energy physicists both the postage and the trouble of circulating preprints. The electronic version of the preprint – inevitably called an e-print – is typically submitted to a journal and simultaneously posted to the arXiv website (<a href="http://arxiv.org/">http://arxiv.org/</a>). This is now the standard method of scholarly communication of a very large fraction of the physics, astronomy and mathematics communities.

'arXiv is the primary daily information source for hundreds of thousands of researchers in physics and related fields. Its users include 53 physics Nobel laureates, 31 Fields medalists and 55 MacArthur fellows, as well as people in countries with limited access to scientific materials. The famously reclusive Russian mathematician Grigori Perelman posted the proof for the 100-year-old Poincaré Conjecture solely in arXiv.'

Reference: http://phys.org/news142785151.html#jCp

The arXiv repository is now over 20 years old and has a submission rate of over 7,000 e-prints per month and full text versions of over half a million research papers are available free both to researchers and the general public. More than 200,000 articles are downloaded from arXiv each week by about 400,000 users. Most, but not all, of the e-prints are eventually published in a journal and this amounts to a sort of post-publication 'quality stamp'. The apparent drawback of multiple, slightly different versions of a paper turns out not to be a serious drawback in practice. Citation counts for high energy physicists usually

count either the e-print version or the public version. A detailed study of the arXiv system by Anne Gentil-Beccot, Salvatore Mele and Travis C. Brooks is published as 'Citing and Reading Behaviours in High-Energy Physics. How a Community Stopped Worrying about Journals and Learned to Love Repositories'. The paper is, of course, available as arXiv:0906.5418.

In the terminology of today, arXiv represents a spectacularly successful example of 'Green Open Access'. This is the situation in which researchers continue to publish in refereed, subscription-based journals but also self-archive versions of their papers either in subject-based repositories - as for arXiv and the high energy physics community - or in institutionally-based repositories. In certain fields – such as the bio-medical area with the US PubMedCentral repository - these full-text versions may only be available to the public after embargo period of 6 or 12 months. The alternative open access model – so-called 'Gold Open Access' – is one in which researchers or their funders pay the journal publishers to make the full text version of the paper freely available.

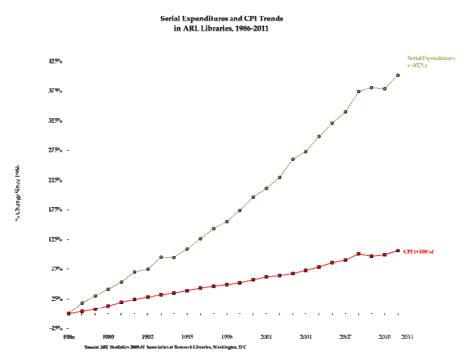
Why should you care? The research described in the papers was typically funded by a grant from a Government funding agency – think NSF or NIH in the USA or RCUK in the UK. The research papers are reviewed by researchers whose salary generally also comes from the public purse. The publishers organize the review process and publish the journals - and then restrict access to these papers to those who can afford to pay a subscription to their journals. Since the research was both funded and reviewed by researchers supported by public money raised by taxes it seems not unreasonable to demand that the general public should be allowed access to this research without having to pay an additional access fee. Now that we have the Web and the technology to make perfect digital copies of documents at zero cost, it is clear that the old rules in which publishers controlled dissemination through the printing press needs to change – just like it has for music and journalism. No one begrudges publishers some reward for the efforts at quality control and supporting a prestigious 'branded journal' like Nature. But, as will be seen in the next post, the central issue for universities is now one of affordability of their present journal offerings. Subscription fees to journals have risen much faster than inflation over the last 15 years or more and now constitute an unreasonable 'tax' on scarce research funds that is now going to shareholders of the publishing companies.

## 2: University Research Management and Institutional Repositories

University Deans are required to do many things for their university, including taking some responsibility for the research output of their Faculty. Each year, capturing all forms of research deliverables – journal papers, technical reports, conference and workshop proceedings, presentations and Doctorate and Masters theses – is a necessary and important chore. This is especially important in the UK - where the research funds allocated to each department by the Government are explicitly linked to the quality of its research over a four or five year period.

First as Chair of the Electronics and Computer Science Department, and then as Dean of Engineering at the University of Southampton, I was responsible for two of these 'Research Assessment' cycles in the UK. It was during the preparation of these research returns that I encountered an interesting problem: the University library could no longer afford to subscribe to all the journals in which our 200 engineering faculty members - plus a similar number of postdocs and graduate students – chose to publish. This meant that just assembling the published copies of all the publications of all research staff and students

became a much less straightforward exercise. The reason for this problem is well-known to librarians – it is the so-called 'serials crisis'. This crisis is dramatically illustrated below in a graph that shows the relative growth of serial expenditures at ARL Libraries versus the consumer price index over the past twenty-five years.



These are typical expenditure curves for all university libraries - and the University of Southampton was no exception. It was for this reason that the University Library sent out a questionnaire each year asking staff which journals they would least mind cancelling! Yet the serials crisis is a curious sort of crisis in that most research staff are simply unaware of any problem. They feel free to publish in whatever journal is most appropriate for their research and see no reason to restrict their choice to the journals that the University can afford to subscribe to.

The Research Assessment exercise in the UK is intended to measure 'research impact' and this is judged in a number of ways. One form of research impact that can easily be measured is the number of citations by other researchers to each paper. In order to garner citations, a research paper needs to be accessible and read by other researchers. Not all researchers – and certainly not the general public whose taxes have usually helped fund the research – have access to all research journals. Physicists have solved this accessibility problem by setting up arXiv – a repository for un-refereed, pre-publication e-prints. The US National Library of Medicine has solved the accessibility problem in a different fashion. The full text of all research papers produced from research funded by the National Institutes of Health are required to be deposited in the PubMedCentral (PMC) repository after publication in a journal, usually after some 'reasonable' embargo period from 6 to 12 months. Similar open access policies have now been adopted by other funders of biomedical research such as the Wellcome Trust and the Bill and Melinda Gates Foundation.

The repositories PMC and arXiv are examples of subject-specific, centralized research repositories. However, it is my firm belief that each research university needs to establish and maintain its own open access 'institutional repository' covering all the fields of research

pursued by the university. At Southampton, in the Electronics and Computer Science Department, with colleagues Les Carr, Wendy Hall and Stevan Harnad, we established a Departmental Repository to capture the full text versions of all the research output of the Department to assist us in monitoring and assessing our research impact. A graduate student in the Department, Rob Tansley, worked with Les Carr and Stevan Harnad to develop, in 2000, the EPrints open source repository software. Robert went on to work for Hewlett-Packard Laboratories in the US and wrote the DSpace Repository software in collaboration with MIT. The EPrints and DSpace repository software are now used by many hundreds of universities around the world. For a list of repositories and software see: <a href="http://roar.eprints.org/">http://roar.eprints.org/</a>

As Dean of Engineering, I tried to use the example of the ePrints repository in Electronics and Computer Science as a model for the entire Engineering Faculty. By the time I left Southampton, this had only partially been implemented, but I was enormously pleased to see that by 2006, the University had mandated that all research papers from all departments must be deposited in the 'ePrints Soton' repository. In 2008, this was extended to include PhD and MPhil theses. For more details of Southampton's research repository, well managed by the University Library, see:

http://www.southampton.ac.uk/library/research/eprints/

There is much more that can be said about this 'Green' route to Open Access via deposit of full text of research papers in Institutional Repositories. For a balanced account, I recommend Peter Suber's recent book on 'Open Access' published by MIT Press, to be available under Open Access 12 months after publication. Peter describes the different varieties of Open Access – such as green/gold, gratis/libre – and also issues of assigning 'permission to publish' to publishers versus assigning copyright (https://mitpress.mit.edu/books/open-access). In addition, the Open Archive Initiative supports two community-supported repository standards: OAI-PMH for metadata and OAI-ORE for aggregating resources from different sites into compound digital objects (http://www.openarchives.org/). Beyond the UK, the Confederation of Open Access Repositories or COAR is carrying the banner of open access repositories:

COAR, the Confederation of Open Access Repositories, is a young, fast growing association of repository initiatives launched in October 2009, uniting and representing 90 institutions worldwide (Europe, Latin America, Asia, and North America). Its mission is to enhance greater visibility and application of research outputs through global networks of Open Access digital repositories.

Why is all this important? It is important because the present scholarly communication model is no longer viable. While many journal publishers perform a valuable service in arranging peer review and in publishing high quality paper and online journals, the unfortunate truth is that universities can no longer afford the costs of the publishers' present offerings. For example, it was not possible for me as Dean to establish a new research area in the Faculty and have the library purchase the relevant new journals. In such an unsustainable situation, it is obvious that we need to arrive at a more affordable scholarly publishing model. However, instead of just waiting for such a model to magically emerge, university librarians need to be proactive and take up their key role as the guardians of the intellectual output of their university researchers.

It is the university library that has both the resources and the expertise to maintain the university's institutional research repository. This is not just an academic exercise. Managing the university's research repository will surely become a major part of the university's 'reputation management' strategy. Studies of arXiv have shown there to be a significant citation advantage for papers first posted in arXiv, and subsequently published in journals, compared to papers just published in journals (arXiv:0906.5418). Similarly, it is likely that versions of research papers that are made freely available through an institutional repository will also acquire a citation advantage – although this conclusion is currently controversial. Nevertheless, like it or not, universities will increasingly be evaluated and ranked on the published information they make available on the Web. For example, the Webometrics Ranking of World Universities takes account of the 'visibility and impact' of web publications and includes both an 'openness' and an 'excellence' measure for research repositories and citations (<a href="http://www.webometrics.info/">http://www.webometrics.info/</a>). I am pleased to see that Southampton features in 32<sup>nd</sup> place in Europe and I 19<sup>th</sup> in their World rankings ©

#### 3: Jim Gray and the Coming Revolution in Scholarly Communication

When I joined Microsoft in 2005 to create an 'eScience' research program with universities, Turing Award winner Jim Gray became a colleague as well as a friend. I had first met Jim in 2001 and spent the next four years having great debates about eScience. Roughly speaking, eScience is about using advanced computing technologies to assist scientists in dealing with an ever increasing deluge of scientific data. Although lim was a pioneer of relational databases and transaction processing for the IT industry, he had recently started working with scientists to demonstrate the value of database technologies on their large datasets and to use them to 'stress test' Microsoft's SQL Server product. With astronomer Alex Szalay from Johns Hopkins University, Jim and some of Alex's students built one of the first Web Services for scientific data. The data was from the Sloan Digital Sky Survey (SDSS) - which is something like the astronomical equivalent of the human genome project. Although the tens of Terabytes of the SDSS now seems a quite modest amount of data, the Sloan survey was the first high resolution survey of more than a quarter of the night sky. After the first phase of operation, the final SDSS dataset included 230 million celestial objects detected in 8,400 square degrees of imaging and spectra of 930,000 galaxies, 120,000 quasars, and 225,000 stars. Since there are only around 10,000 or so professional astronomers, publishing the data on the Skyserver web site <a href="http://cas.sdss.org/dr7/en/">http://cas.sdss.org/dr7/en/</a> constituted a new model of scholarly communication - one in which the data is published before it has all been analyzed. The public availability of such a large amount of astronomy led to one of the first really successful 'citizen science' projects. GalaxyZoo, http://www.galaxyzoo.org/, asked the general public for help in classifying a million galaxy images from the SDSS. More than 50 million classifications were received by the project during its first year, and more than 150,000 people participated. Jim's SkyServer and the Sloan Digital Sky Survey pioneered not only open data and a new paradigm for publication but also a crowd-sourcing framework for genuine citizen science.

Jim also worked with David Lipman and colleagues at the National Center for Biotechnology Information, NCBI, a division of the National Library of Medicine (NLM) at the National Institutes of Health (NIH). The NIH had established a policy on open access that required

'all investigators funded by the NIH submit ... to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication.'

The NIH's PubMed Central deposit policy was initially voluntary, but was signed into law by George W. Bush in late 2007. The percentage compliance rate then improved dramatically and now the NIH have taken a further step of announcing that, sometime in 2013, they 'will hold processing of non-competing continuation awards if publications arising from grant awards are not in compliance with the Public Access Policy.'

PubMed Central is a freely accessible database of full-text research papers in the biomedical and life sciences. The clear benefits of such an open access archive of peer-reviewed papers are summarized on the NIH website <a href="http://publicaccess.nih.gov/FAQ.htm#753">http://publicaccess.nih.gov/FAQ.htm#753</a>

'Once posted to PubMed Central, results of NIH-funded research become more prominent, integrated and accessible, making it easier for all scientists to pursue NIH's research priority areas competitively. PubMed Central materials are integrated with large NIH research data bases such as Genbank and PubChem, which helps accelerate scientific discovery. Clinicians, patients, educators, and students can better reap the benefits of papers arising from NIH funding by accessing them on PubMed Central at no charge. Finally, the Policy allows NIH to monitor, mine, and develop its portfolio of taxpayer funded research more effectively, and archive its results in perpetuity.'

Jim's work with NCBI was to help them develop a 'portable' version of the repository software, pPMC, that could be deployed at sites in other countries. In the UK, the Wellcome Trust, a major funder of biomedical research, had adopted a similar open access policy to the NIH. With assistance from NCBI, Wellcome collaborated with the British Library and JISC to deploy the portable version of PubMed Central archive software. The UKPubMed Central repository was established in 2007. Just last year, the repository was enlarged and re-branded as EuropePubMed Central <a href="http://europepmc.org/">http://europepmc.org/</a> since this service is now also supported by funding agencies in Italy and Austria and by the European Research Council. In addition, PMC Canada was launched in 2009.

NCBI were also responsible for developing two, XML-based, Document Type Definitions or DTDs:

'The Publishing DTD defines a common format for the creation of journal content in XML. The Archiving DTD also defines journal articles, but it has a more open structure; it is less strict about required elements and their order. The Archiving DTD defines a target content model for the conversion of any sensibly structured journal article and provides a common format in which publishers, aggregators, and archives can exchange journal content.'

These DTDs have now been adopted by NISO, the National Information Standards Organization, and form the basis for NISO's Journal Article Tag Suite or JATS <a href="http://jats.nlm.nih.gov/index.html">http://jats.nlm.nih.gov/index.html</a>

As is now well-known, Jim Gray was lost at sea at the end of January 2007. A few weeks before this tragic event, Jim had given a talk to the National Research Council's Computer Science and Telecommunications Board. With Gordon Bell's encouragement, I and two colleagues edited a collection of articles about Jim's vision of a 'Fourth Paradigm' of data-intensive scientific research <a href="http://research.microsoft.com/en-">http://research.microsoft.com/en-</a>

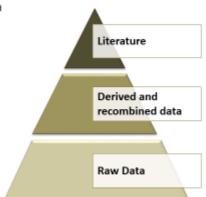
us/collaboration/fourthparadigm/default.aspx The collection also included a write-up of Jim's last talk in which he talked about not one, but two revolutions in research. The first revolution was the Fourth Paradigm; the second was about what he called 'The Coming Revolution in Scholarly Communication'. In this section, Jim talked about the pioneering efforts towards open access for NIH funded life sciences research with NCBI's full-text repository PubMed Central. But he believed that the Internet could do much more than just make available the full text of research papers:

'In principle, it can unify all the scientific data with all the literature to create a world in which the data and the literature interoperate with each other (Figure 3). You can be reading a paper by someone and then go off and look at their original data. You can even redo their analysis. Or you can be looking at some data and then go off and find out all the literature about this data. Such a capability will increase the "information velocity" of the sciences and will improve the scientific productivity of researchers. And I believe that this would be a very good development!'

I include his Figure 3 below:

## All Scientific Data Online

- Many disciplines overlap and use data from other sciences.
- Internet can unify all literature and data
- Go from literature to computation to data back to literature.
- Information at your fingertips –
   For everyone, everywhere
- Increase Scientific Information Velocity
- · Huge increase in Science Productivity



After talking about open access and overlay journals, peer review, publishing data, Jim goes on to discuss the role that ontologies and semantics will play on the road from data to information to knowledge. As a specific example, he talks about *Entrez*, a wonderful cross-database search tool supported by the NCBI:

'The best example of all of this is Entrez, the Life Sciences Search Engine, created by the National Center for Biotechnology Information for the NLM. Entrez allows searches across PubMed Central, which is the literature, but they also have phylogeny data, they have nucleotide sequences, they have protein sequences and their 3-D structures, and then they have GenBank. It is really a very impressive system. They have also built the PubChem database and a lot of other things. This is all an example of the data and the literature interoperating. You can be looking at an article, go to the gene data, follow the gene to the disease, go back to the literature, and so on. It is really quite stunning!'

This was Jim's vision for the future of scientific research – an open access world of full text publications and data, a global digital library that can truly accelerate the progress of science. Of course, the databases at NCBI are all carefully curated and marked up using the NLM DTDs. Outside NCBI's walled garden, in the wild world, we have a plethora of different archives, repositories and databases - and replicating the success of a federated search tool like *Entrez* will be difficult. Yet this is the vision that inspires me. And it is this vision that leads me to support the open access movement for more than just the blunt economic facts that the university library system can no longer afford what publishers are offering.

4: Open Access in the UK: The Finch Report and RCUK's Open Access Policy In the UK, the JISC organization has long pioneered the exploration of different models of open access and, in particular, the role of institutional repositories. Although JISC's future is now somewhat uncertain because of the recent change in its funding status to that of a charity, JISC is seen internationally as a major innovator in the use of advanced ICT in Higher Education. In Europe, only the Dutch SURF organization can match the breadth and originality of JISC programs. Such an innovative 'applied research' funding agency is lacking in the US - although the role of JISC is partially met by organizations such as the Mellon Foundation.

Until 2006, I was Chair of the JISC Committee in Support of Research. Our Committee was able to fund many innovative projects and initiatives, including the pilot study that led to the adoption of the Internet2 Shibboleth authentication by UK universities, the establishment of the Digital Curation Center (DCC) in Edinburgh, a test-bed 'lambda network' for high-data rate transfers and an experimental text mining service offered by the National Centre for Text Mining (NaCTeM) in Manchester. In April 2005, my committee produced a leaflet explaining the basics of 'Open Access'. I particularly remember having to insist that the author of the report, one Alma Swan, now well-known to the Open Access community, should put the section on 'Green Open Access' via repositories before the section on 'Gold Open Access' Journals.

Other committees of JISC also funded a large number of projects exploring different aspects of open access repositories. From 2002 – 2005 the JISC FAIR Program – Focus on Access to Institutional Repositories – funded projects like the SHERPA project at Nottingham and the TARDis project at Southampton. From 2006 – 2007, the JISC Digital Repositories Program funded another 20 projects including the OpenDOAR project – a Directory of academic Open Access Repositories - and the EThOS project - to build a national e-thesis service. JISC also funded a Repository and Preservation Program which included the PRESERV project at Southampton that looked at preservation issues for eprints. All of this preamble is intended to show that the UK has had a vibrant and active 'research repository community' for over a decade. The ROAR site currently lists 250 UK university repositories. It is unfortunate that the 'Working Group on Expanding Access to Published Research Findings' - better known as the Finch Committee – seem to have chosen to ignore much of this seminal work.

The UK Government has adopted an explicit commitment to openness and transparency <a href="http://www.cabinetoffice.gov.uk/transparency">http://www.cabinetoffice.gov.uk/transparency</a> In the context of research, this has been interpreted as making the results of 'publicly funded research' open, accessible and exploitable. The Government's belief is that open access to research results will drive innovation and growth as well as increasing the public's trust in research. With such

laudable intent, the Government set up the Finch Committee to explore how best the UK could 'expand access to published research findings'. Unfortunately for the outcome, conventional scholarly publishers were the best represented stakeholder group on the Committee which consisted of five publishers, four researchers or university administrators, three funders and two librarians. The majority of the 'Finch Report' recommendations were accepted by Minister David Willets and a version of them promulgated by the combined Research Councils organization, RCUK – roughly equivalent to the NSF – in July 2012. The RCUK policy can be summarized as follows (quoting Peter Suber's SPARC Open Access Newsletter, issue #165):

- RCUK-funded authors 'must' publish in RCUK-compliant journals. A journal is RCUK-compliant if it offers a suitable gold option or a suitable green option. It need not offer both.
- To offer a suitable gold option, a journal must provide immediate (un-embargoed) OA to the version of record from its own we site, under a CC-BY license, and must allow immediate deposit of the version of record in an OA repository, also under a CC-BY license. It may but need not levy an Author Processing Charge (APC).
- To offer a suitable green option, a journal must allow deposit of the peer-reviewed manuscript (with or without subsequent copy-editing or formatting) in an OA repository not operated by the publisher.

To compensate the publishers – or, in the view of the Finch Committee, give them time to move their business models to accommodate the new open access world – the Finch Report advocates increasing funding to publishers 'during a transition period' by establishing 'publication funds within individual universities to meet the costs of APCs'. In addition, the report also explicitly deprecates the use of institutional repositories by effectively relegating them to only providing 'effective routes to access for research publications including reports, working papers and other grey literature, as well as theses and dissertations'.

Peter Suber, a very balanced advocate for open access, has given a detailed critique of these recommendations – as well as enumerating several erroneous assumptions made by the group about open access journals and repositories (see issue #165 of the SPARC Open Access Newsletter (<a href="http://www.earlham.edu/~peters/fos/newsletter/09-02-12.htm">http://www.earlham.edu/~peters/fos/newsletter/09-02-12.htm</a>). Let me highlight some key points that he makes - with which I am in entire agreement.

First and foremost, we should all applaud the group for its robust statement in favor of open access:

'the principle that the results of research that has been publicly funded should be freely accessible in the public domain is a compelling one, and fundamentally unanswerable.'

Similarly, the Finch Committee are equally forthright about their intent to induce change in the scholarly publishing industry:

'Our recommendations and the establishment of systematic and flexible arrangements for the payment of APCs will stimulate publishers to provide an open access option in more journals.'

Minister David Willets endorsed this goal and told the Publishers Association that: 'To try to preserve the old model is the wrong battle to fight.'

Let me be clear, these statements represent huge progress for the Open Access movement in the UK. The Government is to be commended on its stance on openness: unfortunately I feel that the Finch Committee missed an opportunity by not supporting mandated green open access repositories in addition to gold OA.

A major problem with the Finch and RCUK endorsements of gold OA as the preferred route to open access – and their explicit deprecation of green OA – is that the proposed interim settlement is unreasonably generous to the publishers at the expense of the UK Research Councils and HEFC-funded UK universities. By giving publishers the choice of being paid for gold OA or offering an unpaid green OA option, it is clear that publishers will cancel their green option and opt to pick up more money by introducing a gold option. Their shareholders would demand no less. Even the majority of OA publishers who currently charge no APC fee - contrary to the assumptions of the Finch Group - will be motivated to pick up the money on the table. Similarly, publishers who now only offer Toll Access via subscriptions will be quite happy to pick up more money by offering a gold OA option in addition to their subscription charges.

As I made clear in Part 2 of this series of articles on open access, the serials crisis means that universities are already unable to afford the subscriptions to Toll-Access (TA) journals that the publishers are offering. To offer them more money to effect some change that they should have initiated over a decade ago seems to me to make no sense. Instead of making generous accommodations for the interests of publishers, the Finch Group should have looked at the problem purely from the point of view of what was in the public interest. Now that publishers receive articles in electronic form, and research papers can be disseminated via the Web at effectively zero cost, what have publishers done in the last fifteen years or more to adapt their business models to these new realities? The answer is that they have raised journal prices by far more than the rise in the cost of living. It is this rise in subscription costs that has resulted in subscription cancellations – not competition caused by the availability of articles in green open access repositories.

Despite green OA approaching the 100% level in Physics, both the American Physical Society and the Institute of Physics have said publicly that they have seen no cancellations they can attribute to arXiv and green OA. Similarly, the Nature Publishing Group has said openly that 'author self-archiving [is] compatible with subscription business models'. The American Association for the Advancement of Science (AAAS) - who publish 'Science' - also 'endorse the green-mandating NIH policy'. There is much concern in the Finch Report for Scholarly Society publishers. In fact a survey in December 2011 showed that 530 scholarly societies currently publish over 600 OA journals. While it is true that some societies use subscription prices to subsidize other member activities, this need not be the case. Now that we have the Web, the monopoly endowed by ownership of a printing press is gone forever. Just ask the music industry or the news media.

Let me give three anecdotal examples of the serials crisis:

- In 2007 the University of Michigan's libraries cancelled about 2,500 journal subscriptions because of budget cuts and the increasing costs of the subscriptions.
- In 2008, Professor Stuart Sheiber of Harvard explained 'that cumulative price increases had forced the Harvard library to undertake "serious cancellation efforts" for budgetary reasons'.

 In 2009 – 2011, the UC San Diego Libraries continued to cancel journal subscriptions because of budget cuts and increasing costs of subscriptions. Around 500 titles (\$180,000 worth) were canceled in FY 2009/10, and about the same number were projected to be cancelled in FY 2010/11. It also cancelled many of its satellite libraries.

In fact, any research university library around the world will have a similar story to tell. When even such a relatively wealthy university as Harvard has problems with journal subscription increases surely it is time to take note!

The transitional period envisaged by Finch and RCUK is projected to cost the UK Research Councils and Universities a minimum of £37M over the next two years. This is money that will have to come out of hard-pressed Research Council budgets and already reduced university HEFC funding. Instead of continuing to listen to the special pleading of publishers, what is needed now is some leadership from RCUK. They need to put in place a policy with some sensible provisions that do not unduly 'feather-bed' the publishers and that is also affordable by UK universities. Instead of being overly concerned with the risks of open access to commercial publishers, RCUK should remember its role as a champion of the public interest.

What should RCUK do now? In my opinion, RCUK could make a very small but significant change in its open access policy and follow the example of the Wellcome Trust and the NIH. They should adopt a rights-retention green OA mandate that requires 'RCUK-funded authors to retain certain non-exclusive rights and use them to authorize green OA'. In the words of Peter Suber, this would 'create a standing green option regardless of what publishers decide to offer on their own.'

The scholarly publishers have had plenty of time to read the writing on the wall. They have shown their intransigence to adjust to the new reality for more than fifteen years. It seems manifestly unreasonable to give them a very significant amount of more money and more time to do what they should have been exploring fifteen years ago. By insisting on a green option RCUK will help generate the required and inevitable changes to the scholarly publishing business and get a fairer deal for both academia and the tax-paying public.

In this short overview I have omitted many subtleties and details – such as embargo times, 'libre green', CC-BY licenses and other flavors of green OA. Peter Suber's SPARC Open Access Newsletter #165 and his book on Open Access (MIT Press Essential Knowledge Series, 2012) gives a much more complete discussion with detailed references.

Also, in the interests of full disclosure, I should stress that I am not 'anti-publisher' and have been an editor for the Wiley journal, 'Concurrency and Computation: Practice and Experience' (CCP&E), for many years. In fact it is ironic that my University, Southampton, could not afford to subscribe to CCP&E even though it was essential reading for my research group of over 30 researchers. From this experience, and from my time as Dean of Engineering, I came to believe that the unsustainable, escalating costs of journal subscriptions together with the advent of Web have irrevocably changed what we require from the scholarly publishing industry. And, after working with many different research disciplines during my time as the UK's e-Science Director, and now at Microsoft Research, I have seen at first hand the inefficiencies of the present system and the large amount of unnecessary 're-inventing the wheel' that goes on in the name of original research. Because of

Professor Tony Hey, Microsoft Research – Written evidence

this I passionately believe that open access to full text research papers and to the research data can dramatically improve the efficiency of scientific research. And the world surely needs to solve some major health and environmental challenges!

18 January 2013

# Higher Education Funding Council for England (HEFCE) – Written evidence

I. Lord Krebs's letter of 24 December 2012 invited HEFCE to submit written evidence to a short inquiry into open access publishing. The letter invited us to provide an overview of actions taken by HEFCE since the publication of the Finch Group's report; to address the issue of support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts; and to outline any plans for the role of open access publishing in future REFs.

#### **Background**

- 2. HEFCE was established by the Further and Higher Education Act 1992 as a non-departmental public body operating with a high degree of autonomy within a policy and funding context set by the Government. The Council's main function is to administer grant provided by the Secretary of State for Education and Skills. We provide independent advice to the Secretary of State on the funding needs and development of higher education. Further information about the role, policies and funding allocations of the HEFCE can be found on our web-site at <a href="https://www.hefce.ac.uk">www.hefce.ac.uk</a>.
- 3. The Council allocates approximately £1.6 billion a year as recurrent block grant (non hypothecated) research funding to HEIs. Through our funding and policy work, we seek to fulfil our strategic aim for research:
  - To develop and sustain a dynamic and internationally competitive research sector that makes a major contribution to economic prosperity, national wellbeing and the expansion and dissemination of knowledge.
- 4. Reflecting this aim, our grant for research is allocated to higher education institutions taking into account indicators of the quality of their research activity in different disciplines; these indicators are derived from periodic national exercises to assess research quality of which the most recent was the 2008 Research Assessment Exercise (RAE) and the next will be the 2014 Research Excellence Framework (REF).

## **Open access policy**

- 5. Our policy for the allocation and use of our research grant also reflects in particular the principle that the dissemination of research findings and outputs, both to other researchers and to a wider group of potential users and others with an interest, is an essential and integral part of any high quality research process. The prompt and widespread dissemination of research findings will in turn both benefit the efficiency of that process and enable its application to support the economic, social and cultural development of the country, as well as increasing public understanding of research.
- 6. It is therefore our established policy that outputs from all research supported though HEFCE funding should be as widely and freely accessible as the available channels for dissemination permit. It is evident to us that the development of the internet in particular has opened up significant new channels for sharing research findings and outputs, and made possible new forms of academic discourse, in ways that the academic community has not yet

learnt to exploit to their full potential. A situation where all outputs from publicly funded research are freely available upon first publication is now achievable as well as desirable – though we do recognise that change on that scale is unlikely to be achievable within a short space of time. In the mean time, we do not see it as the role of the Council to instruct the academic community to adopt particular specified channels and modes of publication to that end; we do however consider that we have a role to play in supporting and encouraging the development of open access publication in whatever forms may emerge that will both command the support of the research community and contribute to achieving our policy aims.

- 7. Within this context we welcome the current developments towards increased open access that are being undertaken in the UK. We welcome the contribution that the recommendations of the Finch report, and the action now being taken by the research councils to implement these, will make towards accelerating and consolidating these developments, and are committed to further developing our own policy in this area in full dialogue with the communities involved including researchers and research managers, publishing bodies, learned societies, other funders of research, and international organisations.
- 8. Following the Government's response to the Finch report in July 2012, HEFCE published on 16 July a statement on implementing open access. That statement:
- made clear that HEIs may use the funds provided through our research grant towards the costs of more accessible forms of publication including to meet the additional costs that may be incurred by them during a transition from the established model of publication funded by subscription to payment by authors or by their employers.
- Set out our intention to develop a specific requirement that research outputs submitted to a REF exercise subsequent to 2014 shall, as far as it may be reasonable to require at the time, be published in an open access form; and to consult widely with interested communities on how in detail such a requirement might be framed.
- More generally, was intended to contribute to advancing a dialogue with researchers and managers in the institutions that we fund. It is clear to us that informed acceptance of our policy position, of the actions planned by the research councils and others, and of the underlying reasons why we support the government's view that the UK should play a leading role in the development of open access rather than awaiting events, will take time to develop and that dialogue is still at a relatively early stage.
- 9. We are now engaged in dialogue with the interested communities, to identify the key issues around open access while we are developing our consultation proposals. We will shortly issue an informal letter seeking advice on the parameters of our open access requirement in the next REF, and on any unforeseen consequences of this. Following our consideration or the responses to that letter, we envisage launching a formal consultation on specific proposals later during 2013.
- 10. While our proposals remain under development, we can set out some elements in our thinking on which we plan to consult. We recognise that within the likely timeframe of a REF exercise subsequent to 2014 it would not be realistic to require all submitted outputs

to be published in open access form; some of the work that would be submitted could be in the pipeline for publication by the time that our firm plans are known, and moreover the availability of open access options is more developed in some fields and forms of publication than others. Equally, it is our intention to define acceptable forms and conditions of open access publication - for example, in relation to embargo periods for different discipline groups - in terms as close as possible to those that may be employed at the time by other research funders including in particular the research councils. These and other issues can be resolved only after our planned consultation.

18 January 2013

Higher Education Funding Council for England (HEFCE) and Research Councils UK (RCUK) – Oral evidence (QQ 52-70)

# Higher Education Funding Council for England (HEFCE) and Research Councils UK (RCUK) – Oral evidence (QQ 52-70)

Transcript to be found under Research Councils UK (RCUK)

#### Human Relations - Written evidence

#### Open Access and the Social Sciences: the Case of Human Relations

The Humanities and Social Science (HSS) community has already made it clear in several forums (e.g a note by the President of the Royal Historical Society and an event at the British Academy)<sup>76</sup> that the concerns of this community are not addressed in the Finch Report and that Open Access (OA), especially in its 'gold' form, could have the perverse effect of damaging the accessibility that the idea of open access seeks. This note illustrates this argument using the case of the journal *Human Relations*. This journal is a particularly useful example as it is among the oldest of UK social science journals (established 1947), it has a very wide international reach (three-quarters of its papers come from outside the UK), and its profits help to sustain a major institution, the Tavistock Institute. A move to open access could seriously damage the success of this journal.

The journal publishes 60 papers a year. At the Finch Report's estimate of a charge of £1500 per paper, this would generate a revenue of £90,000 p.a. Current total revenue is about £1,036,000. This revenue is deployed in three ways: to cover the editorial, production and marketing costs of the journal incurred by the Tavistock Institute, those incurred by the publisher SAGE, and to provide a royalty to the Tavistock Institute. This business model would be unsustainable under OA.

The reasons why OA would not work here, whereas they might in STEM subjects, are several. They include the following. First, like all good quality social science journals we have a very low acceptance rate, of under 10%. If we were publishing 90% of papers submitted, as do many STEM journals, the story would be very different. Second, the shelf life of social science papers is very long. Some of our most cited papers continue to be those going back to the 1940s and 1950s. OA, even the 'green' variant, assumes shelf lives of up to 12 months, an assumption that does not work in HSS. Third, many papers do not derive from publicly funded research grants, so that charging the producer would not work, or cause all kinds of disincentives.

There are also many other perverse side-effects. For example, we are working to strengthen our reach in developing countries. Requiring authors from those countries to pay a fee would be a serious disincentive, and might lead them to go to other journals using a different model.

We would also observe that OA sounds rather more 'open' than it really is. As the Finch Report itself notes, scientific debates have traditions and languages that need experience and training to access. Simply allowing 'access' would not in fact mean that the 'non-specialist' on whom the report (para 1.7) particularly concentrates would be able meaningfully to engage with the content. There are other routes to making results accessible, such as simplified accounts in newsletters and websites, that most leading research bodies already use. Anyone wanting the full academic report can always ask for it.

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<sup>&</sup>lt;sup>76</sup> http://www.royalhistoricalsociety.org/RHSPresidentE-letterOctober2012.pdf and http://www.britac.ac.uk/policy/research\_and\_he\_policy.cfm.

#### Human Relations - Written evidence

The journal already makes major efforts to place the papers that it publishes in the public domain. We produce press releases and podcasts of our work, SAGE regularly has free trial periods for its journals, the editor's choice of leading papers is made freely available, we have an electronic newsletter that goes to about 10,000 recipients, and we are about the appoint a media editor who will work further on making our papers accessible. All this activity is, however, costly, and OA would undermine the model on which it depends.

In our view, OA is a one-size-fits-all model. The costings in the Finch Report represent overall averages and not the experience of specific journals. HSS journals could be seriously damaged by OA. There may be benefits in addressing access to the contents of research, but these require careful exploration. Debate has moved very fast in recent months, and the implications for HSS journals have not been thought through. They need careful attention.

15 January 2013

Imperial College London, University of Oxford and University of Bournemouth – Oral evidence (QQ 17-37)

# Imperial College London, University of Oxford and University of Bournemouth - Oral evidence (QQ 17-37)

Transcript to be found under University of Oxford

## Institute of Physics (IoP) - Written evidence

#### **General** issues

- I. Both from a scientific and a publishing perspective, the Institute recognises and supports the principle that the results of publicly funded research should be made as widely available as possible. However, we feel strongly that the transition from the current arrangements to an open access (OA) model needs to be carefully managed to ensure sustainability in terms of the publishers' business models and to maintain the quality of the scholarly record.
- 2. In addition, we are of the firm view that the additional costs of implementing the OA policy must not be met by diverting money away from the Science Budget which, despite being ring-fenced, is being eroded on an annual basis due to inflation. It is imperative that if the government wants the UK's science base to move to the OA model, then it needs to source the requisite additional funding without placing a burden on existing allocations to the research councils and the funding councils, which are already under considerable pressure.
- 3. The Institute would like to point out that the surplus from publishing made by charities such as the learned societies allows them to support science, business and education in a way which is valued by many stakeholders, including government and the research councils. Indeed, the Finch report clearly recognised the value of the UK's learned societies and, while we cannot expect any preferential treatment over other publishers, we would ask that the transition to OA is not carried out so precipitately as not to allow us to develop a sustainable business model. The Institute, in common with most subject societies and professional bodies, receives no direct public funding for its core programme and without the income from publishing, the majority of our charitable activities would cease.
- 4. The government largely accepted the Finch recommendations for a balanced package of measures in the transformation to OA. At present, neither RCUK nor HEFCE seem to have taken that message completely on board. It would be of great benefit to all concerned, universities and publishers, if the two funding bodies were able to formulate and implement clear policies consistent with the Finch recommendations.

## Support for universities in the form of funds to cover article processing charges, and the response of universities and HEIs to these efforts

- 5. In September 2012, the government announced £10m which will be allocated to 30 of the UK's most research-intensive universities to enable them to move forward and develop policies to meet the costs of article processing charges (APCs) and help ease the transition to the OA model. This investment is in addition to the contribution RCUK will be making to institutions to support payment of APCs associated with OA through block funding grants from 1 April 2013 and beyond.
- 6. Universities are resistant to the RCUK expectation that they contribute 20% of the costs towards APCs. But this is not the only extra cost: there will be additional administrative costs associated with the extra financial transactions for each of the thousands of papers

published in a typical institution as well as the costs relating to the public availability of data associated with the publications. This situation is likely to be exacerbated if, as anticipated, HEFCE announces requirements for OA publication for articles to be eligible for the REF, effectively insisting that publications are OA regardless of whether they are funded directly from the public purse. If there is no additional funding provided, universities will have to use their own budgets, i.e. QR income, which is not a sustainable model in the current financial climate.

- 7. Note that, the planned measures, in the short term at least, will lead to an additional cost because there will be no substantial reduction of library charges for international journals which publish papers from international authors, including the vast majority of science journals.
- 8. The UK produces only about 6% of the world's academic publications. Consequently, in the case that the UK proceeds to implement the author pays model unilaterally, there would be only a negligible reduction for libraries in the cost on journals, since 94% of the papers would still use the traditional publishing route. However, the entire cost of UK publications would have to be absorbed within the UK system. Even allowing that this is an extreme scenario, the proposals are likely to result in an increase in the cost of dissemination of tens of millions of pounds. As it stands, the plan appears to be that researchers and businesses in other countries will be able to obtain free and either immediate or very early access to UK papers without a corresponding return in the other direction. This also raises questions as to how publications from the developing world might be accommodated.
- 9. This additional cost has to come from somewhere, whether it is from RCUK (which may affect the ring-fenced Science Budget), universities or, preferably, new money from the government to support its policy initiative. RCUK and some libraries are requesting the full cost of the APCs be set off against journal subscriptions and licences. Not only is this line apparently inconsistent with government policy, it would also lead to administrative chaos with the need to track the origin of each paper published in every journal.

## Embargo periods for articles published under the Green model

- 10. The green OA route, in which the papers are made freely available after a suitable period of time, is potentially viable but the length of the embargo before free publication is a critical issue. The Finch report and the government made it clear that there was a need for reasonable embargoes for the green model. However, the RCUK's policy remains vague on this issue and it appears that where there is no funding for an APC, RCUK wants the paper to be deposited in a repository after a very short embargo period, which is explicitly six months for scientific articles.
- II. A major issue with regards to the green model relates to the nature of the academic field. In physics, we have undertaken an analysis of downloads of the papers we publish and we find a typical half-life of at least four years, i.e. half the downloads occur in that period. In other areas, such as mathematics, the half-life is even longer. It is therefore unreasonable for RCUK to impose a single embargo period for all STEM subjects regardless of the nature of the research. In physics, a six-month period would mean that the vast majority of readers would find it advantageous to wait for free publication rather than pay a subscription to

provide a viable business model for the publisher. Furthermore, underlying the green model is the recognition that publishers must exist and if they exist, they must have a business model.

12. We are in agreement with Finch in identifying gold OA, where all authors pay, as the best long-term solution, although it may pose problems in an international environment, particularly in the developing world, where authors may not be able to afford the costs. However, particularly in the short term, there will be a need to support the green model, too. Here there is a need for clarity on green routes, particularly during the transition period. Where a journal offers gold OA but an author does not choose, or is not able, to pay, it is reasonable that the embargo period should be longer than for a journal that does not operate under a gold model. As discussed above, there are issues concerning the embargo periods for different subjects but it is clear that a journal trying to operate sustainably with a gold model would be undermined if all papers submitted via a green route were made publicly available after just six months, as currently suggested by RCUK. The Minister of State for Universities and Science, David Willetts MP, has accepted the case for variable embargo periods but that position has not yet been taken up by RCUK.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council Open Access policies and guidance

- 13. The Institute was requested to nominate a representative to a working group on the data access implications of OA but, outside that, we have not been consulted at all by RCUK beyond the public consultations.
- 14. In addition to a lack of constructive engagement by RCUK with its stakeholders, it is also our understanding that RCUK's proposals emerged essentially without consultation with publishers. As a result, a number of vital technical issues have not been addressed. In particular, while everyone recognises the need to improve the access to research findings, neither publishers nor academics should be forced to make rapid change that does not allow a smooth transition to the preferred solution.
- 15. In addition, it is not at all clear that business funders of research have been significantly engaged with on the key issues particularly on access to data or even publications. The requirements refer to unrestricted access to text and data mining. There are substantial issues surrounding those requirements in terms of the formats used and the type of data stored but a different point is that some funding routes, for example, involving the TSB or joint grants between businesses and universities, may have commercial sensitivity and the business providers may baulk at allowing unrestricted access to competitors.
- 16. To ensure successful implementation there are a significant number of issues to address which can only be resolved by all stakeholders coming together; these include a better understanding of the risks to the quality of UK science and risks to the income of learned societies from a lack of funding and a poor implementation of the policy. There are also substantial technical issues surrounding the CC-BY licence and the format for data availability which cannot be addressed without the main protagonists working closely together.

### Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

- 17. A number of concerns have been raised with the RCUK by both the universities and the publishing companies, many of which have yet to be resolved satisfactorily.
- 18. It is not clear whose responsibility it will be, RCUK or the authors, to check whether the criteria are satisfied. Depending on how the policy is applied, that might be a high risk for authors. In addition, there might be circumstances, such as the publication of conference proceedings, where authors have no choice of journal; in such cases, would UK participants be expected to insist on their papers being withdrawn? There might be other cases of accidental violation; for example, where co-authors from another country publish in a national journal. The situation is particularly complex for areas such as particle physics and astronomy, where large international collaborations are the norm.
- 19. In addition, RCUK has not made it clear how its policy will be monitored nor the consequences for a researcher whose paper might find a way into a proscribed journal. Will it really be the case that RCUK will police all publications that acknowledge any of the research councils? And will any offender really be prevented from applying for research funds? There is a difference between guidelines and requirements; if these proposals are intended to be rules, then much more information is required about the consequences of breaking them. Although RCUK has indicated that it will use a light touch approach, particularly in the early years, the stakes are very high for researchers and the clearer the guidelines can be, the better.

## International Society for First World War Studies – Written evidence

With over 300 members in 27 countries, our Society is the largest network of First World War scholars in the world. Founded in 2001, this interdisciplinary organisation launched its peer-reviewed journal in 2010; First World War Studies is published by Taylor & Francis.

#### I. Open Access - A welcome but contested development

Few academic researchers and scholars deny the intellectual, scientific, economic and social benefits of open access to research findings. Yet, in the wake of the Finch report and the publication of the open access policies of most British funding bodies, open access has emerged as a hotly contested issue in the UK. Notwithstanding the vehemence of long-committed activists, the passionate nature of recent arguments belies the arcane and technical nature of the matter at hand. Open access has indeed become a battleground whereupon scholarly and scientific practises, public policy, copyright laws, market mechanisms and library services collide and pull researchers in opposite directions.

#### 2. The misrepresentation of open access

In this context, British proponents of the so-called "Gold" route to Open Access (OA) have moved - fast and aggressively - to impose a model whereby authors pay to publish the results of their work. Like the Finch report, they misrepresent the range of open access channels offered to scientists and scholars in the digital age. Advocates of Gold OA reduce the plurality of ways to achieve open access to the - admittedly better known - Gold and Green roads to open access. Green OA essentially refers to the optional or mandated archiving of publications, often in their pre-print versions, in institutional or subject repositories. Repository journal (in whatever forms they may take) are often dismissed for their presumed weakness or rejection of peer-review process. Though it is generally true that Green OA does not entail the presence of a quality-assurance mechanism, it does not follow that only Gold OA provides for peer-review.

The Finch report also failed to address the other reasons why repositories remain unpopular if not ignored. If the Working Group had been serious about Green OA, it would have recommended that it be made a requirement of the next REF exercise and promoted the policies of the 24 British universities that have already adopted a "green mandate". These include Durham, Birkbeck College, Bath, Nottingham, UCL, Edinburgh. (There must be some value in "green mandates" for 254 institutions worldwide - including Princeton, Harvard, MIT and the University of California - to adopt them).

Green OA is of course very problematic for publishers who fear the loss of income that would undeniably result from the adoption of shorter (6-month) embargo before release in the public domain through a repository. No one would expect turkeys to vote for Christmas, but a serious report ought to have deployed some creativity and intellectual flexibility to envisage the possibility for public funders to mitigate the opportunity costs that would be incurred by publishers under a more ambition Green OA regime. Albeit difficult, this option should have at least be entertained and scrutinized. HEFCE could perhaps subsidise the purchase of subscription-based publications allowing for shorter embargo

period. This would obviously be anathema to free-marketeers, but as it stands, the proposed policy simply redesigns the channels whereby public funding supports the publishing industry. In short, repositories have not been given a real chance. Making the deposit of publications in a repository a requirement of the REF would have a direct, immediate impact at a negligible cost.

Crucially, it is essential to underline that contrary to the report's claim (page 94), Gold OA is not the only way to guarantee quality assurance through peer-review. The Platinum and "Freemium" types of open access that dispense with APC charges while meeting the costs of peer-review and other services are not even mentioned in the report<sup>77</sup>.

#### 3. An unworkable policy and a £10m gamble

Many other organizations have highlighted the limitations of the Finch report. The open access policy formulated in response by Research Councils UK (RCUK), now likely to be adopted by the Higher Education Funding Council for England (HEFCE) and that universities are scrambling to implement, is just as flawed, unworkable and unfunded. For all the excitement generated by the Government's allocation of £10m towards the cost of transition to Gold OA, it will simply be impossible to spend that money in accordance with RCUK requirements.

Indeed, committed to fostering the commercial exploitation of research findings, RCUK does require publication under a CC-BY licence. At this stage, however, no major commercial publisher or not-for-profit academic press allows a commercial or derivative use of their publications. RCUK is yet to suggest how the researchers they fund are to circumvent this critical obstacle. Likewise, their stance on Green OA (self-archiving in or out of institutional repositories) fails to recognize the fact that publishers also reject the prescribed length of embargo (6 to 12 months) and, in some cases, the very possibility to publish post-print (peer-reviewed) versions of articles. Quite how the 30 privileged institutions in receipt of the RCUK "pump priming" grant will manage to square this particular circle before the end of March remains to be seen.

Licensing is indeed the crux of the matter and the very bone of contention that the Finch report merely tip-toed around. This incapacity to tackle licensing and copyright issues means the sector is about to gamble £10m of public money in the hope global publishing conglomerates will kindly accept to undermine their income streams to accommodate the UK idiosyncratic stance. Since the country only contribute for 6% of the world's scientific output, the case for British global leadership appears to rest on delusional fantasies.

#### 4. An unfunded policy

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In short, no amount of coaxing or coercion will make this work even if taxpayers and students were prepared to foot the bill of Gold Open Access. And prepared they are not. David Willetts, the Minister for Universities, has already made clear that the costs of Gold OA will be covered by existing funds provided by RCUK, HEFCE and universities. In the age of the "student consumer", Gold OA will obviously be a hard-sell. As the sector celebrates the Chancellor's investment of £600m in research and innovation, it is worth remembering

<sup>&</sup>lt;sup>77</sup> Dacos, Marin. "OpenEdition Academic Committee's Statement on Open Access." Open Electronic Publishing, October 12, 2012. http://oep.hypotheses.org/1039.

that the cost of Gold OA is currently (under)estimated by the Finch Report and RCUK to be around £100m a year<sup>78</sup>.

#### 5. The unknown cost of Gold Open Access

The sophistication of the models run by the Finch Working Group cannot mask a critical limitation of their report: the impossibility, at this stage, to measure the cost of peer review, a critical element to assure quality control in the system of scholarly communications. Currently covered by researchers and editors who, by and large, volunteer their time and expertise, this cost is perhaps the one variable that would not be affected by any measure of competition or regulation (assuming of course that we do see quality-assurance as a critical part of the publication process).

The operation and costs of peer-review seem to bring about a great deal of confusion among policy-makers. According to a speech he gave before the Publishers' Association on 2 May 2012, David Willetts appears to believe its costs are covered by publishers<sup>79</sup>. Likewise, one of the main contributors to the Finch report would have us believe that Gold OA is the only way to pay for peer review<sup>80</sup>. That is simply not the case.

The Finch Working Group also put its faith in the capacity of market pressures "to keep publishing costs and the level of APCs in check" (pp. 63, 76). Yet in most cases, competition between universities will lead researchers to seek publication in a small number of prestigious journals whose APC will simply rise in response. Even if the UK government could conjure up an efficient global scholarly market, the costs for research-intensive universities, research funders, and therefore the British taxpayer will most certainly keep on rising.

#### 6. A drain on university resources

Ideally, the cost of every publication would be included in a grant application and covered by research funders. Even if every single grant application were funded, this would not prove as straightforward as it seems. The Finch report rightly noted the difficulty for applicants to predict the number and cost of publications at that point in the research cycle (page 56). Moreover, this model would also require researchers to publish their work within the auditing period of each individual grant. In this configuration, a senior scholar asked by a prestigious publication to consider the impact of her ground-breaking RCUK-funded work in the last 10 years would need to identify alternative sources of funding.

Without a significant and sustained investment of public money, research funders will therefore not be in a position to meet the costs of Gold OA. Universities will have to increase their financial contribution to the system of scholarly communication. The Finch report makes it clear that increased access to scholarly output cannot be achieved without additional funding or "diversions from existing funds" including existing library budgets (pp. 62, 76). Gold OA will "represent a drain on university resources" (p.75); a fact confirmed by David Willetts in his letter to Dame Finch.

<sup>&</sup>lt;sup>78</sup> For a detailed critique of the Finch Report and its modelling assumptions see our Society's response: http://www.pierrepurseigle.info/a-response-to-the-finch-report-on-open-access/

<sup>&</sup>lt;sup>79</sup> Willetts, David. "Public Access to Publicly-funded Research." Department for Business, Innovation and Skills, May 2, 2012. <a href="http://www.bis.gov.uk/news/speeches/david-willetts-public-access-to-research">http://www.bis.gov.uk/news/speeches/david-willetts-public-access-to-research</a>

<sup>80</sup> Jubb, Michael. "Go for Gold in the Scientific Publishing Revolution." Research Fortnight (July 25, 2012): 22.

#### 7. A threat to academic freedom, a danger for the UK research base

The financial and managerial implications of Gold OA converge ominously to undermine our freedom of academic expression. Unable to meet the costs of Gold OA, universities will have to ration access to their meagre institutional publication funds. Would-be authors will therefore have to seek the authorization to publish in the hope their research - and their publication of choice - will be deemed worthy of the university's imprimatur, now the responsibility of faculty managers. Without the scientific and financial wherewithal to provide a solid internal peer-review, managers will effectively make or break careers on a wing and a prayer, if not always on a whim. Under the proposed regime, doctoral and early-career researchers will be particularly vulnerable and many will - reasonably enough - turn away from British universities.

Faculty heads and research leads across the UK will be all too aware of the difficulties that this would pose to them. Anyone aware of the complexity and sensitivity of the preparation of REF submissions will realize the immense difficulties that a move to Gold OA would create. As APCs rise, universities will have no choice but to limit the number of publications they produce. Short of charging researchers themselves or their students, this will be the only way to control the rising cost of scholarly communications.

The Finch report also acknowledged that the proposed move to Gold OA would have a severe impact on journals, like ours, with a steady number of contributions from overseas and therefore on the dissemination of findings of international collaborative projects. 46% of articles published by UK-based researchers involve an overseas author, yet RCUK has failed to provide a clear policy direction in this regard. International collaboration and collegiality at the national and institutional levels would suffer as a result as well as the international standing of the UK research base.

#### 8. A risk for learned societies, an attack on scholarship

Many learned societies in the UK and in the USA have expressed their serious reservations about the proposed move to Gold OA. They have highlighted the damaging impact it would have on their capacity to fund and support research activities. Conference, grants, postgraduate scholarships and postdoctoral positions would all be at risk. One would be misguided however to read in their response a rear-guard defence of their established position and income streams. For the radical changes proposed by the Finch Report would indeed have a dramatic and detrimental effect on the way science and scholarship is not only disseminated but produced. The implementation of the report's recommendations would affect and most certainly limit academic freedom and, in particular, the capacity of scientists and scholars to choose their publication outlets; they would streamline and homogenize publications at the expense of non-standard outputs like review articles, fora, opinion pieces and book reviews which contribute to the diversity and richness of scholarly and scientific debate. The level of APCs likely to be charged by generalist and prestigious journals would threaten the capacity of early-career, independent and retired scholars to contribute to academic debates. Colleagues working in developing countries (or even in affluent countries operating under a different funding structure) may be shut out of the global scientific conversation altogether.

### 9. Gold OA will undermine existing relationships between scholars and publishers

The implementation of the Finch Report will certainly jeopardize the funding and existence of most learned societies. It will also sour and force a redefinition of the often mutually-beneficial relationship they enjoy with their publisher. Notwithstanding the oligopolistic tendencies of the publishing sector and their impact on the cost of subscriptions, we recognize, like most researchers, that publishers have a critical and legitimate part to play in the system of scholarly communication. The expertise of publishers allows scholars and scientist to concentrate their time and effort on maintaining peer-review as an essential, if imperfect, quality-assurance mechanism.

#### 10. A flawed case for a rushed policy

Advocates of Gold OA claim that the reforms they advocate will only be implemented at the end of a "sustained and complex period of transition" (Finch report, p. 111). However, UK-based researchers will not have the leisure to enjoy such a transition period, since the Higher Education Funding Council (HEFCE) now proposes to make open access a requirement of its Research Excellence Framework (REF) after the current 2014 exercise. In other words, researchers must be in a position to meet this new requirement by 2013-2014; at the time when they will start writing the publications they intend to submit for the REF 2020. Despite the limitations of the evidence mobilized in favour of Gold OA, its imposition will immediately and radically affect the work of UK researchers.

#### II. Open access as a typical example of HE/science policy-making in the UK

The debate on open access is dominated – and at times hijacked – by a handful of activists who can rarely command the suffrage of a significant number of practising scientists and scholars. Yet, they have proved tremendously successful in defining the terms of the debate as a rather Manichean alternative between Gold and Green. Operating in a fast-changing, uncertain institutional and financial context, most academics – myself included – did not engage in this discussion until the suspiciously rapid endorsement of the Finch Report by the Government and RCUK. While the profession at large thus betrayed its problematic reluctance to engage with policy-making, the speed at which Government and funders committed themselves to "implementing Finch" – as the phrase now goes – revealed their own reluctance to open the debate beyond a small circle of cognoscenti.

The academic profession has now awakened to the consequences of the proposed move to Gold OA. Publishers, librarians have also expressed their serious reservations. Yet, policy-makers, including RCUK, have so far systematically refused to engage with their critics in any sustained and constructive fashion. For instance, RCUK is still to explain how its pump-priming grant is to be spent. The refusal of funding bodies to publicly acknowledge the impracticality of Government policy certainly stems from the bureaucratic logic that drives their relationship with BIS. As in other areas of HE/science policy-making, RCUK seem unable to provide an evidence-based assessment of Governmental proposals. Likewise, too many university and HEI leaders have been unwilling to stand up for the UK research base, anxious as they certainly are to position their institution so as to benefit from the proposed policy, irrespective of its detrimental impact on the sector as a whole.

Our Society welcomes the efforts made to promote and disseminate our research findings in the widest possible fashion. Science and scholarship are indeed public goods. Unfortunately, the relentless and aggressive drive towards Gold OA simply does not meet the standards of the kind of deliberative and evidence-based policy-making process that the matter warrants. The Government and RCUK must go back to the drawing-board and mobilize the scientific and academic community to make open access a sustainable model of scholarly communication.

## International Society for the Study of Behavioural Development (ISSBD) – Written evidence

There is general agreement that free and open access to scientific knowledge is desirable. The way this might be achieved has come to the fore in recent debates about the future of scientific and scholarly journals. There are different models, such as:

- 'gold': the author or author institution pays a fee to the publisher at publication time, the publisher thereafter making the material available 'free' at the point of access (the 'gold' route).
- 'green': the author can, generally after an embargo period, self-archive their publication (the 'green' route) whether the publication is grey literature (usually internal non-peer-reviewed), a peer-reviewed journal publication, a peer-reviewed conference proceedings paper or a monograph
- 'free': neither author nor reader are charged, and publishing costs are met in other ways

The recommendation from the UK Finch report suggests to move towards 'Gold' open access publishing, where publishers receive their revenues from authors rather than readers, and so research articles become freely accessible to everyone immediately upon publication. This model has been widely used within the sciences and medicine, but not in the Humanities and Social Sciences. Under this arrangement, authors are expected to pay when they submit papers for publication in online journals: the so called "article processing cost" (APC). The fee can amount to anything between £1,000 and £2,000 per article, depending on the reputation of the journal. Although the fees may sometimes be waived, eligibility for exemption is decided by the publisher and such concessions have no permanent status and can always be withdrawn or modified.

A major problem with the APC model is that it effectively shifts the costs of academic publishing from the reader to the author and therefore discriminates against those without access to the funds needed to meet these costs. Among those excluded are academics in, for example, the humanities and the social sciences whose research funding typically does not include publication charges, and independent researchers whose only means of paying the APC is from their own pockets. Not only is APC discriminatory, but within a finite research funding budget its costs are likely to be met from funds otherwise available for the research itself, thereby potentially penalising the whole research community.

Furthermore, academics in developing countries in particular face discrimination under APC because of their often very limited access to research funds. This will be a specific problem for ISSBD which involves an international member- and authorship. Our society's publication, the International Journal of Behavioural Development (IJBD) is currently published by SAGE, a UK publisher. We do not share the optimism expressed in the Finch report that the proposed shift towards a 'Gold' standard will have an international momentum, and would urge you to reconsider this recommendation. We cannot see how public universities will be able to recruit about 60 million pounds a year to compensate for the article charges. Most UK universities suffer from similar financial problems than the rest of Europe. Given that there is serious doubt about the international momentum (as reflected in the extremely critical reactions of many UK university officials), it could well be that such a move —if be approved by the UK government—may put UK researchers at a

disadvantage in the international competition game. The excellent letter by the president of the Royal Historical Society (Royal History Society's letter) clearly illustrates the negative consequences, particularly in the Humanities and Social Sciences. We can only hope that the House of Lords will be open to the manifold criticisms and postpone a decision.

We asked ourselves how this attempted shift in emphasis could affect ISSBD, particularly if Sage will be forced to apply OA rules. Could IJBD still survive as a subscription-based journal? If not, would this mean that international authors (or their universities) would have to pay for their products, providing article publication charges (APC)? Wouldn't this imply that most international authors principally interested in publishing their work with a Sage journal would look for alternative publication outlets? I could easily imagine that this would be the case, and that future submissions would predominantly come from UK researchers whose choices are limited, and which would render the journal less interesting to an international readership. In a more general vein, all UK-based publishers supporting the key journals of international learned societies could get into trouble given that there is no reason for most international researchers to follow the UK gold-route rules and pay for their articles.

While preferring 'Gold' the Finch report also discussed an alternative "Green" or self-archiving route. The two are not incompatible and can co-exist. The green route requires authors to deposit their final peer-reviewed manuscripts in institutional or subject repositories. The 'Green' route recognises the role of repositories in managing data. There is no business model for doing this, other than the assumption that whatever model is used will not be harmed by free access after an embargo period. The length of embargo crucially influences whether this "nobody pays" approach causes harm. The general recommendations is that the embargo period should be not less than 12 months. There is little research on the effects of embargo periods, and different fields will have different sensitivities. Problems related to repository issue and the embargo period still have to be solved. Overall, our major issue with this initiative is that the recommendations provided by the Finch report do not seem to have an international echo, which is a bad thing in a global publishing world.

There is another approach that could be implemented for a fraction of the cost of commercial publishers' current journal subscriptions. "Access for all" (AFA) journals, which charge neither author nor reader, are committed to meeting publishing costs in other ways. AFA could be encouraged if university libraries set aside some of their journal acquisition funds, currently paid to commercial publishers through bulk arrangements, in the form of grant aid to support new or existing AFA journals. Allocations would take account of the many years it can take to build the readership and submissions base on which the journals' reputation and future viability will depend. Governance details would need to be decided and ideally would involve library consortia, universities, learned societies and research funders.

What we need is some clear thinking about how online publishing should develop. In particular we I would urge to give serious attention to alternatives, such as the AFA strategy for journal funding which should be adopted within a vision for open access publishing. This is not to advocate a sudden major shift to this form of publication, rather a funding regime that would encourage its growth and explore how it might best be managed. Such a publication model would not only be cost-efficient, it would also find greater acceptance within the academic community as a legitimate return on the editorial and refereeing resources that are currently provided for free.

International Society for the Study of Behavioural Development (ISSBD) – Written evidence

18 January 2013

#### John Innes Centre and the Sainsbury Laboratory - Written evidence

#### **Embargoes**

This brief submission is about embargo periods relevant for generating wider public interest in peer-reviewed science via the media.

Most UK journalists, including the top national science, health and environment correspondents, still value a short embargo of a few days. This enables them to receive notification of an upcoming paper, scrutinise it and its wider relevance in the relevant field before it goes public, invite second voice comment to provide perspective on how far it advances our understanding of a subject and prepare a story ready to tie in with publication.

With the rise of open access publishing, more journals are publishing more quickly. A paper can appear online with no notice at all, making it too late to get it onto the news agenda. If it is already online it is already old news, so unless it is a major story it will have less chance of making it onto the running order for broadcast news or the newslist for print publications.

Notice helps science journalists write a good story and this in turn can benefit authors. Press coverage can help improve the understanding of controversial science, it can help push citation rates, and it can help scientists make new research and industry contacts.

Some journals are able to manually hold publication of a paper on the request of a press officer so that they can generate wider coverage. But this is ad hoc and arbitrary. It is good practice for a journal to have a set workflow that becomes familiar to science press officers and journalists.

A good example of best practice can be found at Nature, where different journals in the group's portfolio have different, but well-known, embargo periods and publication dates and times. It is the dedication of the staff makes this happen. For example, they proactively contact press officers ahead of publication to give them notice so they can write a press release and distribute it to journalists under embargo. It pays dividends for getting Nature papers good quality coverage.

I recommend that journals build in five days' notice for the publication of papers. This is sufficient for many organisations to promote their science to the public via the media, particularly when it is combined with an in-house system between scientists and their press offices to keep track of a submitted paper.

Dr Michael Jubb and Dame Janet Finch, Working Group on Expanding Access to Research Publications – Written evidence

## Dr Michael Jubb and Dame Janet Finch, Working Group on Expanding Access to Research Publications – Written evidence

Submission to be found under Dame Janet Finch Working Group on Expanding Access to Research Publications

Note: Submitted in a personal capacity

#### **Executive Summary**

We have prepared this written evidence as Early Career Researchers who have been closely engaged with the open access (OA) policy area and its developments for some time, and who plan to pursue careers in the British Higher Education system. Our writings about open access have been very widely circulated amongst British and international academics online.<sup>81</sup>

This paper sets out our concerns in four broad areas:

- In relation to *academic freedom*, where we highlight the possible role of non-expert committees in selecting which papers will be funded by Article Processing Charges (APCs) and the corresponding effect on journals;
  - 2. In relation to wasted resources, because of the negative impact on research funds likely to result from the reorientation of scarce monies towards APCs and because of the increased burden on academic time in administering the funds;
  - 3. In relation to *academic inequality*, where the privileging of 'gold' or APC routes will give an advantage to wealthier individuals and institutions and where there will be potentially serious disadvantages for doctoral students and others;
  - 4. In relation to the control of *research outputs*, where the proposed licence will allow external parties to exploit academic findings without payment or reinvestment in the academic system;

#### I. Introduction

I.I The Committee's Inquiry into the implementation of the open access policy is extremely welcome, as scrutiny of this controversial policy and its possible ramifications has been hitherto extremely piecemeal. Moreover, the implementation of the policy is taking place on an accelerated timeline that has not allowed for proper reflection on its proposals and effects on the wider sector. We have been heartened by some of the lines of questioning pursued by members in the first session on II<sup>th</sup> January 2013.

I.2 We have been strong advocates for open access in the social sciences, and believe that all publicly-funded research (at a minimum) should be available without charge, in its full peer-reviewed version of record, as soon as it is published (whether online or in print). But whilst we are strongly in favour of open access as a principle, we have major concerns about the implementation of this policy along a gold-dominant route and its negative consequences

<sup>&</sup>lt;sup>81</sup> Our Paper on OA policy which raises these issues has been visited more than 7,000 times, having been widely shared on social networking sites: <a href="http://thedisorderofthings.com/2012/12/04/open-access-hefce-ref2020-and-the-threat-to-academic-freedom/">http://thedisorderofthings.com/2012/12/04/open-access-hefce-ref2020-and-the-threat-to-academic-freedom/</a>. It is also available as a PDF here: <a href="http://thedisorderofthings.files.wordpress.com/2012/12/open-access-hefce-and-ref2020-position-paper3.pdf">http://thedisorderofthings.files.wordpress.com/2012/12/open-access-hefce-and-ref2020-position-paper3.pdf</a>

for the majority of academic researchers in the UK. Many academic colleagues have recognised our assessment of the possible scenario as both serious and realistic.

- I.3 We wish to raise four key areas of concern: academic freedom, wasting resources, academic inequality and control over research outputs. These are of particular importance to ordinary researchers without access to particular grant funding and large institutional endowments.
- I.4 We are particularly concerned that responsibility for these consequences has not yet been clearly assumed by any of the parties involved in advancing the policy the Working Group, RCUK and BIS. We hope that the Committee will be successful in eliciting some recognition and responsibility for the substantial changes underway.
- I.5 We are also concerned that insufficient attention has been paid to the differences in funding level and research form between STEM (Science, Technology, Engineering and Mathematics) and AHSS (Arts, Humanities and Social Science) subjects. Many assumptions about the affordability of open access charges seem to come from the experience of STEM researchers, and do not reflect the current funding environment faced by AHSS subjects, which are already dealing with substantial funding shortfalls as a result of recent government reforms to higher education.

#### 2. Academic Freedom

- 2.1 Academic freedom is compromised by the gold route to open access, which is a 'pay-to-publish' (or 'pay-to-say') system, because institutions and academics will have to bid for the funds to publish their work. This means that unless academics are rich enough to pay for the publication of their own research, they will have to convince non-expert committees of the value of pre-published work, and compete against other University colleagues for funds. They will be restricted as to what they can publish and where. It is clear that Institutional Publication Committees will have to ration funds in line with pressures for Research Excellence Framework (REF) and impact agendas, meaning that lots of potentially valuable work will go unfunded.
- 2.2 This approach also assumes that such funds are available in-house; for the majority of cash-strapped universities they will not be, meaning that many of their academics may simply not be able to publish at all in the journals of their choice. This has serious consequences for one's academic career prospects.
- 2.3 Additionally, many non-UK journals may not be open access compliant, preventing UK academics from publishing in them.
- 2.4 UK journals will also be under pressure to select research according to whether APCs can be paid, instead of simply taking the best quality research. Although many journals have declared that they would not do this, it is difficult to see how a gold business model could actually be viable if they do not, since everyone could just refuse to pay.
- 2.5 Although it may be argued that academics can simply publish in green rather than gold journals, matters are not so simple. Journals are not simply repositories for articles, but are also (for better or worse) status symbols in the job market and are closely linked to reputation for academic and non- academic audiences alike. Different journals also specialise

in particular intellectual traditions and interest areas. Since journals with a strong academic reputation have an interest in charging higher APCs, deciding to publish in green-compliant or non-compliant journals is very unlikely to be a cost-neutral decision.

2.6 Overall, the gold system would thus limit academic freedom through introducing a layer of institutional vetting which would structurally discourage academics from pursuing the lines of inquiry and publication outlets they judge best. Rather they are incentivised to fall in line with whatever this particular committee is most likely to fund, based on bureaucratic criteria and non-expert judgements.

#### 3. Wasting Resources

- 3.1 There is a huge shortfall in the money being provided by RCUK to kick-start gold open access given the amount which would be required to fund current research outputs. Even the best-funded institution, the University of Cambridge, has identified a shortfall of around £495,000 in 2013/14 for the budget required to meet the minimum RCUK compliance levels of 45%. The Open University has estimated that to get to the minimum suggested 45% level for 'gold' open access, they would need to spend £740,000 per annum, against the RCUK block grant of £78,000. For all institutions, these will have to be found from already tight budgets, wasting money that could be spent on research itself or other scholarly activities.
- 3.2 Moreover, despite the insufficiencies in open access funding, this is not new money but instead has been drawn from the existing science budget. So it is already the case that open access funds are being distributed at the expense of new research. Whereas funds for open access publishing could previously be added to budgets when applying for research grants, RCUK have announced that from April 2013 onwards these can only be funded through institutional block grants. In a context of tightening funds, institutional spending on gold open access will therefore reduce funds that would otherwise have been available for research itself. Given the estimates of funding shortfalls, even at the most prestigious universities, the cumulative effect of these changes will likely be serious.
- 3.3 Administering Institutional Publication Funds will also take up vast quantities of academic and administrative *time*, as non-expert committees will have to make impossibly contentious decisions about colleagues' pre-published work. REF panels have found this difficult enough despite having more disciplinary expertise and often seeing the work after the improvements of peer review. The job of Institutional Publication Fund committees will be much harder, and they will by definition be badly placed to judge the work on its quality, since they will have to evaluate work on general grounds, rather than from a position of close familiarity with the specific sub-fields or issue areas in question.

<sup>&</sup>lt;sup>82</sup> Paper for Information to the General Board, Open Access Working Group, University of Cambridge, 18th December 2012: <a href="http://openaccess.lib.cam.ac.uk/gb.html">http://openaccess.lib.cam.ac.uk/gb.html</a>

<sup>&</sup>lt;sup>83</sup> 'Implications for individual researchers', Presentation by Dr Tim Blackman, Academy of Social Sciences Conference on *Implementing Finch*, November 29<sup>th</sup> 2012:

http://www.acss.org.uk/docs/Open%20Access%20event%20Nov%202012/Blackman%20-

<sup>%20</sup>implications%20for%20individual%20researcher%5D.pdf

<sup>&</sup>lt;sup>84</sup> Geraint Jones, 'UK government earmarks £10m for open access publishing', *The Guardian*, September 7th 2012: <a href="http://www.guardian.co.uk/science/2012/sep/07/uk-government-open-access-publishing">http://www.guardian.co.uk/science/2012/sep/07/uk-government-open-access-publishing</a>

<sup>&</sup>lt;sup>85</sup> Research Councils UK Policy on Access to Research Outputs: http://www.rcuk.ac.uk/documents/documents/RCUK%20 Policy on Access to Research Outputs.pdf

3.4 Moreover, important ambiguities will have to be resolved: will work that has received reject or revise decisions from journals be eligible for further APCs? If APCs are only to be paid once articles have been accepted, and do not therefore truly cover the 'processing' costs of publication, will an incentive to publish more work emerge (since the more work is published, the more journals will receive in revenue)? Which institutions will be responsible for APCs in the case of multi-authored papers? And will institutions be able to reclaim APC costs if Faculty change institutions before the completion of a REF cycle? Who will pay the APCs for PhD students, who are not currently returnable as part of an institution's REF submission, but who are most in need of prestigious publications to secure their first academics jobs?

#### 4. Academic Inequality

- 4.1 Under the 'pay-to-say' system, it is the wealthiest, rather than the best, individuals and institutions who will be able to dominate publishing. This poses serious problems for the overall quality of research output, which is currently underpinned by the principle that the best research emerges on its own academic merit. This will become more deeply entrenched as subsequent rounds of the REF become geared towards the 'pay-to-say' model. Since green compliance in the RCUK guidelines allows for journals to impose embargoes of up to 12 months on open access publications, articles published via green route will not be 'open' to the same degree as those published on the gold route. Especially where articles are of pressing importance for public debate, this will create a further inequality within open access, with richer individuals and institutions able to attract more attention (from journalists, think tanks, non-academic experts and the general public) to their work than will be the case for those publishing on the compliant green route. This will in turn lead to higher citation and impact for gold articles, which in turn will increase academic reputation for individuals and institutions opting for gold open access.
- 4.2 The money forthcoming to support universities in the transition period has also been distributed highly unequally. In effect, this amounts to a state subsidy for the richest institutions so that they can get ahead of developments and are best cushioned against the anticipated disruption, leaving others to fend for themselves in a time of cuts. The initial £10m pot for 2012-13, to help develop systems for open access publishing including university repositories, was split unevenly between just thirty universities. The pots for 2013-14 and 2014-15, exclusively to support gold open access, are distributed according to labour costs charged to RCUK 2009-12. RCUK argues that this is an appropriate proxy for "research effort". Again, the outcome of this is highly uneven, with the University of Cambridge being awarded £1.15m for 2013-14 compared to just £6,220 for the University of East London.<sup>86</sup>
- 4.3 However, there are several problems with arguing that 'research effort' in universities can be measured by proportion of RCUK labour costs, and using these as a basis for distributing APC funds. First, it excludes all the research that is undertaken without grant funding. This is the majority of research within Arts, Humanities and Social Sciences, where researchers traditionally work independently through time furnished within ordinary salaried work and sabbaticals. Second, it skews the distribution in favour of those grant winners who have best met RCUK funding priorities over the last few years, i.e. those that have chosen to follow the government line in their research, penalising those following other paths.

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<sup>&</sup>lt;sup>86</sup> See the RCUK spreadsheet summary: <a href="http://www.rcuk.ac.uk/documents/documents/RCUK\_APCfundDistribution.pdf">http://www.rcuk.ac.uk/documents/documents/RCUK\_APCfundDistribution.pdf</a>

Third, if RCUK and HEFCE, as they have indicated, use open access compliance as a decision criteria for future grant- making and QR funding, it is clear that those already disadvantaged in this round will have that disadvantage compounded and deepened in further rounds of grant making. Cash-poor institutions will have to choose whether to move resources from other budgets into OA funds to protect chances of getting future research funding, or whether to not bother. This has serious consequences for the broader aspirations of the academic staff working at such institutions, who are keen to do their own research and have that research considered on a level playing field with that produced internationally. Moreover, it may have consequences for research-led teaching in these institutions.

4.4 More substantially, it poses enormous problems for the academic 'poor' – the early career researchers writing PhDs, retired academics, independent scholars, NGO researchers, and anybody at an institution without the inclination to pay for their research. This will suppress the development of academic talent in the long run, suppress the publication of the excellent work that emerges post-retirement, and suppress the work of any scholars outside identified 'research-intensive' institutions. This will entrench a plutocracy rather than a meritocracy in the publication of academic research.

#### 5. Control Over Research Outputs

- 5.1 Under the 'gold' system, it is intended that work is available under a 'CC-BY' copyright licence, which means that as long as it is attributed, work can be remixed, re-purposed and re-used by anybody, including for commercial purposes. By contrast, most academic work in repositories operates under a non-commercial and non-derivative licence, which means that it cannot be re- used for commercial purposes, and that work cannot be remixed or repurposed in ways not authorised by the author. The 'gold' system effectively removes many of the key rights of authors over their work, and is strongly opposed by the British Copyright Council.
- 5.2 Although there are important arguments to be made here for the public benefits of sharing research, particularly science, this has clear consequences for universities who may want to develop the commercial purposes of research for themselves. It also affects who want to retain the right to royalties from the reproduction of their works and to manage the intellectual context in which their work may be reproduced.

#### 6. Questions Which Arise From Our Concerns

- 6.1 How are non-expert institutional committees meant to decide which research to fund? Will they prefer some journals over others? Is the task and function of these committees not broadly incompatible with principles of expert peer review and academic freedom?
- 6.2 The Government has provided only partial funding for the transition, which has been sourced from existing research budgets, and has done so extremely unequally across different institutions. Can RCUK defend such an uneven distribution of open access funds, and has it considered the consequences of this for the production of research across the UK?
- 6.3 Will this uneven distribution not prevent the majority of institutions from successfully producing policy-compliant research in the future? Will this not structurally disadvantage

academics at institutions without the money to pay APCs? Do the Government and RCUK accept that this could be extremely destabilising for the majority of researchers?

#### 7. Conclusion

- 7.1 We are concerned that the implementation of this policy will have very negative consequences for the majority of academic researchers and institutions, who will not be able to afford APCs, and we urge all stakeholders to take these concerns seriously.
- 7.2 Given these concerns, we urge a reconsideration of the model for achieving open access, and in particular the role of government funds in ensuring the free circulation of scholarly work without reducing funds for research, teaching or other academic activities themselves.
- 7.3 We thank the Committee for the opportunity to submit Written Evidence to share our concerns about the policy, and look forward to seeing the conclusions of the Inquiry.

#### London Higher 'Research Excellence Group' - Written evidence

#### **London HEIs and Open Access**

On behalf of a group<sup>87</sup> of Directors/PV-Cs of Research from higher education institutions in London, I write to submit evidence in regard to your enquiry on Open Access (OA). London has the most diverse range of higher education institutions (HEIs) in the UK, and arguably in the world. They range from the greatest concentration of monotechnic, specialist institutions in the UK, to some of the world's most prestigious multi-faculty, research-led institutions. Our Research Group draws representations from across this broad spectrum.

London HEIs are committed to, and indeed at the forefront of, the Open Access (OA) agenda. Our members have invested in **25 Institutional Repositories** (equating to so-called Green Open Access), more than any other region in the UK by far. It is against this background of deep-rooted commitment to OA that we are writing to urge the Committee to ensure that, in the Government's implementation of the Finch Committee recommendations, researchers are **allowed to use the Green Option if that is their preference**. Our reasons are as follows:

- We are concerned that some RCUK policy statements have favoured Gold OA over the Green OA option. London has 25 Green OA repositories and our HEIs have invested substantially in establishing this world-leading approach; it makes no sense to us to abandon them:
- There is a clear preference amongst the **humanities and creative arts institutions** (particularly prominent in London) for Green OA, as the monograph, book chapter and creative work are preferred research outputs in these fields and lend themselves to Green OA rather than Gold;
- RCUK's suggested embargo (authors must pay for Gold OA if their publisher has an embargo of more than 6 months for the Green option) may have unintended consequences. Publishers may legitimately lengthen their embargos to force authors to pay for gold OA.

Much has been written concerning the argument in favour of unilateral Gold OA. We share some of the well-founded concerns over some of the statements that have been used to support the Gold OA argument, in particular the claims that data mining can *only* be done in the Gold OA system, or that most readers of UK research require this level of research interrogation. We do not propose to go over these arguments here; suffice to say that we endorse the UK Government's commitment to Gold OA, but **not unilaterally, not this quickly and not at the expense of a perfectly acceptable, functioning and cost-efficient intermediate route, that of Green OA.** 

the costs of a switch to Gold OA is estimated by RCUK itself to be £100m over 5 years; it is proposed that this cost is met from the existing research budget with no new money; given the current pressure on HE research budgets the

<sup>&</sup>lt;sup>87</sup> Membership is open to all London Higher members; a list of members is attached.

group cautions that such a decision goes against the Government's stated objectives of supporting research and innovation and may harm the UK research-base;

We note the proposed review of Open Access arrangements by RCUK and would welcome further details on how this will be conducted and by whom. In the meantime we urge RCUK to continue its dialogue with the sector over this important issue. We support RCUK's recent moves to create a balanced and mandated approach to Open Access in the UK. We are confident that by building upon our existing excellence in OA the UK will continue to lead the world in OA. We look forward to a day when all research is published in OA formats and will continue to work with the UK Government to achieve this goal.

Author: Professor Geoff. Rodgers, Chair of The London Research Excellence Group, on behalf of this Group (see below)

17 January 2013

#### Members of the London Higher 'Research Excellence Group'

Name	Institution	Title
Prof. David Price	University College London	Vice-Provost (Research)
Prof. Chris Mottershead	King's College London	Vice-Principal for Research and Innovation
Prof. Jeremy Aynsley	Royal College of Art	Director of Research
Prof. Peter McCaffrey	London Metropolitan University	Deputy Vice-Chancellor (Research & Development)
Prof. Rao Bhamidimarri	London South Bank University	Executive Dean, Faculty of Engineering, Science and the Built Environment
Prof. Jane Powell	Goldsmiths College University of London	Pro-Warden Research and Enterprise
Prof. Geoff Rodgers (Chair)	Brunel University	Pro-Vice Chancellor, Research
Prof. Donal Bradley	Imperial College London	Pro-Rector (Research)
Prof. Penny Sparke,	Kingston University	Pro Vice Chancellor (Arts)
Professor Evelyn Welch	Queen Mary, University of London	Vice Principal for Research and International Affairs
Dr Martin Davies	University of Greenwich	Director of Research & Enterprise
Tony Doherty	SOAS	Director of Research & Enterprise
Prof. Anne Hodgson	Institute of Education	Assistant Director (London)
Prof. Oriana Baddeley	University of the Arts London	Dean of Research

#### **London Mathematical Society - Written evidence**

The London Mathematical Society <sup>88</sup> is the leading learned society for research mathematicians in the UK. The major source of revenue to the Society (70%) comes from the sales of its distinguished list of peer reviewed journals. Any change to the current publishing model of subscription sales will directly affect the income to the Society and its work.

We have long been concerned about the threat to our Society from the implementation of open access policies which seek to reduce the level of library sales by making the content of journals available to readers through alternative routes.

Our publishing income is used to support a wide range of grant schemes including conferences, joint research activities, collaborative meetings and visits. The Society is particularly concerned with providing help for mathematicians (including research students) at an early stage in their careers. At a time when other funding agencies are cutting back on their contributions it is imperative that the LMS remains able to provide support.

#### What the Society already does in terms of open access:

In order to provide our readers with a 'mixed economy' of access to the journals, the Society provides the following open access options:

- a) Free universal online access to the society-owned journals for the first six months of the publication of content, thereafter moving behind the subscription wall. This is known as a 'reverse moving wall'. We will review this policy regularly as funders develop new policies on embargo periods for green open access.
- b) Through our publishing distributors, we agree to provide free access or access at a greatly reduced fee to *low income countries*. Currently, the offer is available to established not-for-profit educational institutions from qualifying countries based on country incomes as established by the World Bank Report 2006.
- c) Since 2008 we have offered a *paid open access* option for all our journals, where an author can opt to have the APC paid by his or her funder in return for free universal online access to their paper. To date only one paper has been published in this form, which gives some evidence for the low interest in paid open access publishing among mathematicians. In order to accommodate the recent RCUK policy, we offer an option of using the CC-BY licence to authors, although we would prefer to adopt the CC-BY-NC option, the previous default licence.
- d) Since the launch of the *math arXiv*<sup>89</sup>, we have permitted authors to upload one or more versions of their paper up to the version accepted for publication by the Society. This is not a condition imposed on our authors, i.e. they are free to place preprints on the arXiv

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<sup>&</sup>lt;sup>88</sup> The London Mathematical Society, <a href="http://www.lms.ac.uk/">http://www.lms.ac.uk/</a>, is the UK's learned society for mathematics with an international membership. The Society's main activities include publishing journals and books, providing grants to support mathematics and organising scientific meetings and lectures. The Society is also involved in policy and strategic work to support mathematics and the mathematics research community. This work includes engaging with government and policymakers on mathematics education and research, participating in international mathematical initiatives and promoting the discipline.

<sup>89</sup> http://arxiv.org/new/math.html

or not and many prefer not to do so. We are willing to extend this permission to repositories run by funders or to university repositories, although we question the value of such narrow repositories when the arXiv is already available.

In providing this 'green' access, we are aware that it poses a long term threat to the financial health of the journals. Where a paper has been freely available on the arXiv for some months prior to publication, we have some tentative evidence that the published version is less frequently downloaded than a paper that is not available on the arXiv. Libraries now have access to individual journal download metrics and they consider the price-per-download when choosing which journals to cancel, seeing this metric as an indication of how widely the journal is read by the users of the library. Because downloads of the arXiv version of papers are free, they do not recognise the value of counting the number of downloads from the arXiv. Our highest quality journals are those with most papers available to be read on the arXiv and these are most vulnerable to cancellation by librarians using the price-per-download metric.

e) We are considering the launch of a purely open access journal, a decision to be made this year.

#### Addressing the range of concerns given in the enquiry notice:

#### I. RISKS FOR LEARNED SOCIETIES

The major risk to us, as a learned society, is that the implementation of RCUK's policy will unbalance our mixed economy of the options described above, and hence damage our ability to support UK mathematics. RCUK's policy, as stated in July, promoted gold open access as the preferred option and, in the event it was not available, then the second option would be to accept publication in journals under their green open access criterion. This was in line with the Finch report and we were content with this policy to the extent that it gave us a basis on which to transition our existing journals from library sales to APC funds. We have heard reports since that RCUK now want to make both options equally viable and that authors need not apply for APC funds if the journals permit green open access. While our UK members would be happy not to have to engage with their new university fund distributors, it provides no long term transition to an economically viable open access model for our journals.

Furthermore, setting the green and gold options to be equivalent will encourage UK mathematicians not to apply for funds because they come from a subject in which many journals already adopt liberal (green) access policies. Mathematics has found to its cost that where there is no need for expensive equipment and little funds available to it from the research councils, there is less regard for the importance of the subject. This position will be further exacerbated by a misconception<sup>90</sup> that mathematics publishing is costless because you can find freely-available next-to-final versions on the math arXiv, and therefore mathematics journals are less important in comparison with more costly journal publishing in the other sciences who do not already offer free access policies.

#### 2. INTERNATIONAL ISSUES

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<sup>&</sup>lt;sup>90</sup> Providing high quality peer review and support for the editors and authors inevitably incurs costs. Rather than pay our editors, we provide administrative and secretarial support and we also provide a high quality copy-editing and proofing service which is particularly appreciated by authors for whom English is not their first language.

Some years ago a study showed Mathematics was second only to the Earth-and-space sciences in the number of international collaborations; we believe the number of international collaborations has, if anything, grown since then. We do not know how to advise a UK-based author on the question of how they deal with international co-authors who have different criteria for the value of publishing work in a journal that does not comply with RCUK's policy. Worse, there is no clear guidance to authors at different universities within the UK, working under the same grant, who have to apply to their own university for funds. Which university foots the bill? These questions have been raised several times by our authors and members as RCUK policy has developed, but no answer has been provided. By devolving responsibility for payment to individual universities it exacerbates the problem rather than alleviates it because universities will have their own interpretation of the policy. We already have a journal policy for multiple-authored papers which is to make the corresponding author solely responsible for handling all matters with his co-authors and university. As a publisher, this is the only practical solution but it does not help mathematicians who have been given no useful guidance by RCUK.

#### 3. EMBARGO PERIODS

Our view is that we have gone far enough in our free access policy and we do not and would not permit reuse of post-acceptance versions of the article, even after a long embargo period of several years. Furthermore, we question the inferred claim of RCUK to have rights to the benefits gained through peer review of the papers, i.e. the added value between the writing of a first draft and the final acceptance of a paper; peer review is a particularly lengthy process for mathematicians. The majority of our referees are not resident in the UK and, while we do not pay them for refereeing, it is certain that RCUK does not pay them either. We pay considerable sums for the administrative costs of the peer review process; these are not negligible when the aim is to provide an efficient and fair route for authors, referees and editors. We are also concerned that the shifts in interpretation by RCUK of a policy that was intended to conform with the Finch report are a first indication of an intention to move further in the direction of requiring final published versions of papers to be available after an embargo period. We recognise that, in letting preacceptance versions be freely available for so long, we have somewhat undermined the argument that there is value in what the Society brings to the peer review process because we have allowed that material to go free. This would be to misunderstand the good intentions to find a reasonable compromise between our mission to disseminate mathematics while using money from publishing to benefit the other charitable activities of the Society.

Therefore we hold that it is our choice to permit access via the arXiv because it complies with the wishes of mathematicians, it is not RCUK's right to demand access or to force us to move the access policy further down the chain of versions beyond free voluntary access by the authors to post pre-acceptance versions on the arXiv.

#### 4. ARRANGEMENTS FOR APC FUNDS

This is the least-developed aspect of the RCUK policy and one we have most concern about. The passing of responsibility from RCUK to universities without the formation of a proper implementation plan is already causing confusion for mathematicians. For the reasons described above, we are concerned that mathematicians will not bother to apply for APC support funds because there are enough green open access alternatives available to them. As a society, the financial health of our journals is dependent on mathematicians seeking to take the gold option route where possible and we encourage them to do that but

it is understandable that they do not want to spend many hours applying for limited funds through a chaotic system which is currently being run on a first-come first served basis. So far, the passing of responsibility by RCUK to the universities and the arbitrary assignment of limited funds has caused different universities to adopt different strategies and different interpretations of the policy. We will leave it to the universities to report on the problems and real costs of implementing RCUK's policy. What we hear from mathematicians is that they have no idea what is going on and this is a major deterrent to applying for funds which will skew the apparent demand from mathematicians.

There is a further issue regarding RCUK support funds; RCUK policy states explicitly that their support fund should only be used for APCs for articles on research "resulting from research council funding". Since most UK mathematicians hold no such funding, most will be ineligible for support.

#### **Conclusion:**

Only 17% of our published authors are based in the UK. However, as a UK society, we would do our best to publish our members' papers if their funding body imposes conditions that we are unwilling to meet. We have noted the Institute of Historical Research's reaction to RCUK policy but have instead taken the approach that we will offer whatever aid we can to enable British authors to continue publishing in our journals. Doing the best for our authors to work with the policy, gives the impression that we agree with it, but this is not the case. If our members had ever been consulted during the setting up of the policy, they would certainly have said that there is no call for the move to the version of open access publishing dictated by RCUK.

Mathematicians have developed their own, fully international solution to the access question with the math arXiv. Posting on the arXiv is a voluntary process and more in keeping with the principle that it is the authors' choice what to do with their paper.

What is valued in our journals is the peer review process and the validation of research that, in many cases, has already been read on the arXiv. Free and immediate access on the arXiv to early versions of the work does nothing to help our society's financial model but it is a voluntary, international, compromise which we are happy to take part in provided the rest of the structure is not destroyed through misguided evangelical policies.

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<sup>91</sup> http://scholarlykitchen.sspnet.org/tag/institute-of-historical-research/

## Dr Peter J. Matthews, National Museum of Ethnology, Japan – Written evidence

I am a New Zealand citizen resident in Japan, and working here as a full-time researcher at a national research institution (see full address below). I am currently collaborating in research projects with Cambridge University, Oxford University, and Warwick University.

I am also creater and administrator of The Research Cooperative (<a href="http://researchcooperative.org">http://researchcooperative.org</a>), an NPO social network for researchers, editors, translators, publishers and others involved in research communication. This network currently has almost 6,000 members globally, including many in the UK.

I write as someone with practical interests in open access publishing.

First I should state my strong support for the following statement in the Executive Summary of the Finch Group report: "Our view is that the UK should embrace the transition to open access, and accelerate the process in a measured way which promotes innovation <u>but also what is most valuable in the research communications ecosystem</u>." (my underlining)

This submission also relates to the following issue:

\* Engagement with publishers, universities learned societies and other stakeholders in developing the new open access policies.

I strongly urge the Committee to take a broad view of who the "other stakeholders" are, and also of "what is most valuable in the research communications ecosystem". Regarding the latter, please understand that the ecosystem includes all the people involved in the production of scientific communications, before publication and distribution, and that these people include, in addition to researchers and students, the editors, proofreaders, copyeditors, illustrators, photograpers, IT specialists, website designers, reviewers, printing companies, language service companies, academic writing teachers, and so on. When we consider the costs and 'value', please understand that the needed involvement of all these also has costs, and also has value in terms of the social interactions that allow scientists to learn how to write and communicate effectively. Collaboration, and mutual support, and relationships of trust are part of the value embedded in the research communications ecosytem, but are fragile and not universally available.

I will summarise my further concerns as follows:

- I. In the world of academic publishing, UK-based publishers and journals have been historically important, and remain important, for many research communities outside the UK, especially in the Commonwealth countries. Such communities can also be regarded as stakeholders, since they are often also contributors. The fate of historically important research journals published in the UK is of international interest.
- 2. The Open Access movement has addressed various important questions concerning the costs of publishing and distribution, but has not to my knowledge addressed important

questions concerning the costs of preparing papers for publication. I will expand in three parts below (a-c)

a) To reduce publication costs, many Open Access publishers push the process of copyediting back onto the author, rather than taking full responsibility for the final presentation standards of the research they publish.

This may be done explicitly, in the instructions for authors, or it may done covertly, by simply accepting poorly-edited manuscripts for journals that the publisher has little interest in. I have attended a meeting where a representative of a major English-language publisher admitted that for journals with limited specialist audiences, the publisher takes a relaxed attitude to the standard of English, while hoping to maintain the standard of content. This is a difficult compromise to make. Poor content and poor presentation are closely correlated. For reviewers, badly prepared papers are difficult to read closely, and review standards may fall when journals ask reviewers to be lenient about the presentation.

- b) Within the UK itself, and across different countries, there exist wealth gaps that limit how much institutions and individuals can spend on editing, illustration, and translation. Such costs are already mainly pushed onto individual researchers or their employers. These presubmission costs should be given consideration as well the costs for submission, review, copyediting, distribution, and archiving. Whe discussion turns to the question of transparency in publishing costs, this should also include the existing costs (in time and money) to prepare papers for publication.
- c) In various countries, including the UK, when graduate students have to prepare a 'thesis' in English as a second language (ESL writing), there is a tendency for supervisors and institutions to recommend preparing a 'thesis by papers'; in other words, the student may be given the option of putting most effort into the publication of short papers (that require less writing, in quantitative terms) rather than preparing a longer but unpublished thesis.

Many graduate students are thus under pressure to publish early, before they have had much opportunity to develop their thinking and writing skills through the process of writing a longer thesis. The students (and their departments) must determine how much to spend in order to publish each paper. As a result, students in wealthy departments may have chances to publish in high impact journals that charge high author fees and offer open access for readers, while students in less wealthy departments may have to pay fees themselves, and thus be limited to journals that continue to accept papers at no cost (traditional subscription journals).

For foreign students in the UK, who must necessarily spend more for editing costs (on average), the early pressure to publish creates a further economic barrier to academic success.

A journal may be 'Open Access' for readers, but the road to that journal may be far from open. 'Gold-Standard' open access journals are too rare to have much impact on this problem. If a Gold-Standard journal is also maintaining a high standard of presentation (as it should), then economic barriers (at the preparation stage) may still exist for many researchers and graduate students.

Dr Peter J. Matthews, National Museum of Ethnology, Japan – Written evidence

I am sorry that I cannot offer any easy solutions to these problems. My aim is merely to recommend these problems for consideration by the Committee.

#### Dr Heather Morrison - Written evidence

This is an individual submission, from an open access advocate and scholar focused on the area of scholarly communication and open access.

#### **Summary**

**Embargo periods**: the public has a right to results of research funded by the public with no delay at all. Embargo periods should be as brief as possible and the policy should state timelines for gradual reduction and eventual elimination of embargoes. In the short term, the current 6-month embargo for STM should be continued, while an absolute maximum of 12 months might be contemplated in the short term for social sciences and humanities journals. There is evidence that providing free access to back issues, sometimes immediately and often with little delay, is rapidly becoming the norm for scholarly journals, generally on a voluntary basis and with formal support from this sector, with no evidence of harm.

Arrangements for article processing fees: permitted uses of the block grants for article processing fees should be expanded to include a variety of supports for open access. Any support for open access publishing should be accompanied by a requirement that articles be deposited for open access in a UK-based repository, to ensure that the UK never loses access to the results of UK funded research. The CC-BY policy requirement for article processing fees should be changed to a broader statement requiring that publication be open access with no restrictions on educational or research uses, as CC-BY is not always compatible with the needs of scholarship. For example, sometimes CC-BY will be in conflict with research ethics requirements.

**International issues:** it is highly unlikely that the UK's support for article processing fees will be adopted by other countries, and by interfering in the market in this way, this approach may defeat its own purpose by inflating prices, thereby discouraging the practice of voluntarily supporting article processing fees that is employed by a growing number of institutions outside the UK.

To mitigate risk to scholarly societies, I recommend subsidizing scholarly and university press publishing either directly through block publishing grants or indirectly through providing infrastructure support for their publishing.

#### **Details**

- I. Embargo periods: the public has a right to release of results of research funded by the public with no delay. Any embargo period permitted is more than generous to publishers to provide time to transition to models consistent with immediate free access. For this reason, the policy should provide a timetable for gradually decreasing and then eliminating permitted embargos.
- 2. Embargo periods STM: the current 6-month embargo for STM should be decreased to a shorter period in the near future (perhaps shorten to 3 months in 2 years), and eventually eliminated. In the STM area, there are sufficient profitable open access journals to prove that this model is workable given the generous research funding in this area. There are many STM journals that are

not open access where immediate free access to all of the content of the journals is provided without harm to the journals. The case of arXiv, where in some areas of physics virtually all articles have been published in arXiv even before submission to a journal, with no harm to the journals, is decades old and well known. However, this immediate free access occurs in other STM disciplines as well. For example, over 1,000 journals voluntarily provide all the content of their journals to PubMedCentral with no delay in access. Many of these journals are not open access journals. This number is steadily growing, indicating that this provision of free access is fully compatible with ongoing production of the journals. Data is from *The Dramatic Growth of Open Access*: <a href="http://poeticeconomics.blogspot.ca/2012/12/dramatic-growth-of-open-access-2012.html">http://poeticeconomics.blogspot.ca/2012/12/dramatic-growth-of-open-access-2012.html</a>

- 3. Embargo periods humanities and social sciences: there is evidence to support an embargo period of no more than a year as an absolute maximum across all disciplines. Voluntarily making back issues freely available has become such a common practice among traditional subscription based scholarly society publishers, with formal endorsement from important groups, that free back issues with an embargo period of a year or less can be described as an emerging norm for this sector.
- 4. Minimal embargo periods are supported by traditional society publishers. On March 16, 2004, traditional not-for-profit publishers in Washington, D.C. made a commitment to the Washington D.C. Principles For Free Access to Science A Statement from Not-for-Profit Publishers <a href="http://www.dcprinciples.org/">http://www.dcprinciples.org/</a>, through which "representatives from the nation's leading not-for-profit medical/scientific societies and publishers announced their commitment to providing free access and wide dissemination of published research findings". The publishing principles and practices supported by this group include: 3. As not-for-profit publishers, we have introduced and will continue to support the following forms of free access:...The full text of our journals is freely available to everyone worldwide either immediately or within months of publication, depending on each publisher's business and publishing requirements".
- 5. Embargo periods: tens of thousands of scholarly journals are made freely available after a brief embargo period by their publishers on a voluntary basis. This supports the argument that free back issues is simply becoming the norm for scholarly publishing. The extent of this practice may be best viewed in the Electronic Journals Library (EZB). The EZB is a collaborative project of 589 libraries, based in Germany that collects both subscription and free "scientific and academic full text journals". EZB currently includes 38,066 journals close to 30,000 more titles than are listed in the Directory of Open Access Journals, which is limited to fully OA journals. Among the 30,000 journals are a very large number of journals that voluntarily provide free access to back issues, with no policy requirement. Details about the EZB can be found here:

http://rzblx1.uniegensburg.de/ezeit/about.phtml?bibid=AAAAA&colors=7&lang=en

A quick scan of the journals participating in the US-based Highwire Free hosting service illustrates that a 12-month embargo is very common for the society journals voluntarily participating in this service:

http://highwire.stanford.edu/lists/freeart.dtl

6. Arrangements for article processing fees: whenever funds are used to pay

article processing fees, researchers should be required to deposit in other (UK-based) repositories for open access to ensure that the UK never loses access to the results of UK funded research. The rationale for this recommendation is that the RCUK policy applies to researchers, not to publishers or journals. The Creative Commons licenses are means by which license holders can relinquish certain rights that they have under copyright, which do not place any obligation on the licensor. If a researcher publishers in an open access journal but fails to deposit in an open access repository, then if the journal or publisher ceases to make the work open access, access to the work could be lost to the UK research community. For example, an open access publishing company could be sold to another company which could issue the same works under toll access only, with all rights reserved, and no obligation to sell products at prices UK universities can afford.

- 7. Arrangements for article processing fees: before any funds are distributed, the requirement that funded articles be published using the CC-BY license should be dropped, and replaced by a more general statement that articles should be released for open access with no restrictions on educational or research use. The reason for this recommendation is that the CC-BY license is sometimes less than appropriate for scholarly works. CC-BY is not always compatible with research ethics. For example, when a research subject agrees to allow the use of a photo in a research article, it does not follow that the researcher can grant blanket permission to anyone in the world to use the photo for commercial purposes and/or make derivatives of it (as the CC-BY license does). In a situation like this, CC-BY-NC-ND is more appropriate. Many scholars have concerns about the accuracy or quality of potential derivatives, and for this reason may prefer to use the CC NoDerivatives element. It is possible that derivatives could have negative consequences for the public, for example if an incorrect derivative results in an inaccurate description of a new surgical procedure. These are brief examples drawn from substantial work mapping open access and Creative Commons, which can be found in my dissertation.
- 8. Arrangements for article processing fees: permitted uses of the block grants should be expanded to include a variety of forms of support for open access, giving each university leeway to fund initiatives that best fit their institution. For example, the vast majority of university libraries in North America provide hosting and support services for journals their faculty are involved in. Providing these kinds of services in the UK would go a long way towards addressing the concerns of scholarly societies with transitioning their journals to open access, as most journals would have options for university-supported publishing.
- 9. Arrangements for article processing fees: expand permitted uses of the block grants to include preparation for future leadership. For example, to prepare the UK for leadership in scholarly communication in the future I recommend providing some seed funding for the most transformative possibility for scholarly communication reported by Houghton and Oppenheimer in 2009 <a href="http://www.jisc.ac.uk/news/stories/2009/01/houghton.aspx">http://www.jisc.ac.uk/news/stories/2009/01/houghton.aspx</a>, that is, building an overlay journal system on top of institutional repositories. Britain's strength in institutional repositories makes the UK a natural leader in this area. UK-based mathematician Timothy Gowers recently posted about a new system that will make it easy to

create overlay journals with arXiv, suggesting that this approach may be feasible much sooner than most of us had thought: <a href="http://gowers.wordpress.com/2013/01/16/why-ive-also-joined-the-good-guys/">http://gowers.wordpress.com/2013/01/16/why-ive-also-joined-the-good-guys/</a>

- 10. Arrangements for article processing fees: consider dropping this funding altogether, returning the funds to general research support, and allowing researchers to use their discretion to pay article processing fees from their research grants, as the US NIH and Canada's CIHR do. The article processing fee support is an interference with the market that I consider to be against the interests of open access, and even the open access publishers that one might think would benefit from this policy, although I doubt that they would agree.
- 11. International issues: it is highly unlikely that the UK's support for article processing fees will be adopted by other countries, and by interfering in the market in this way, this approach may defeat its own purpose by inflating prices, thereby discouraging the practice of voluntarily supporting article processing fees that is employed by a growing number of institutions outside the UK. One reason is because the way these grants have been set up encourages high prices for article processing fees. The UK is aiming to protect a positive balance in trade, while for virtually every other country, the incentive is in the opposite direction, i.e. for most countries scholarly publishing involves a negative balance in trade, and propping up the existing system is counterproductive.

If prices for open access article processing fees are inflated due to the RCUK's generosity, this is a disincentive for voluntary initiatives to support article processing fees. Ross Mounce recently released some research illustrating a 5% increase in BioMedCentral's open access article processing fees over the past year. This is above inflation, and for library subscriptions, an increase of this amount would be sufficient to trigger a "review before renewal" decision, and possibly cancellation. In other words, RCUK's generosity in its support of open access-via-article-processing-fee publishers may actually cause a drop in support for this publishing model from outside the UK.

12. To mitigate risk to scholarly societies, I recommend subsidizing scholarly and university press publishing either directly through block publishing grants or indirectly through providing infrastructure support for their publishing. Direct subsidy is much more cost-effective than indirect subsidy through APFs. One example of such a program in Canada's Social Sciences and Humanities Research Council's Aid to Scholarly Journals, and the Synergies project that has provided support for Canada's social sciences and humanities journals to move online and facilitated the move to open access for a number of these journals. In North America, it is common for university libraries to provide hosting and support services for journals local faculty are involved with, an option that facilitates high quality open access publishing at a modest cost (see also paragraph 8).

Freedom for scholarship in the internet age <a href="https://theses.lib.sfu.ca/thesis/etd7530">https://theses.lib.sfu.ca/thesis/etd7530</a>

#### Ross Mounce, PhD student, University of Bath - Written evidence

This submission is an individual contribution.

Of particular relevance to this inquiry I should state **my research funding is from BBSRC**, I am engaged in **content mining research** (which is commonly hampered by copyright/legal issues with respect to non-Open Access research), and I am a **council member of** The Systematics Association (a UK-based learned society).

#### **Background**

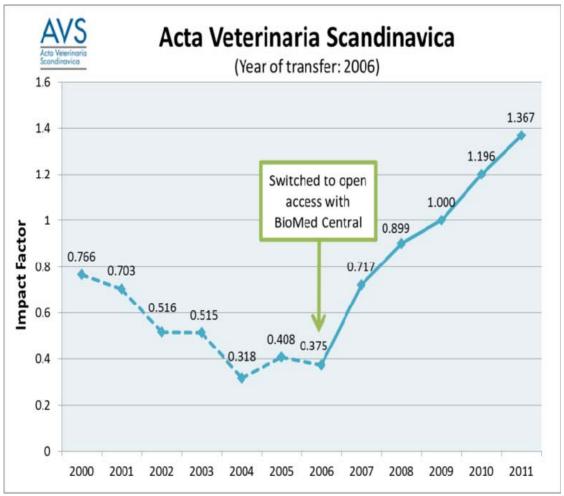
- I. On the whole I was extremely pleased when the Finch Report came out and even more so when RCUK announced it was going to implement most if not all of the recommendations. I, and most of my colleagues strongly believe that **taxpayer-funded research such as that given out by RCUK should be made openly available** to everyone in the world to read and to use for whatever purpose (Open Access).
- 2. Currently there are huge **inequalities in access** to scholarly outputs (not just papers, but data & software too). My research library at the University of Bath can only afford to subscribe to so many subscription access journals very far from all of them. But for myself and my colleagues to do high-quality, high-impact, definitive research we frequently **need access to materials** we don't have either free/Open Access, or quick paid-subscription access to. In these cases myself and colleagues often spend hugely-wasteful lengths of time trying to get copies of these must read materials that are **buried behind paywalls we can't unlock**.
- 3. The alternative options for access to paywall-restricted papers are poor and inefficient; inter-library loans can take days or weeks. Relatively few researchers currently post full-text self-archived copies of their own work in 'green' online repositories (although perhaps more might do so in the future). Electronic inter-library loans from the British Library can only be printed-once if an error occurs during printing tough luck, you'll only ever have half a print version.
- 4. Sympathetic colleagues at different institutions with different journal access rights pass each other PDFs all the time technically this is copyright infringement we have a system that appears to criminalise attempts to do comprehensive and diligent research. Yet these small acts of academic copyright infringement are rampant online if you know where to look and are often the only way to sensibly and efficiently get research done. Buying additional legal access is simply not affordable nor desirable at the outrageous prices often offered and sometimes only upon inspection of the fulltext does one find that the paper isn't actually of use and can be discarded.
- 5. Many different peer-reviewed papers have shown that **Open Access research has a higher citation rate** than its paywall-protected 'Closed Access' counter-parts [e.g. I-8]. Making RCUK research 100% Open Access should reasonably therefore confer some of this effect on our research and **increase our already impressive global impact**, particularly if we are one of the first big research nations to embrace this, rather than the last.
- 6. But **the UK** is far from alone in strongly pursuing Open Access means of research dissemination. The NIH Public Access mandate requires that all NIH-funded research publications are accessible to the public (world-wide) via the PubMed Central

repository no later than 12 months after publication. In Australia, both <a href="NHMRC">NHMRC</a> & <a href="ARC">ARC</a> have Open Access policies in place. In fact if one looks closely enough one will see a litany of national research funders that already have open access mandates in place <a href="Argentina">Argentina</a>, <a href="Denmark">Denmark</a>, <a href="Austria">Austria</a>, <a href="Belgium">Belgium</a>, as well as innumerable policies at the university/institution level e.g. the <a href="Howard Hughes Medical Institute">Howard Hughes Medical Institute</a>, <a href="Wellcome Trust">Wellcome Trust</a>, and even my own institution — the <a href="University of Bath">University of Bath</a> (important to mention, because not all UK university research is funded by RCUK).

7. In particular I think we should note the way in which the <u>SciELO Network</u> has provided sustainable free access to <u>over a thousand</u> South American, Latin American, and (more recently) African research journals via the internet. It is ethically awkward that 'they' provide access to so much of 'their' research to us for free whilst we often charge them for access to 'our' research (many institutions do NOT receive charitably given access via <u>HINARI</u>). This is an asymmetrical access imbalance that sorely needs to be corrected.

#### **On Learned Societies**

- 8. Learned societies heavily-reliant on subscription journal income and concerned with how the RCUK policy may affect them should closely examine the workings of other societies that have successfully operated open access journals for many years. West and colleagues [9] provide <u>robust data</u> showing hundreds of society-operated gold Open Access journals with good citation impact at either no-cost to authors, or for a usually reasonable APC.
- 9. Good examples include the <u>Journal of Economic Perspectives</u> (of the American Economic Association) not only do they charge nothing to authors (APC=0) and provide free access to readers, but also Thomson Reuters Journal Citation Reports (JCR) ranks this as the 5<sup>th</sup> best journal in Economics out of 321 listed. It is influential and extremely well cited.
- 10. The journal Acta Veterinaria Scandinavica is a remarkable success story of society journals (it's the official journal of the Veterinary Associations of the Nordic Countries). From 2000 to 2005 it was subscription-access only and was dwindling in impact and citations. In 2006 they changed to Open Access publishing with BioMed Central and now enjoy significantly increased impact and citations for the research published there.



A plot of the Impact Factor of the journal Acta Veterinaria Scandinavica over time, showing a marked increase after switching to Open Access publishing. Source. Author: BioMed Central. Image licensed under the Creative Commons Attribution 3.0 Unported license

- 11. The European Geological Society (EGU) publishes 14 different gold Open Access journals with the help of Copernicus Publishing. One of these in particular Atmospheric Chemistry and Physics has been hugely successful and through high citation rate is now ranked the 2<sup>nd</sup> best journal of 71 in the category "Meterology & Atmospheric Sciences" in Thomson Reuters JCR. It happily publishes articles using the Creative Commons Attribution Licence (CC BY) and charges a fair, variable APC that is cheaper for those who submit manuscripts in LaTeX form reflecting the ease of which it is to convert such manuscripts into publishable forms. Microsoft Word submissions require more processing and thus they charge more. It is commendable that they expose, and make avoidable some of the effort costs of typesetting this way.
- 12. Furthermore, I'd bet there are many different societies operating subscription access journals that already allow self-archiving of published works so that they'd be compliant with the Green OA route which the RCUK policy also allows (with additional leniency on the humanities, allowing a 12 month embargo). This would seem to me to be a fairly pain-free way of complying with the policy should they wish to (N.B. Learned societies are not obligated to comply with this policy, although you would think if it was a British society it might be in their best interests. It is the researchers that *must* comply).

- 13. I am concerned for some UK learned societies that from their annual financial reports seem to indicate they are rather reliant on subscription-journal income to support their societies financially. I am not privy to the exact details of whether society subscription-journal income is 'ringfenced' away from supporting the other activities & perks of a societies' membership. I hope it is. Otherwise I worry that perhaps some learned societies maybe using the surplus from the subscription-access journal income (paid for by libraries/institutions/universities world-wide) and spending this surplus on personal society member-only perks e.g. a free hardcopy paper newsletter only delivered to personal members. I have examined annual report accounts of some learned society accounts myself and find that where the money/surplus goes to be rather opaque in some cases.
- 14. It appears that many societies have been operating a consistent and healthy surplus from their subscription-access journals and using this surplus to expand their outreach activities and member perks free pens, paper, mugs, USB sticks and heavily discounted student memberships. I myself have greedily taken many of these membership benefits, and know that I have received goods and services that far exceed the cost of the small, hugely subsidized membership fee I paid. All this would be okay if it was only members paying for other (younger) members self-sustainability. But I am increasingly concerned about the asymmetry of fees and benefits provided by some learned societies. Surely a significant portion of journal subscription income is from institutional subscriber agreements? Institutions are very rarely members of learned societies, and institutionally the only benefit they get from these fees paid is institutional access to subscription-only society journals. Yet the surplus from subscription income at societies doesn't seem to be given back except to members through perks and the organisation of outreach events and such.
- 15. Therefore I think it would be fairer for a society to publish any associated journals in an Open Access manner and concentrate on being financially self-sustaining whilst clearly delivering on their core mission(s) of educating the world about their subject, arguably bettered by providing open access via the internet. Relying on denying access to research via paywalls to provide surplus income with which to spend on outreach to further their mission, seems like a very convoluted argument and an inefficient way of spreading knowledge. Put simply, **Open Access very clearly fulfils many of the core purposes of learned societies** and provides an open platform with which to build outreach around.

#### **Arrangements for APC funds**

- 16. As I'm sure many will cite, most gold open access journals listed in the Directory of Open Access Journals (DOAJ) are fee free. They do not charge an APC. Of those that do, the average APC is just \$906 (Solomon & Bjork, 2012). There is no strong relationship between the APC cost of gold open access journals and their article level impact [9]. Intuitively this makes sense if I submitted my work to *Nature*, or I submitted my work to the *Panamanian Journal of Ichthyology* (a fictional journal) the work, if published, would essentially be the same journal 'brand' is just a label, it doesn't change anything especially not the quality of peer review. In terms of citations, solid evidence supports this intuition since 1990 the relationship between Impact Factor (citations to a journal) and article-level citations has significantly weakened [10]. To put it another way good research gets read and cited no matter where it's published.
- 17. I'm aware there are concerns in the Humanities and Social Sciences about Open Access and APCs. I don't know why there aren't more Open Access journals in these

disciplines. There's nothing technologically preventing a surfeit of new Open Access journals from forming. Good, well tested solutions like Open Journal Systems are free to implement (no software cost) and are used by over 11,000 journals world-wide. The implementation only needs bandwidth-cost support and the same human time/effort required to run a subscription access journal, which I'm sure institutions should be made willing to help with. Stuart Shieber gives an excellent description of how costs are managed at the Journal of Machine Learning Research. Here academics volunteer time, with the help of a little institutional support to produce a high-quality, high-impact peer-reviewed research journal that costs just \$6.50 per paper to run.

- 18. I would urge the House of Lords to look into how universities and libraries could be encouraged to help British academics **create new**, **efficient**, **low-cost**, **peer-reviewed research journals**. Martin Eve for one appears to have no trouble doing this. It need not even necessarily require additional cash-injection, just IT-support and the use of institutional bandwidth & servers to host Open Access journals.
- 19. Above all, academics in all areas need to consider and be made aware of the huge variety of open access publishing options available to them. The big **commercial publisher brands may be the most well-known** in some areas, and they spend significant marketing budgets on ensuring this. Unfortunately these commercial publishers also offer some of the most eye-wateringly expensive gold Open Access options. We need to incentivize and ensure a 'value-for-money publishing' mentality, and to discourage academics away from these expensive 'hybrid' OA options. It would be good to set a hard limit on the amount of cash that RCUK would be willing to pay for an APC for any one publication. Otherwise it might encourage some publishers to further indulge in pricegouging.
- 20. I am glad that RCUK is supporting gold open access and green open access routes. I fail to see how green alone would work it does not provide peer review. 'Overlay' peer-review services external to journal publishers operating on pre-print servers are a nice idea, but I'm not sure this model of publishing will gain traction or acceptance in academia, not for a while at least. Therefore to continue to build-on and support low-cost journals I think it is good that RCUK is encouraging the gold open access route.

#### **Embargo periods**

21. I don't have much to say about embargo periods. Only that I've seen some interesting arguments used against short embargo periods in the humanities e.g. history. One such argument used was that the 'citation half-life' was very long in History and therefore a short embargo period would harm this discipline more than in the sciences. Yet I know that in Palaeontology, the citation half-life of papers as you might imagine is also very long – yet there are few such concerns about embargo periods or the effect of Open Access in this discipline. I recently gathered data and found that the mean-age of cited papers in a palaeontology is <a href="New Years">> 18 years</a>. Therefore I don't 'buy' this long-tail usage argument as it equally applies in other disciplines that appear to have no problem with open access, green or gold.

17 January 2013

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## Dr Tom Olijhoek - Written evidence

Open Access Consultant at Codex Consult, NL; coordinator open access workgroup at Open Knowledge Foundation

The following are my personal views on the need and rationale for Open Access publishing.

- I) The basis for the requirement of open access to information is formed by the following 3 principles:
  - a) Access to information is a fundamental right (similar to the right to clean air, clean water, medical care, education)
  - b) The accumulated knowledge of mankind is owned by everyone and cannot and should not be claimed or shielded from access by individuals, organizations, firms or governments
  - c) Knowledge by itself has no intrinsic value, it only derives a value from being shared with as many people as possible.
- 2) The barriers put in place by toll access publishers are not in the interest of scientists, not in the interest of citizens, not in the interest of governments but are only there to assure continuing high profits for an anachronistic publishing industry. It is far from clear why scientists, students, universities and other parties have to pay huge sums in order to access information that in the majority of cases has already been paid for by government funding.
- 3) I therefore am fully supportive of open access publishing where information will have to be made available, immediately, for free and without any restrictions regarding use or reuse. I want to emphasize the need for immediate open access. One of the major advantages of open access is the fact that sharing of information speeds up scientific development (see below). In my view only immediate sharing of information can guarantee the greatest benefits in this respect. The only reason to impose embargo periods lies in continuing support for toll access publishers, which they may demand but which is not in the best interest of anyone else than the publishers themselves.
- 4) The major advantages of open access publishing can be summarized as follows:
  - a) Economic advantages. The Committee of Economic Development (CED) in America has concluded that the benefit by the introduction of open access to NIH has outweighed the costs many times over. And in Australia it was found that open access to the information held by the Bureau of Statistics had cost \$ 4.6 million in investments and yielded \$ 25 million in benefits. In England, the Open Access Implementation Group has determined that the public sector has already saved £ 28.6 million by open access, and that each 5% increase in open access publications will save the public sector an additional £ 1.7 million.
  - b) Social advantages. Because access to information is the key to development, innovation and prosperity, open access also has significant social implications. Good information for citizens, politicians, businessmen and others, forms the basis for a functioning democracy. This is certainly of great importance for all non-democratic

countries such as in Africa. And open access to information for patients, for example, can literally save lives. Open access to information for nurses will increase the knowledge and motivation and contribute to better care. And there are countless other examples to consider.

- c) Advantages for science. The same CED mentioned above has said that its research also clearly showed that the research process itself was considerably accelerated by immediate and free access to the results. Commercial applications followed more quickly and there were less dead-end research projects. The quality of research was in fact found to be markedly improved by open access, probably because of much more feedback and monitoring by college researchers. In addition open access created many more opportunities for innovation because more people and especially more people from different backgrounds tried to solve the same problem. Open access also provides a solution to the so-called "local search phenomenon" in which solutions will be less than optimal as the group members are smaller in number and less diverse.
- d) New metrics. Moreover, because many more people share knowledge other new metrics can be more reliable used for the assessment of the quality of scientific publications, such as number of downloads, social media messages, number of pageviews and post-publication peer review. These methods take into account the reality of knowledge dissemination via the World Wide Web, and when combined with conventional citation index they are a better indicator for the importance of a study than the citation index alone.
- 5) I therefore urge the Science & Technology Committee of the House of Lords to follow the recommendations of the Finch report and even go further by not accepting any embargo for scientific publications of research that was publicly funded.

17 January 2013

# Open Access Scholarly Publishers Association (OASPA) – Written evidence

## **Key Points**

- ➤ OASPA recognizes the interests of funders in seeking to maximize access to the results of research funded under their programmes.
- ➤ OASPA supports the RCUK policy support for gold open access as the preferred model, with additional funds being made available.
- ➤ OASPA supports the RCUK policy requirement for a Creative Commons Attribution (CC-BY) Licence to be used where Research Council funds are used to meet a gold open access fee.
- The APC levels per article that are assumed by the RCUK policy following the Report by the National Working Group on Expanding Access to Published Research Findings, are reasonable and in line with the experiences of open access publishers.
- Infrastructural challenges exist (e.g. payment mechanisms), and are being addressed by the necessary stakeholders. OASPA is committed to engaging actively with stakeholders to resolve these.

#### Introduction

- The Open Access Scholarly Publisher's Association (OASPA) is pleased to respond to the House of Lords Science and Technology Committee inquiry into open access. As the first and primary association for publisher's working in the field of open access publishing, OASPA aims to expand open access publishing through exchanging information, setting standards, advancing models, advocacy and the promotion of innovation.
- 2. OASPA was founded in 2008. At the time only a small number of publishers were engaged with OA publishing. Today our membership includes a rapidly expanding list of publishers, including many of the larger legacy publishers such as Springer Science + Business, SAGE Publications and Wiley-Blackwell, as well as society publishers such as the Royal Society and Institute of Physics.
- 3. Membership is granted to those publishers who demonstrate a commitment to engaging actively with OA publishing, including the publication of at least one title that makes all original research immediately upon publication under a liberal license (see below), and who meet a list of quality assurance criteria (e.g. rich description of peer review process, full names and affiliations of board members, etc. see http://oaspa.org/membership/membership-procedures/).
- 4. OASPA engages not only with the publishing community but is also working with other stakeholder groups such as SPARC Europe (board member), OAPEN (chair of advisory board), and OpenAIRE (member of advisory board) to develop the OA ecosystem.

## **Support for the current recommendations**

5. OASPA recognizes that the current House of Lords inquiry does not question the aims of the current policy but is investigating the current plans for implementation.

The report from the National Working Group on Expanding Access to Published Research findings and the policy adopted by the RCUK set a clear policy direction in support of open access. OASPA particularly supports the following points:

- its choice of gold open access as the preferred model, with additional funds being made available;
- the requirement for a Creative Commons Attribution (CC-BY) Licence to be used where Research Council funds are used to meet a gold open access fee.

### Support for gold

- 6. Gold OA is expanding quickly, both among the early pioneers of OA publishing as well as within the publishing sector more broadly, including by new actors in the sector. A study by Laakso and Björk published in *BMC Medicine* shows that gold OA (in immediate OA journals and published together with articles published under a hybrid option) have grown 16-fold between 2000 and 2011. Approximately 17% of the articles published during 2011 and indexed in Scopus are available under gold OA.(doi:10.1186/1741-7015-10-124) (link <a href="http://www.biomedcentral.com/1741-7015/10/124">http://www.biomedcentral.com/1741-7015/10/124</a>).
- 7. As the RIN Report Heading for the Open Road made clear through its cost benefit analysis, green OA is reliant upon the current subscription system as a foundation. As noted by Dame Janet Finch in her testimony to the House of Lords Committee on 16 January 2013, this system is currently being disrupted. OA publications are already biting at market shares that were earlier occupied by subscription titles and many publishers are experiencing subscription cancellations that are of concern from a business perspective. In this context, Gold OA offers a business opportunity to publishers and more stable foundation for offering extended access in the long run.
- 8. OASPA recognizes that publishers and scholarly societies have expressed concerns over the uncertainties associated with shifting business models (bearing in mind that an APC model is but one funding model). It is for this reason that OASPA invites members of the community to share knowledge and experiences at an annual conference dedicated to OA publishing.

### **Support for Licensing Requirements**

- 9. One of the key motivations of Open Access publishing is to maximize the potential impact of any piece of published research by removing any barrier to access or reuse of that work. The best way to achieve that is to attach a Creative Commons Attribution license (CC-BY) to each and every publication. Among other things, the use of a CC-BY license assures that researchers and institutions are free to post the final published version of that work in any repository, archive, etc., removing concerns about the circulation of multiple versions of a particular article.
- 10. At OASPA, one of the criteria for membership is that a publisher must use a liberal license that encourages the reuse and distribution of content. We strongly encourage (but currently do not require) the use of the CC-BY license wherever possible. A CC-BY-NC license is also accepted.
- II. As emphasized by the early declarations on open access in Budapest, <u>Bethesda</u> and Berlin, open access is about more than access open access removes access and reuse barriers, and thus has the potential to transform the literature into a much more powerful resource for research, education and innovation.

- 12. The human genome project is a compelling demonstration of the power of open access to research, and reflects a well-established practice within the genome community to make research data publicly available for all reuses via resources such as GenBank. It is also interesting that one of the early visionary articles about open access to literature (published in Science in 2001) was entitled "Building a GenBank of the published literature", the creation of which would "encourage the development of new, more sophisticated, and valuable ways of using this information, much as GenBank has done for DNA sequences".
- 13. Also in the Social Sciences and Humanities the application of liberal licensing can offer as yet untapped advantages in scholarly advancement. Among others, the European Commission has supported projects in these subject areas that deal with developing a robost and integrated infrastructure for research outputs. Projects like CLARIN (Common language resources & technology infrastructure), DARIAH (Digital Research Infrastractures for the Arts), and CESSDA (Council of European Social Science Data) are demonstrating the value of open access to outputs.
- 14. One argument against applying liberal licenses within the Humanities has been that publications in many subject areas include images and other elements that are reproduced under permission from a copyright holder. As a solution to the issues this raises, open access publishers apply alternative licenses to the specific item within the overall publication to honour copyright conditions and permissions. The Wikimedia Foundation, among others, is also working in this area to address copyright concerns in relation to images.
- 15. The largest OA publishers (BioMed Central, PLOS, and Hindawi) have between them already published hundreds of thousands of peer-reviewed articles under the CC-BY license and in doing so have created high-quality sustainable businesses. Major established publishers, such as Springer and Wiley-Blackwell, whose businesses have been built on subscription models, have also recently embraced CC-BY for their open access content [LINK TO CITATIONS]. As the open access corpus grows, new services, commercial and non-commercial, will be built on top of open access literature, and publishers that impose no limit on the reach and impact of the work that they publish (thanks to their use of the liberal CC-BY license) will be the most attractive option for authors.
- 16. OASPA has expressed its support for Creative Commons Licensing (either CC-BY or, as a second-best choice, CC-BY-NC) in other policy contexts (the European Commission and the United States, notably) as this assures that researchers and institutions are clear about their rights and are free to post the final published version of a work in any repository, archive, etc., and avoids the dissemination of multiple versions of an article.

### Addressing concerns and challenges raised about the RCUK policy

#### **APC** levels

17. OASPA feels that the information on APC levels upon which RCUK recommendations are based is reasonable. The Wellcome Trust, as noted in the report "Accessibility, sustainability, excellence: how to expand access to research publications" has the longest

- and broadest experience of funding APCs. Elsewhere, results of a study by Björk & Solomon showed that the average APC level by journal is 906 USD, with averages varying across fields (DOI: 10.1002/asi.22673). Further figures in the same study, support the calculations within the working group's report.
- 18. Concerns have been raised that the UK will be funding OA for other countries by being a first mover. Further criticism has been raised that the allocated funds will not be sufficient. In this context it may be worth noting that most OA publishers are able to split payments between more than one funding body or institution. The Open Access Key system (a third party payment aggregator that many OA publishers are partnering with) also allows for split payments.

#### Infrastructural issues

- 19. As yet the full infrastructure for gold OA has not been established. OASPA is currently cooperating with other stakeholders on three issues that are critical to address: payment mechanisms, metrics, and quality control. While all three of these areas pose challenges, concrete steps are being taken.
- 20. In particular, the emergence of intermediaries in this area, with systems built on the input of experienced OA publishers and institutions who have managed central funds, contributes to reducing what could otherwise amount to an unmanageable number of micro payments. OASPA is aware that JISC is involved in investigating means of managing the RCUK funds allocated for gold OA.
- 21. The development of alternative metrics for measuring impact as well as a standard for reporting such measures will be key to evaluating the value of publishing services in future. OA publishers have begun to discuss these issues and are working to make progress towards solutions that will be of value to the broader community.
- 22. It is particularly in relation to infrastructural issues that OASPA agrees with the argument that there is a need to bring stakeholders together at this time in order to manage change as the publication eco system evolves. OASPA would support and be happy to be involved in any attempts to make the infrastructure for OA and payment of APCs easier for authors, HEIs and publishers.

#### Variations across fields

- 23. Some stakeholders have argued that the RCUK policy as it currently stands does not take account of the differences between scholarly subject areas; noting in particular that the policy ignores the realities of the Social Sciences and Humanities.
- 24. OASPA recognizes that the uptake of OA varies across subject areas. For this reason, it is important that the RCUK policy also allows for alternatives to publishing gold OA. The possibility to take advantage of author archiving (green) provides a secondary route of compliance that will likely be important for journals in the social sciences and humanities, for example.
- 25. At the same time, OASPA would argue that the RCUK policy speaks to an argument against OA in the Humanities that has been raised earlier. Namely, that funding levels in the Humanities do not allow for adoption of gold OA. OASPA applauds the RCUK policy for providing funding across all fields of scholarship which it supports. This may

also provide a context for some journals in fields that are underrepresented in the OA publishing market to experiment with OA.

## Learned Societies will be damaged by the policy

- 26. OASPA recognizes the concerns of scholarly societies for whom journal income has become an important source of income for other important society activities. In particular for those societies whose primary income is derived from a subscription-based journal, a consideration of OA and move to gold OA cannot be taken lightly.
- 27. Given the difficult situation many societies face, it is important that the RCUK policy provides for a green option as well as allowing for a hybrid solution (i.e. offering authors a choice of gold for the individual article in exchange for a payment). Indeed many society titles already offer a hybrid option.
- 28. PLoS, BioMed Central, Springer, Co-Action Publishing and Copernicus Publications have all gained experience from working with scholarly societies to transition journals to gold OA. In some cases, particularly for smaller and medium sized societies, the transition has resulted in the same or a better financial situation in relation to the journal.
- 29. Among the resources that might be useful to societies considering gold OA is a list that Peter Suber and Caroline Sutton have made freely available covering journals that have moved to gold OA. This list currently contains nearly 700 titles. The OAIG has funded a project aimed at developing resources for societies considering gold OA. These resources are due for publication within the next couple of months.

#### Relationship between gold and green

- 30. From an Open Access publishing perspective, archives and repositories provide channels for disseminating authors' work and encouraging re-use, leading to greater impact. When published under an appropriate licence, the final published version of an article can be deposited within an institutional or subject repository immediately upon publication. OA publishers generally provide support to authors in depositing their articles as well as providing automatic deposit on behalf of authors.
- 31. As a society dedicated to developing gold OA, OASPA refrains from offering opinion on embargo periods.

### **Rushing in to Open Access**

32. As a reaction to the limited discussion and debate of the National Working Group's report, before the RCUK policy was adopted, it has been argued that the Council is "rushing in to Open Access". While the current surge in debate over the Councils' policy may well indicate that a greater debate period was desired by many actors, it is worth noting that Open Access, and gold OA, have been debated for over a decade. The issues and concerns that are being raised in current discourse are unsurprising and echo those that have been aired for a number of years. Gold OA was established over 10 years (with earlier examples of single journals going back to the mid -1980s, using bitnet for distribution).

## Sustaining peer review and high-quality editorial work

33. Throughout the debate on OA claims have been made that gold OA is not compatible with quality editorial work or peer review. In the worst case scenario presented,

authors may engage in vanity publishing as the APC model is corrupt and leads publishers to accept everything and anything for publication. This myth has largely been debunked over the last few years. In addition to the stringent membership criteria OASPA applies (and which has been adopted by a number of funding bodies and central fund managers), most OA publishers have established mechanisms to separate financial decisions (for waivers) from editorial decisions (to publish). Editorial quality is not dependent on business model.

34. Often quality is conflated with prestige. While a new journal may offer high quality editorial practices from day 1, prestige takes time to build up. Now that open access publishing is over a decade old, a growing number of Open Access journals have rapidly become leaders in their fields in terms of impact factor, etc.

## First mover disadvantage?

- 35. A second concern that has been raised is the notion that the UK stands to suffer as a first mover; UK research will be available to the world, but the UK shall not be rewarded with the same access to global research, at least initially. While understandable, this concern ignores fact that a healthy research sector requires that the output of the research should be widely read and cited around the world this provides the key to fruitful international cooperation. So, increasing the global visibility of the output of UK research will itself benefit the UK research sector. It would certainly be unfortunate if the global scientific publishing system were to be stuck with a non-optimal model in terms of access and impact because no country was prepared to act first.
- 36. The leadership shown by the Wellcome Trust and NIH in unilaterally implementing open access policies rapidly resulted in adoption of similar policies by many other organizations worldwide, RCUK's recent efforts to add impetus to the move to gold OA seem poised to have a similar influence on policy in Europe, the US, and the rest of the world. The Global Research Council is due to hold its inaugural global summit meeting in May 2013, and "agree on an action plan for implementing Open Access to Publications" is one of the two key topics for discussion, <a href="http://www.globalresearchcouncil.org/meetings">http://www.globalresearchcouncil.org/meetings</a>.

18 January 2013

## Open Book Publishers CIC Ltd - Written evidence

- 1. We write as a group of scholars in the humanities and the social sciences in response to the request for evidence regarding the enquiry into Open Access. We welcome the House of Lords' decision to inquire into Open Access and current funding policies for this. We have direct experience of all aspects of research in the humanities and social sciences (HSS), and long standing interests in promoting Open Access: in 2008 we founded Open Book Publishers, publishing Open Access research monographs in HSS using a variety of Creative Commons licences.
- 2. The arguments in support of Open Access in HSS are widely articulated, and we believe the vast majority within academia accept that this is the future of academic publishing. We are facing a period of extreme uncertainty and opportunity new digital products and dissemination channels are evolving rapidly and we need to focus on facilitating this change as much as possible.
- 3. The recent report by Dame Janet Finch and subsequent new policies announced by the UK Research Councils (RCUK) fully support Open Access publication for all UK publically funded research. These are clearly important steps in the right direction, demonstrating both willingness and financial commitment to encourage the transition to a new publishing environment. However we believe that Finch recommendations and RCUK policies fall well short of pushing through (or even encouraging) the wholesale reforms required to maximise the potential of Open Access as the primary outlet for research results.
- 4. The Finch/RCUK approach sustains the existing publishing landscape it conceives of only the existing publishing formats (journal articles, collected conference papers and monographs) and maintains the central role of commercial publishers in providing existing services. The potential for the development of completely new types of research output allowed by technology which is no longer constrained by the printed page is ignored.
- 5. It also identifies a unique business model for the provision of Gold Open Access, through publishing charges imposed on the author. Even ignoring the significant transition costs involved, there is a real risk that this approach will not induce changes in the inefficient and costly academic publishing sector. By redirecting commercial publisher revenue streams from library budgets to research budgets the underlying structural issues that have allowed commercial publishers to sustain high margins at the direct expense of taxpayer and academic research budgets are not addressed. By maintaining control over the publishing output, the peer review process and the separation of the user (readers/authors) from the purchaser (university institutions), commercial publishers will continue to be able to manipulate the market for profit.
- 6. The proposed funding model will also introduce a new series of publishing distortions. Researchers working at institutions with large budgets to pay for the dissemination of their staffs' work will have better access to the top journals. Internal rationing of available publishing funds may favour some researchers over others.

- 7. And these distortions will be exacerbated even further when it comes to the publication of monographs, where publishing charges are likely to be even higher. In fact the Finch Report says very little of book publishing, concluding that "it is difficult to encompass monographs within the discussion about promoting wider access to publications".
- 8. One of the mandates of the Finch working group was to maintain the economic viability of existing 'stakeholders' and this is readily apparent from the proposed solution. It is unfortunate that there was no representation for emerging Open Access publishers who may have noted that the vast majority of existing Gold Open Access publishing outlets do not impose publishing charges on authors. In many cases these are financed either directly or indirectly through university departments or research societies. Many departments now recognise that by supporting OA publications they enhance the recognition and reputation of their institution with obvious longer term pecuniary benefits.
- 9. The requirements for successful Open Access dissemination fo research differ significantly between disciplines. The monograph based, HEFCE funded research of many Humanities disciplines stands in stark contrast to the article based, project funded research in many Science disciplines. It would be remarkable if a single solution satisfies all parties. Allowing the academic community the freedom to develop new products, methods and practices for the dissemination of their research is an important way to facilitate genuine innovation in this industry. Mandating a particular funding process is likely to be counterproductive in this regard.
- 10. In 2008 we set out to discover whether Open Access could be a sustainable model for publication, and founded Open Book Publishers. In a small team, and on a shoe-string budget, we publish high-quality, peer-reviewed, Open Access monographs in the Humanities and Social Sciences. We do this not by charging authors, but through a 'freemium' model: we make all of our monographs freely readable online, but, to cover our modest costs, charge a reasonable price for printed editions and certain digital formats. The model is incredibly fast and cost effective, and allows us to retain the quality and academic rigour of a traditional university press. We are now partnering with research centres and university departments to develop coherent Open Access research dissemination strategies in specific disciplines and finding that the RCUK 'single model' funding policies are more problematic than useful.
- 11. Open Book Publishers is successfully spreading knowledge and high quality academic research around the world: our free online books are currently averaging around 500 views per month, which is more than most printed academic books see in an entire lifetime. They are accessed by people in over 120 countries (most academic books are only available in Western university libraries), with large numbers coming from the developing world.
- 12. It is not clear to us that requiring an author pay model, rather than allowing alternative funding streams to develop in partnership with universities and research institutes, will maximise the potential for the creation of innovative Open Access initiatives and products and the efficient dissemination of research outputs.

13. We strongly recommend that RCUK, HEFCE and other research funding agencies continue to support the development of Open Access dissemination, but do so in ways which will allow multiple funding routes and business models to develop within the research sector.

18 January 2013

## **Open Humanities Press - Written evidence**

## **Background**

- I. Open Humanities Press (OHP) welcomes the opportunity to make this submission to the House of Lords on the actions taken by Government and RCUK following publication of the Finch report.
- 2. OHP is an international gold open access humanities publisher based in the United Kingdom. OHP was founded by academics, librarians and technologists in 2006. We have a history as an advocate for the professional interests of humanities scholars, educators and life-long learners. We act on behalf of 14 open access scholarly journals by promoting and protecting their rights in the UK and overseas. OHP also publishes open access monographs using the innovative models of scholar-library partnership and scholar networks.
- 3. OHP considers the fundamental openness of research essential to the innovation that comes from the free and open transfer of ideas. OHP is pleased to see that there is now universal acknowledgment that full open access is essential to the advancement of knowledge, and that the discussion has shifted to how this open access is best achieved. We support policies, legislation and regulation that promote the right of the public to access research. OHP considers the open access mandate voiced by the RCUK a significant and welcome improvement. However, we think that the implementation recommend by the Finch report, and the subsequent policies developed by RCUK, are unlikely to successfully promote the orderly and low risk transition to open access that the Finch group clearly intended.
- 4. Our specific comments on the issues raised are:

# Support for universities in the form of funds to cover article processing charges, and the response of universities and HEIs to these efforts.

- 5. The Finch report clearly advocates in its conclusions, and the RCUK policy exclusively promotes, Article Processing Charge-based business models for gold open access. Like the ~70% of open access journals worldwide, OHP journals do not impose an Article Processing Charge (APC). Humanities scholars continue to have a bias against author-fees (considered "vanity publishing"), making APC models almost non-existent among humanities journals. The RCUK should acknowledge that non-APC is the dominant model of gold open access and fund more flexible mechanisms for universities in support of non-APC journals. Even though this will be difficult to implement, it is sorely needed.
- 6. As the government has said it will not provide additional monies to support APCs that this funding is to 'come out of existing research funds' (Willetts, <a href="http://www.bis.gov.uk/assets/biscore/science/docs/l/12-975-letter-government-response-to-finch-report-research-publications.pdf">http://www.bis.gov.uk/assets/biscore/science/docs/l/12-975-letter-government-response-to-finch-report-research-publications.pdf</a>, p. 2) this policy is effectively a cut in the overall research budget. We fear that the humanities will, as it too often does, bear the brunt of this indirect cut. Further, we are concerned by the RCUK's intention to provide block grants only to some universities.

## Embargo periods for articles published under the Green model

7. None of the 14 journals that are part of OHP has any embargo period and we do not support any embargo on green-open access to research publications. We recommend this clause be removed from the RCUK policy and not adopted in any subsequent policies. At a minimum, the RCUK should mandate RCUK-funded authors of articles and monographs to retain certain non-exclusive rights to their manuscripts and use them to authorize immediate green open access. We also find the Finch group's discussion of delivering open access monographs in "sub-optimal" formats discouraging. Humanities disciplines often take publications directly as their corpus of study. The rising use of computational techniques in the humanities requires that all research output be amenable to the full range of research methods, techniques and tools digital humanities scholars are developing.

# Engagement with publishers, universities, learned societies and other stakeholders

in the development of research council open access policies and guidance

8. The conclusions and polices are weighted so heavily towards the concerns of large commercial publishers it is difficult to avoid the conclusion that the concerns of the traditional backbone of the scholarly communications ecosystem, namely, university presses, learned societies, small commercial presses, libraries and researchers, were underrepresented in the process. (And this despite the fact that a recent report found many commercial companies already 'enjoying profit margins as high as 53 per cent on academic publishing' as compared to '6.9 per cent for electricity utilities, 5.2 per cent for food suppliers and 2.5 per cent for newspapers' (Simon Lilley, 'How Publishers Feather Their Nests on Open Access to Public Money', *Times Higher Education*, I November, 2012, p. 30-31,

http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=421672&c=1; referring to David Harvie, Geoff Lightfoot, Simon Lilley and Kenneth Weir, 'What Are We To Do With Feral Publishers?', submitted for publication in *Organization*, accessed through the Leicester Research Archive, <a href="http://hdl.handle.net/2381/9689">http://hdl.handle.net/2381/9689</a>.)

- 9. The resulting open access policy of RCUK is needlessly narrow and will likely have the unintended consequence of discouraging competition in the publishing sector, just at a moment when innovation is blossoming. In particular, the wait-and-see attitude adopted in respect to monographs undervalues humanities research and underestimates the rapid growth open access monograph publishing. The Directory of Open Access Books currently lists 1259 titles published by 35 presses. Specific open access mandates for monographs would greatly accelerate progress in this area.
- 10. It would appear that there was also insufficient consultation with the international open access community resulting in a policy which is out of step with developments abroad. The UK's historical leadership in research is at risk as a result.
- II. Astrid Wissenburg, former deputy chief executive of the ESRC, and a member of the Finch committee, has stated that gold author-pays open access will only succeed if 'the rest of the world quickly following the UK's lead on gold, thereby removing the need for UK institutions to continue paying both subscription and article fees' (<a href="http://www.timeshighereducation.co.uk/story.asp?storycode=421949">http://www.timeshighereducation.co.uk/story.asp?storycode=421949</a>). However, the emerging international consensus is strong green mandates with minimal, if any, embargos and APC's only for fully open access journals. In its attempt to support hybrid journals, the RCUK's policies have a very good chance of actually undermining the open access it seeks. Additionally, as Wissenburg makes clear, there is the very real possibility of UK universities

paying twice for the same content – once for subscription-based journals published overseas and again to cover the costs of publication for their own scholars - thus increasing, rather than reducing, access costs. Such policies have drastic implications for overseas authors and others such as postgraduate students and independent or retired scholars who wish to publish in UK journals, but who have access neither to the UK's block grant nor to institutional funding. It will also have consequences for UK authors who are likely to publish increasingly in international journals free from APCs, thus further damaging the reputation of the UK as a research leader. In the words of the Arts and Humanities Research Council, 'UK scholarship will risk becoming provincialised and our universities will be pushed down international rankings.' (Open Access to research: British Academy response', 26 Jul 2012, <a href="http://www.britac.ac.uk/news/news.cfm/newsid/786">http://www.britac.ac.uk/news/news.cfm/newsid/786</a>)

# Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

12. The broad range of reactions from the scientific and publishing communities speak to a set of policies which, while well intended and welcome in terms of their unwavering support for open access, nevertheless fail to recognize the diversity and current trajectories of the contemporary scholarly communications environment. The confusion and uncertainty over the likely impacts of the RCUK policies suggests the concerns of a majority of stakeholders, including the most innovative smaller players, have been insufficiently addressed. We encourage the House of Lords to find that the RCUK rework its open access policies along the lines suggested above.

17 January 2013

## Operational Research Society (ORS) - Written evidence

## I. Background

The Operational Research Society (ORS) has a portfolio of seven publications, six of which are published through Palgrave-Macmillan (P-M). ORS has enjoyed an excellent relationship with its publishers for many years, and has been working closely with them in consideration of the Government's views on Open Access (OA) and the subsequent Finch Report. At the time of the Finch Report, none of the Society's publications were OA. Whilst welcoming the Government's initiative on OA, it is important to point out that ORS receives over half its income from its publications, and hence appropriate action over OA is vital to the future well-being of the Society.

### 2. Action

Following publication of the Finch Report, ORS and P-M immediately held a series of discussions to determine future policy. It was decided that from I<sup>st</sup> January 2013 all journals would be published in hybrid form. That is, authors would be offered a choice on whether their paper (once accepted) should be published in the traditional (subscription based) way, or should be published OA online. The OA model chosen was the Gold model. Further discussions are now underway to decide whether a new OA only journal should be introduced into the ORS portfolio, again using the Gold model.

### 3. Financing Article Processing Charges

This is a worrying factor relating to OA. The level of APC resource which will be made available from the Research Councils is clearly inadequate, and the suggestion that allocation of this resource would be by means of a block grant, mainly to the top research-led universities, seems unfair. Although various estimates have been made of the likely total of APC charges, the generally accepted level seems to be around £60 million per year, with the Research Councils maybe providing about £10 million in total. It seems certain that some authors, who previously would publish in subscription-based journals, which will in future be OA journals, will be forced to publish elsewhere. Many universities are in perilous financial positions, and it is unlikely that they will be able to provide substantial inputs of resources for APC charges.

### 4. Gold or Green?

It now seems likely that both Gold and Green models will now be acceptable to the Research Councils. There is a strong and growing feeling within the academic community that the embargo period for the Green model should not be more than 6 months, but some publishers are still insisting that the embargo period should be as long as 18 months. The length of the latter period would of course affect the timeliness of cutting edge research.

### 5. Challenges to the scientific community

Most Learned Societies depend heavily on their publications for income, and ORS is no exception. It is not being over-dramatic to conclude that there is a strong possibility that some Societies may face severe financial difficulties or even closure if the level of resourcing previously enjoyed from publication income is severely curtailed – and this is surely not in the Government's interests. Indeed, well-respected publishers also face

## Operational Research Society (ORS) - Written evidence

hardship if OA is not adopted on a wider global scale. It seems likely that future Research Excellence exercises will require all research outputs submitted to be OA. However, in many science and technology subject areas it is undoubtedly true that the journals with the highest reputations are US based, and at present these are not mainly OA journals. This implies that the very best of UK research will not be published in journals which will highlight British achievement in a global scenario.

17 January 2013

### **PLOS – Written evidence**

### **Executive Summary**

- 1. PLOS is a successful non-profit Open Access publisher that exemplifies the successful application of innovative approaches to scholarly communication.
- 2. PLOS strongly supports the UK government position on widening access and welcomes the central findings of the Finch Report and their implementation via the RCUK and Wellcome Trust Open Access policies.
- 3. An effective market in scholarly publishing services requires transparency of pricing and price sensitivity of the purchasing customer. Based on the financial success and pricing of existing Open Access publishers, transitional costs and the final level of APCs can be lower than incumbent publishers claim are required.
- 4. For a confident publisher whose business is to maximize access to, and impact of, the research it publishes, repositories are partners, not a threat. There is no justification for embargoes for repository mediated open access.
- 5. Open Access publishers have demonstrated both excellence and leadership in high quality and innovative peer review processes. A move to Open Access will enhance the reach and prestige of UK research.
- 6. The shift to Open Access poses challenges for learned societies but these are symptoms of deeper structural issues. PLOS is working in collaboration with a wide range of stakeholders to provide information and resources to aid this transition for scholarly societies.
- 7. The Creative Commons Attribution license is the license of choice for major Open Access publishers and maximizes the reach and impact of published research. The objections that have been raised to its use are largely based on misunderstanding and ignorance.
- 8. The Humanities and Social Sciences face different challenges in the transition to Open Access due to the nature of their funding but where funding is similar to STEM then similar implementation is appropriate.

#### Introduction

- I. PLOS is a non-profit Open-Access publisher that has grown from its first publication in 2003 to become a major player in scholarly publishing in less than ten years. PLOS publishes seven journals including the highly selective general biology and medical journals *PLOS Biology* and *PLOS Medicine* four specialist journals and *PLOS ONE*, the journal that publishes more research from the Wellcome, BBSRC, and MRC than any other journal. PLOS is financially sustainable with a business model based on publication charges that makes peer reviewed research articles immediately available online for use and for re-use to anyone. Authors retain copyright of their article and license them for public reuse via a Creative Commons Attribution license [1].
- 2. PLOS strongly supports the UK Government's position on widening access to publicly funded UK research, the conclusions of the Finch Report on widening access and the RCUK policy on Open Access. Open Access will deliver benefits for the economy, for medical patients, for innovators, for small and medium enterprise, and for the wider engagement of

British society in scholarship more generally. The story of PLOS shows that an innovative approach to scholarly publishing can provide cost effective, high quality, and widely accessible research publications without requiring compromises.

3. PLOS is delighted to provide evidence to this enquiry but we also wish to express concern at the timing, nature, and level of stakeholder engagement of the current enquiry. A number of key stakeholder groups were not informed of the enquiry, potentially hampering the diversity of evidence and range of discussion that the committee will hear.

## Policy Implementation in the UK

- 4. PLOS strongly commends the Government, the Wellcome Trust, and RCUK on their efforts to implement greater access to the outputs of publicly funded research. There is clear evidence that innovation is hampered by a lack of access and that the economic activity generated through controlling access via traditional business models far outweighs the costs of reducing access. For example, the human genome project generated US\$141 for every dollar spent [2]. According to the Houghton Reports [3-5], Open Access is likely to return a 5-fold increase in investment. That is, there is a net benefit to the UK economy in moving towards models that widen access. These pure economic benefits will also be bolstered by benefits of wider engagement in research, cultural enrichment, and better informed policy making.
- 5. With the benefits of widening access clear, the question moves to the most effective means of implementation and any associated costs. It is clear that in spending public money there are tensions between the pace of transition, transitional costs, and the delivery of public benefits. The management of the transitional process is therefore critical and requires informed engagement by all stakeholders.

### **Article Processing Charges**

6. PLOS publishes peer reviewed research papers that can be freely accessed, used and reused by anyone. The publishing costs are covered by article-based publication charges (APCs) to authors. PLOS reached break even in 2010 and has made a modest surplus since then with revenue of \$24M in FYII. In 2012 PLOS published almost 25,000 papers representing 63% growth over 2011. Publication charges make up the majority of revenue.

#### Transitional costs

- 7. The majority of the current cash flow in UK scholarly communication is used to purchase subscription access to traditional journals from incumbent publishers. PLOS recognizes that there may be transitional costs involved in shifting these cash flows from subscriptions to support of publication charges. However the claimed magnitude of those costs and the ongoing demands for more money from incumbent publishers appear to us unreasonable. In particular, where there are additional charges paid for making a specific article open access in a predominantly subscription journal there is risk of 'double-dipping', where the article costs are covered twice, once through a subscription and one through an APC. It is also essential that like to like price comparisons are made where existing subscription revenue could be used to subsidize APCs.
- 8. We strongly believe that the costs of research communication and dissemination are part of the costs of doing research and that these costs need to be incorporated into research funding. We also strongly believe that there are large inefficiencies in the offerings of

traditional scholarly publishers and that our success and price levels demonstrate that equivalent services can be provided at much lower cost.

- 9. It is widely accepted that the scholarly journal subscription pricing is a result of systemic market failure. PLOS believes that this can be best addressed by creating a functioning market with transparent service pricing. What is critical to managing the transition to this market is transparency of pricing. Currently most subscription pricing is subject to non-disclosure agreements. This means that authors not only are unaware of the prices of the journals that they choose to submit their articles to, but that they are *not permitted* to make a price comparison. This also hampers entry to the market by new innovators and creates special challenges for learned societies interested in adopting an Open Access approach.
- 10. A market in which services are transparent and authors are aware of and sensitive to that pricing is one in which this substantial moral and economic hazard can be avoided [6]. Achieving price sensitivity amongst authors is uncomfortable and raises some concerns. However we cannot see another mechanism that delivers a functioning and transparent market.

### Fair and non-exclusionary pricing

- 11. PLOS in contrast to virtually every other scholarly publisher, particularly subscription based publishers, has not raised prices since 2009 [7]. In addition to this, PLOS offers waivers for those who cannot afford to pay publication charges, investing \$US2.2M in this program in 2011. In addition to waivers, PLOS introduced a Global Participation Initiative in 2012 specifically aimed at encouraging participation from researchers in low and middle income countries by setting lower prices (starting at zero) for research funded by countries in two groups based on a range of economic criteria.
- 12. Compared to our subscription-based competitors providing wider access offerings within subscription journals comparable PLOS journals are priced lower (eg. \$3000 for Elsevier, \$5000 for Cell Press, \$5000 for *Nature Communications*, compared with \$2900 for *PLOS Biology* and *PLOS Medicine* and \$1350 for *PLOS ONE*).

#### **Embargoes**

- 13. PLOS favors fully funded access delivered through peer reviewed Open Access journals as the ultimate method for ensuring access to research. However, PLOS also recognizes the significant contribution that disciplinary, funder, and institutional repositories have made to widening access. Repositories are a key part of managing the transition. They can provide wider access at relatively low cost and can provide an effective means of buffering cash flows as they shift from subscriptions to publication charges.
- 14. Traditional publishers often allow deposit of the author's final version in many cases but often require that it not be made available for some embargo period. PLOS works with repositories such as EuropePubMedCentral by depositing our final published versions directly on publication. We see no need for any embargo that reduces access to our final published articles for some arbitrary time period. There is also no credible evidence that shows that availability through repositories does any damage to traditional publishers. There is no published evidence to support the idea that longer embargos are required for different fields nor that longer embargoes improve the viability of publishers or their ability to recover costs. Moreover, a recent report commissioned by the Research Information Network (RIN), JISC, Research Libraries UK (RLUK), the Publishing Research Consortium

- (PRC), and the Wellcome Trust [8] concluded that permitting embargoes is unlikely to provide the long-term incentives for publishers to transition to open access and would thus hamper the growth of access.
- 15. The most comprehensive study on repository deposition and its effect on publishers is the PEER project, a large scale EU program that involved both libraries and publishers [9] This showed that availability through repositories actually increased traffic to the publisher sites. In terms of observational evidence the long-standing tradition of deposition to disciplinary repositories in Economics, Social Sciences, and most notably in particle physics and astronomy has not been linked to any significant subscription cancellations. Nor has any publisher provided credible evidence that the NIH Public Access policy requiring deposit of author papers in PubMedCentral has had any negative effect.
- 16. The experience of PLOS is quite the opposite. We see our mission as promoting access to content, and repositories of various types are our partners in this endeavour. This includes archival, disciplinary, and institutional repositories which serve different audiences and different needs. We are confident that the value we add to papers in the review and publication process at PLOS is valued by our authors. We regard simultaneous claims that traditional subscription publishers add significant value through the publication process and the call for embargoes as contradictory. A publisher like PLOS -- confident of the value that it adds through markup, archival, indexing, editorial services including peer-review and providing access -- has nothing to fear from alternative earlier versions of research articles being made available via e.g. institutional repositories. The distinction between green and gold outlined in the Finch Report, therefore, presents a false dichotomy. Both approaches should be employed in maximizing access and discoverability.

#### **International Issues**

- 17. Research is a global enterprise tackling problems of global, national, and local relevance. Open Access will increase the reach of UK research and will increase the uptake and use of our publicly funded research. Concerns over the international access to UK research are at best misguided. Access is already available to those who wish to exploit UK research via subscription journals. Moreover, payment of subscription fees often benefits publishing companies that are not UK based.
- 18. The value of research is in its use and re-use and we should be far more concerned about solutions or approaches to global environmental, health, and economic problems that are not arising because the researchers with the potential to provide solutions have no access to the discussion of our problems. With an aging UK population we should be worrying not whether a cure for Alzheimer's may come from China, building on UK work, but that it might not come at all.
- 19. Equally important is that Open Access has been shown to increase the visibility of research, both that made available through repositories and through open access journals. This increased visibility can lead to more extensive use of research, wider collaboration, and greater impact.

## Editorial excellence in Open Access journals

20. All research articles published by PLOS are peer-reviewed. The peer review process has always been led by experienced editorial professionals implementing high quality systems of review, which includes not only an evaluation of the science but also ensures high ethical

and reporting standards. PLOS editors and journals have been at the forefront of improving quality of published articles through requiring reporting guidelines, supporting clinical trial registration and requiring accessibility of data that support published papers. Editorial staff, whether internal or academic volunteers, have no access to information on whether waivers or discounts have been requested and thus make editorial decision based only on editorial criteria. In contrast to virtually all other medical research publishers, PLOS does not accept advertising from pharmaceutical companies. PLOS journals have rigorous competing interests policies.

- 21. This rigorous editorial process delivers accepted research papers that are highly cited and read both by researchers and the general public. From the most important and highly influential papers to technically sound work of interest to a small group of specialists, PLOS provides editorial processes that efficiently and cost effectively deliver the validation and certification that allows funders, researchers, patients, policy makers and innovators to have confidence in the published work.
- 22. In any market there are bad actors and this is as true of journal publishing, both subscription based and open access. Both trade organizations and other groups have moved to provide certification mechanisms that will require further work and improvement. Nonetheless, recent studies have shown that the influence of research, as measured through citations is equivalent in open access and subscription journals [10,11]. Differences in the quality of service are much greater between journals and publishers, than they are between business models.

#### **Risks for Learned Societies**

- 23. Open Access with its transparent pricing creates a challenge for learned societies. All agree that learned societies provide valuable and important services to the research community. However these services have, in some cases, been funded indirectly through journal subscriptions. In some cases the management of journals is outsourced to commercial providers making the transition particularly difficult for the society.
- 24. PLOS receives many queries from learned societies who are interested in moving to an Open Access model and we provide informal information and guidance on a regular basis. We are currently developing more formal resources about pricing and processes to help support societies wishing to transition existing subscription journals to open access as well as working with a range of other stakeholder groups to generate materials to support societies through this transition.
- 25. The challenge for learned societies operating in the 21<sup>st</sup> century is to provide services that are valued and which are paid for. An unfortunate characteristic of many current societies is that they do not believe that their membership are prepared to cover these costs directly and they have therefore become dependent on the indirect funding providing through journal subscriptions. We believe that learned societies face a range of challenges and that the difficulties identified in the transition to Open Access are a symptom of deeper problems that need to be addressed at their roots.

#### Licensing

26. Where a funder purchases or funds publication services the funder has a legitimate right to dictate the service requirements to match their mission needs. Equally a funder can reasonably require that funded researchers meet specific requirements, including reporting

requirements. It is therefore also legitimate for funders to require dissemination in a manner that aligns with their mission. This is particularly the case for public and charity funders.

- 27. There is clear evidence that for publicly funded research the maximum economic and research impact is achieved when research outputs are readily available, accessible, and reusable (3-5). The licensing terms under which research articles are made available can ensure this re-use. In the specific case of copyrightable works such as research papers the Creative Commons Attribution License (CC BY [I]) provides the greatest re-usability and is an appropriate license to use. We therefore strongly endorse the recommendation of the Finch Report and implementation by RCUK and Wellcome that this is the preferred license to be used by UK funded researchers
- 28. Many criticisms have been made of the RCUK and Wellcome preference for the CC BY license over the past months. These include a number of claims; that it enables plagiarism and allows mis-use and misrepresentation, or that it may prevent incorporation of third party content. These claims are baseless. CC BY specifically prevents plagiarism, requires attribution, and allows an author to define attribution requirements on a case-by-case basis (including requiring that attribution be removed if desired). CC BY is perfectly compatible with a viable publication business and is the license of choice for all large Open Access publishers including PLOS, BioMedCentral, Hindawi, eLife, as well as many smaller publishers. It is the license recommended by the Budapest Open Access Initiative (BOAII0) Expert Group for Open Access publications.
- 29. The CC BY license also allows commercial re-use, potentially including for teaching, small and medium enterprise (SMEs), translation, or in the context of advertising. There are two main reasons for permitting commercial re-use. First, as the examples above suggest, it is difficult or impossible to prohibit some use without also preventing other desired uses in unexpected ways. Second, it is in part the *purpose* of publicly funding research to support economic activity in the private sector. For commercial re-use to be expressly prohibited runs counter to the aims of public funding and supporting wider access. It should be noted that SMEs can make significant gains with unfettered access.

#### **Humanities and Social Sciences**

30. PLOS is a publisher focused on the sciences and many of the successful large scale efforts in open access have also been in the STEM arena. We recognize that the humanities and social sciences are funded in a structurally different manner in the UK and that where this is the case separate funding mechanisms may be required. Nonetheless the principle that research dissemination is a fundamental part of the research process and must be properly funded holds.

#### **Background on PLOS**

31. PLOS celebrates the 10<sup>th</sup> anniversary of its first publication, PLOS Biology in 2013. It is a not for profit open access advocacy and science and medical research publishing organization headquartered in the US with a second office in Cambridge, UK. PLOS publishes seven journals: two highly selective and prestigious journals, PLOS Biology and PLOS Medicine, four community journals that focus on important areas in biomedicine and are highly influential in their fields, and PLOS ONE. All PLOS journals are online and exploit the opportunities offered by that medium. In addition, PLOS ONE represents a new model of scholarly publishing because of its peer review model, which selects papers for publication only on objective measures of quality, but does not make subjective decisions on

impact. It has been the world's largest journal for the past two years and its innovative editorial and business model is now being copied, with varying success, by a range of traditional commercial publishers including Springer, Nature Publishing Group, Sage Publishing, and Wiley-Blackwell, as well as Scholarly Society publishers, such as the Royal Society and the British Medical Association.

#### **PLOS** and **UK** research

32. PLOS ONE publishes more research papers funded by the Wellcome Trust, BBSRC, and MRC than any other journal and is in the top ten for both AHRC and NERC. This proportion is rising rapidly. Other PLOS journals figure prominently on these rankings.

18 January 2013

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## Political Studies Association of the UK - Written evidence

## **Executive Summary**

The Political Studies Association (PSA) exists to promote political studies and thus supports moves to widen access to research. However, the Government's proposals for implementing an open access (OA) policy are highly problematic, due in large part to inadequate consultation and hence a failure to consider all pertinent issues, not least the significant differences that exist between subject disciplines.

This paper highlights a number of concerns relating to the Government's policy for achieving open access to publicly-funded research:

- Flawed assumptions about:
  - o the process and conduct of social science research;
  - o the methodologies upon which the current proposals are based;
- These flawed assumptions lead to a biased conclusion preferring so-called 'gold' OA to other potentially more workable solutions;
- A likely significant negative impact on UK social science, threatening the participation
  of early career researchers and the UK's capacity to compete on equal terms with
  social science research elsewhere;
- A major threat to UK academic freedom and copyright;
- A significant impact on the externally-perceived quality of UK research, based not on rigorous peer review but instead the ability to 'pay to publish';
- The likelihood of handing a significant competitive advantage to the UK's competitors;
- A negative impact on the vital activities of the UK's learned societies.

The PSA calls on the Government to reconsider its policy and pilot it differentially.

#### I. Introduction

- 1.1 The PSA welcomes the idea of moving towards more open access to academic publishing. It does, however, have very serious concerns about the speed and lack of consultation with which the Department for Business, Innovation and Skills (BIS), RCUK, and to a lesser extent HEFCE, have pressed ahead with developing and implementing an open access policy. Failure to give full and proper consideration to all the issues has resulted in a flawed policy that will have serious consequences for the international standing of British universities and research.
- 1.2 As a consequence of failing to consult sufficiently widely, the BIS policy on open access has been shaped largely by considerations specific to the science, technology,

engineering and mathematics (STEM) community. The STEM community has been at the forefront of the open access movement and open access publishing is, therefore, considerably better established in the sciences than in the social sciences, arts and humanities (HSS). The needs and concerns of HSS subjects are in most cases quite different to STEM and thus require far fuller scrutiny and consideration by the Government than has been the case to date. It is important that the BIS policy acknowledges that a one-size fits all approach is simply not appropriate.

## 2. Gold, Green, Embargo Periods and Stakeholder Engagement

- 2.1 The Finch Committee on Open Access outlined the two main approaches. The first is the so-called 'gold' model, whereby researchers pay existing publishers to make their research publicly accessible. This is funded through the use of Article Processing or Publishing Charges (APCs). The report's authors estimate that this would cost research funders between £50-60 million a year. Although the methodology for this calculation is not clear, it is the route advocated by RCUK and appears to be the preferred option of HEFCE. Indeed, RCUK has already announced that from April this year all articles arising from research funded by RCUK will have to be published in open access form and has made available a total of £17 million to UK institutions for the payment of APCs. In calculating the amount of money it would make available for the payment of APCs, RCUK has taken figures from the Finch Report, which are based on the average level of APCs across all disciplines, and has used a figure of £2,072 inc. VAT. Using an average significantly disadvantages HSS because the cost of processing an HSS article is significantly higher than in STEM. This is due to both the greater length of HSS articles (19 pages vs 10 pages 92) and lower acceptance rates (11% vs 42%93). Furthermore, STEM subjects receive a significantly higher proportion of funding from RCUK than HSS and hence it is unclear where the cost of APCs for most HSS articles will be sourced.
- 2.2 The alternative model, 'green' open access, where researchers deposit a version of their work in institutional repositories, means papers can be published in subscription journals without an APC, but have to be made freely available after an embargo period. The authors of the Finch Report, in coming out in favour of the 'gold' model, argued that repositories cannot act as publishers. They also argued that the existing system of 'green' OA, whereby researchers have the choice of whether or not to deposit their research in repositories, is not working, as only a fraction of researchers has ever participated. This view has been strongly challenged by a variety of commentators since the Finch report was published and the Government announced its agreement with the main findings and recommendations. The PSA believes that the 'green' model has considerable merit and is likely to have far fewer negative consequences for academic freedom and research standards than the 'gold' model. However, in setting embargo periods much greater consideration needs to be given to the fact that the half-life of HSS articles (their continued utility in frontrank research) is considerably longer than for most STEM subjects. The embargo period for HSS of 12 months as currently set by RCUK is inadequate and should be extended to at least 36 months in order to protect the intellectual property of the researcher and to continue to deliver funding to the profession to enable it to

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<sup>92</sup> The Future of Scholarly Journals Publishing among Social Science and Humanities Association, Report on a Study Funded by a Planning Grant from the Andrew W. Mellon Foundation by Mary Waltham, 2009
93 ibid

- develop young researchers.
- 2.3 Clearly it is in the interests of higher education to reduce its costs, but the 'gold' model does not necessarily lead to this. Transaction costs alone are going to be high and, as acknowledged by Finch, the transitional period in which universities continue to pay subscriptions for journals in their libraries (particularly those journals in which UK researchers are a small minority of authors), yet also have to contribute towards the costs of APCs, could be many years.
- 2.4 The Government has justified support for OA on the basis that 'the public shouldn't have to pay twice', both to fund academic research and, through subscriptions, to pay for the published outputs. However the favoured gold version will deliver almost entirely free goods to the publishers, paid for by publicly funded APCs. This is in effect a subsidy from taxpayers and from fee-paying students to commercial organisations, since taxpayers contribute to funding academic research through the research councils and through the portion of the fees paid by students which are used to fund the time academics commit to research and scholarship time. The Government's argument that 'the public shouldn't have to pay twice' is belied by their own proposals: the public will always have to pay both for the research and its publication, whether the publication costs come from APCs or subscriptions.

### 3. Threat to Academic Freedom

- 3.1 It is not clear where APCs for the social sciences will come from. RCUK and Finch argue that the costs of APCs will be factored into research bids. This may work for STEM, but in social science the lone researcher and small grants for targeted specific research would not stand the cost. New researchers working to small unfunded projects in their own time, a traditional approach for many post-doctoral students anxious to convert their theses into journal articles, do not fit into the 'gold' model at all. Their model rarely exists in STEM subjects, the driver for Finch. The implementation of 'gold' open access will make it even harder for early career colleagues to get published. If Universities hold a sum of money in reserve for paying APCs they will have a vested interest in supporting established 'sure-bets' rather than early career colleagues, or those returning after a career break. At worst those operating outside the mainstream may find funding completely withheld. This is a system that risks promoting orthodoxy over innovation and heterodoxy.
- 3.2 Quite apart from the threat to early career academics, it runs counter to the principles of academic freedom that universities will, in effect, become publication gatekeepers, able to determine the journals in which their staff are published and which articles are deemed worthy of the financial support necessary to be published.
- 3.3 A further concern is HEFCE's proposal that all outputs for the REF2020 should be open access. Given the limited availability of resources for the social sciences this will inevitably lead to 'approved journal' lists, which many would consider an unacceptable infringement of academic freedom, while further limiting the access of new members of the profession and extending overall managerial control over academics.
- 3.4 Also of considerable concern is the requirement that articles that comply with RCUK policy should be available under a CC-BY copyright licence. This means that the authors effectively lose control over their work; so long as it is attributed anyone

can use the work, including those who utilise it for a commercial interest and even extremist groups who may want to piggy-back on the research or distort its findings to their own ends. Academics will have no control over this.

## 4. Loss of UK Credibility

- 4.1 Another issue is that of quality control. The Finch report does not deal adequately with this and although it rehearses some points, no clear recommendation (at least not a convincing one) is made. The current peer reviewed process is robust and although there are some obvious errors from time-to-time, it works well. The 'gold' option will introduce a perverse incentive in that if an author can demonstrate they have met methodological and ethical criteria the publishers have an incentive to publish them whatever the quality of their data or analysis. The more each journal has in terms of throughput, the more money they take and therefore the higher the profit. Publishing executives will set performance indicators based on throughput and via this, income rather than quality.
- 4.2 Given the comments in the report about the need to make research outputs available more speedily and in accessible ways, the publishers would have the incentive to move towards real-time rolling publishing. Even if it does not evolve into this, there is a danger that peer review will diminish in terms of quantity and quality. This will have a most unfortunate detrimental effect on the international standing of UK research.
- 4.3 This will also encourage the differentiation of journals even more so than at present. Those able to raise higher APCs and to appoint high quality editors will be able to use this as a means to attract good peer review (assuming a genuine market and not a simply regulated flat fee). Merely to publish in these journals will suggest high quality papers, but it will raise another barrier to those entering the profession.

### 5. International Considerations

- 5.1 Anecdotally, it appears that some major US publishers in looking at the UK OA policy, especially as it applies to copyright, are quietly asking journal editors whether they wish to consider any UK based papers at all. UK based editors of UK journals are also alive to the quality and copyright issues and are also asking whether the rushed implementation of these seriously flawed proposals will result in them having to restrict publication in their journals to non-UK based authors. An unintended damaging consequence of the Government's policy may well mean that serious quality international journals restrict the access of UK authors, while the OA policy into which the UK has leapt reduces much output into vanity publishing and online blogs.
- 5.2 The OA proposal as it stands would make UK research widely available at no cost to the UK's commercial rivals. It will allow UK taxpayers and researchers to be exploited by both commercial publishers and international commercial organisations. We run the danger of handing UK funded research free of charge to economic and academic rivals unless there is a global open access provision. At present this appears to be unlikely, especially in HSS disciplines.

## 6. Impact on Learned Societies

In HSS, one area where the academy has benefited from the existing publishing model is through the annual subventions passed on to learned societies in return for the right to publish the discipline-based journals owned by those societies. In the case of the PSA, for example, this currently accounts for over £400k per year, which is then used to support the development of the profession in a number of ways. These include outreach to schools to further widening participation and professional development activities for doctoral students. Learned societies such as the PSA actually play a major role in facilitating research and its effective dissemination. A destructive consequence of the Government's open access policy is a threat to this income stream for learned societies, the developmental activities that flow from it, in addition to the long-term threat to academic freedom itself.

## 7. Conclusion

7.1 The PSA urges the Government to acknowledge that significant differences exist across disciplines and the threat of the 'gold 'model to academic freedom and the reputation of British universities. It thus urges a reconsideration of the preference given to the 'gold' model over the 'green' model, a review of the embargo periods allowed under the latter model and modification of the CC-BY licence requirement under the 'gold' model to a CC-BY-NC licence requirement. Ideally the revised policy should be piloted in a number of disciplines before any decision is made about applying it to all publicly-funded research in the UK.

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### The Publishers Association - Written evidence

#### Introduction

I. The Publishers Association (The PA) <sup>94</sup> welcomes this opportunity to submit evidence to the Committee Inquiry. We participated constructively in the Finch working group and have publicly supported the recommendations in the working group report ("The Report") and the endorsement setting out Government Policy in the letter from David Willetts MP, Minister of State for Science and Innovation to Dame Janet Finch of 16<sup>th</sup> July 2012. The publishers we represent look forward to playing a full role in the implementation. We understand that this Inquiry is to focus on the implementation of that Government Policy. We summarise below our responses to the issues raised in the Chairman's letter and we expand on these in a more detailed Appendix.

## The Issues Raised in the Chairman's letter

Support for Universities to cover article publication charges, and the response to these efforts

- 2. On 8 November 2012, RCUK announced details of the block grant funding mechanism which it is introducing to aid its implementation of open access policy. It estimates that in the first year these will cover the Article Publication Charges (APCs) of 45% of RCUK-funded papers, provided that universities supplement the RCUK block grants by an additional 25%. By the fifth year RCUK estimates that its block grants will cover the cost of Gold open access publication for 75% of RCUK-funded papers, again assuming a 25% matching contribution from the universities. We are not in a position to comment on the ability of the universities to supplement the RCUK block grants in this way, nor on how they might fund any probable mandate for open access publication from HEFCE. However, we would observe it is possible that some part of this RCUK block grant funding will be absorbed by administration costs in managing the payment of potentially thousands of APCs at any single institution.
- 3. We recognize that the bold aim to shift the scholarly communication system from a subscription/ licensing base to Open Access has not been attempted on a national scale anywhere else. The Report acknowledged the cost of taking a leadership role. RCUK and the Universities will need time to work out policy and operational issues with the full support of all stakeholders. As publishers we are ready to enable publication of as many papers under the Gold open access model as universities are able to pay APCs, from block grants and/ or their own resources. However, funding for APCs is unlikely to be sufficient for several years, so it is essential that the alternative Green route to open access works smoothly and is sustainable as we outline further below.

### Embargo periods for articles published under the green model

4. On this point, RCUK policy is inconsistent with Government Policy and risks undermining its successful implementation. The Report said the following on embargo periods:

<sup>94</sup> The Publishers Association ("The PA") is the leading representative voice and trade organisation for book, journal, audio and electronic publishers in the UK. Our membership includes publishing houses in the academic, educational and general trade sectors. Collectively, their revenues total £4bn, 80% of the overall total for the sector.

"Our recommendations are presented as a balanced package, so it is critical that they are implemented in a balanced and sustainable way, with continuing close contact and dialogue between representatives of each of the key groups." (Executive Summary #4, p.8)."

"Where an appropriate level of dedicated funding is not provided to meet the costs of open access publishing, we believe that it would be unreasonable to require embargo periods of less than twelve months. (Government, funders, universities)" (Executive Summary #4, xviii, p. I 0).

5. This view was endorsed by David Willetts in his letter to Dame Janet of 16<sup>th</sup> July 2012, in which he set out Government Policy as follows:

"Embargo periods allowed by funding bodies for publishers should be short where publishers have chosen not to take up the preferred option of their receiving an Article Processing Charge (which provides payment in full for immediate publication by the 'gold OA' route). Where APC funds are not available to the publisher or learned society, for the publication of publicly-funded research, then publishers could reasonably insist on a longer more equitable embargo period. This could be up to 12 months for science, technology and engineering publications and longer for publications in those disciplines which require more time to secure payback. Even so, publications with embargo periods longer than two years may find it difficult to argue that they are also serving the public interest."

6. Publishers are in broad agreement with this Policy with its distinction between appropriate Green open access embargo periods depending on the availability of funding for APCs. However, the RCUK Policy says only that Green open access embargo periods should be no longer than six months, except for papers arising from funding provided by AHRC and ESRC, in which cases for an interim period they should be no longer than twelve months. When questioned on this divergence from Government Policy, RCUK has stated that "ambiguity" is required. Given the expectation that there will be a large proportion of papers for which block grant funding for APCs will be not provided, even in the fifth year of implementation, it is essential that there is clarity, not ambiguity, over Green embargo periods, and that RCUK Policy be brought in line with Government Policy.

## Engagement with publishers, universities, learned societies and other stakeholders

- 7. As publishers we have not experienced effective engagement with RCUK, especially over Green open access policy. RCUK has acted unilaterally and in isolation. Successful implementation of Government Policy will require close collaboration between all stakeholders. Publishers remain ready to engage to facilitate a successful implementation, which will require above all simple processes and clear guidance for researchers.
- 8. We note that HEFCE has made a public commitment to "consult with its partners in research funding and other interested bodies before finalising its plans" and we look forward to taking part in those discussions.

## Challenges and concerns raised by the scientific and publishing communities

9. In addition to concerns about the level of dedicated funding, the costs of administration, and compliance with Government policy on the length of Green open

access embargo periods, the research community has also expressed concerns about the RCUK requirement for the blanket use of a CC-BY licence with Gold open access publication (allowing unlimited commercial and non-commercial re-use of the article and requiring only attribution to the author) and the requirement for unlimited non-commercial re-use for Green open access publication. This concern is shared by publishers. The application of a CC-BY licence may not be appropriate for every research community, nor for every researcher within a community, and may be impossible for some disciplines such as literature and music, in which articles may contain extensive quotation from third-party in-copyright works for which the research author does not have the authority to grant unlimited rights of re-use.

10. The requirement for CC-BY is also likely to have an upward impact on the price of APCs. Publishers will lose secondary income from commercial re-use which they will only be able to recover through higher APCs. The RCUK requirement for CC-BY goes beyond the Finch Group recommendations and beyond Government Policy. The requirement for unlimited non-commercial re-use to be associated with Green open access publication (RCUK has spoken specifically of a requirement for CC-BY-NC), even in cases where no funding is provided for APCs, goes even further beyond the Finch Group recommendations and Government Policy and is not accepted by many publishers who expect flexibility over the licensing terms to users for Green open access (see Appendix, #A7). Again, there has been no meaningful discussion of this issue by RCUK with publishers.

# Article Publication Charges and Green open access embargo periods: the publishers' position

- II. As publishers, our position on APCs and Green open access embargo periods is clear. We expect that by April 2013 the great majority of journals will be ready to comply with the 'Compliance of Journals' section #4 of the RCUK Policy, and with any similar policy from HEFCE yet to be published, meaning that most journals will be compliant under the Gold open access publication option. This will have the following consequences for Green open access embargo periods:
- 12. If an author submits to a journal that is offering an appropriate Gold open access option, **and** the paper is accepted for publication, **and** the author is able to pay the journal's APC, then the paper will be published in compliance with the RCUK Policy.
- 13. Conversely, if an author submits a paper to a journal which does **not** offer an appropriate Gold open access option compliant with the RCUK Policy, **and** the paper is accepted for publication, **and** the author has funding to support payment of an APC, then we would expect that the journal should comply with the RCUK Policy that requires deposit of the author's Accepted Manuscript in a repository under an embargo period of no more than 6 months, or 12 months for articles funded by AHRC or ESRC for a period of five years.
- 14. However, if an author submits to a journal which is offering an appropriate Gold open access option, and the paper is accepted for publication, but the author is unable to source funding for the journal's APC, then the paper will be published on a subscription basis with Green open access, typically available under the journal's licence terms after an embargo period of between 12 and 24 months. As cited above, this position is supported in The Report and in the Government Policy: where APC

Research publicly funded?

Yes

No

Gold OA option available from your publisher?

Yes

No

Are APC funds available from research funder?

Green OA after 6 months (AHRC/ ESRC after 12 months)

Yes

No

Green OA after 12-24 months

15. The essence of this position can be summarised in the following decision tree:

16. This decision tree has been endorsed by BIS as a correct interpretation of Government Policy and was initially accepted by RCUK, though this has yet to be reflected in its written Policy and guidance.

### Challenges and concerns, and how these have been addressed

- 17. Publishers are ready to implement Government Policy as published on 16<sup>th</sup> July 2012. We can do so if RCUK Policy is brought into line with Government Policy and if all stakeholders are able fully to engage with each other in the practical implementation of that policy. There are now considerable challenges to an effective implementation from 1<sup>st</sup> April 2013 as planned.
- 18. I am grateful to the Committee for the invitation to provide further information on this submission at the oral evidence session on 29 January, together with Steven Hall, Chief Executive of the Institute of Physics Publishing and a member of the Finch Working Group.

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#### **Appendix**

### The Finch Working Group and Government Policy

Al The Finch Working Group included representatives of all stakeholder communities - both public and private research funders, the universities, researchers, learned societies, libraries, and publishers. It succeeded in producing a set of workable

recommendations to expand access to research outputs because all stakeholders recognised that consensual solutions were more likely to be implemented effectively. From the very beginning of the working group process, publishers supported a substantial expansion of the open access publication model as a means to expand access, provided that this could be achieved sustainably and with no detrimental impact on the high quality of scholarly publishing in the UK. Publishers are ready to implement Government Policy as set out in the Willetts letter, as, we believe, are most other stakeholders.

- A2 The Report spoke of a mixed economy and a 'balanced package' of recommendations (#4, p.8), the essential elements of which are as follows:
  - i) support for Gold open access as the preferred publication model (meaning immediate open access to the final published Version of Record of a paper, with extensive rights of re-use, funded through an Article Publication Charge ("APC")) by way of grants for APCs;
  - ii) transitional support for extensions to licences, to enable access to articles from across the world that are not published on open access terms, to cover all institutions in the HE and health sectors;
  - iii) an initiative to enable free on-site access to journals in all public libraries, for the benefit of SMEs and the general public; and
  - iv) an agreement that Green open access (meaning deposit in an open access repository of the Accepted Manuscript without any payment to the publisher for its services) can be supported only if publishers are able to require a reasonable embargo period before access is enabled via the repository (Government Policy recommends 12-24 months in general, depending on the discipline), and that Green open access with shorter embargo periods should not be imposed on publishers **except** in cases where an APC is offered but the journal does not offer a Gold open access option.

The Government endorsed elements 1), 3) and 4) in its own Policy statement.

- A3 With regards to (i), support for Gold open access, for most journals the industry now offers a publication option in return for an APC which is compliant with Government Policy and with the RCUK Policy published on 16<sup>th</sup> July. Usually this includes the option of using a CC-BY licence, as required by the RCUK Policy, although we understand that this remains the subject of intense and growing debate in some author communities (see for example <a href="http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access">http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access</a>) and may not be practical in disciplines such as literature and music, in which articles may quote extensively from third-party incopyright works. We believe this issue requires further discussion by all stakeholders.
- A4 On (ii), transitional support for licence extensions, we have been told by officials at the Department for Business that no additional funding is available, which is perhaps understandable given the funding support now given for APCs. We have reluctantly accepted this position, although The Report [p.7 #3(iv) and p.101 #8.44] calls for £10m to be made available for extensions to licences. We still expect however that the rest of the 'balanced package' should be delivered.
- A5 In respect of (iii), public library access, our implementation group has been working practically with colleagues from the public library sector on technical and licensing

- work streams to enable a launch date in the spring, assuming all other elements of the package are resolved.
- A6 Finally on (iv), that short Green open access embargo periods will not be imposed on publishers if an APC is not available, it is essential that RCUK Policy is brought in line with Government Policy and that this is clearly communicated to all stakeholders, not least to researchers themselves needing to be compliant with RCUK policy under the terms of their grants.

#### Embargo periods for articles published under the Green model

- A7 The RCUK Policy was published on 16<sup>th</sup> July and no amendment has since been issued, although there has been a very extensive and intensive debate over how the Policy is to be interpreted, including we understand at a number of meetings between RCUK officials, the research community and pro Vice Chancellors (PVCRs) at which publishers were not present. We have made representations to RCUK and to BIS based on our position summarised above. We have endorsed the recommendations in The Report and we have kept faith with our side of the 'balanced package'. As explained above, we firmly believe that to apply sustainable Green open access embargo periods is a reasonable position to adopt if APCs are not available to fund a Gold open access option. We are not opposed to Green open access, although the model has no funding attached to cover the costs of publication and peer review (apart from funds to sustain repositories that have a wider rationale) and has been demonstrated by the PEER project to be operationally problematical.
- A8 Many publishers already facilitate Green open access, with embargo periods set according to the requirements of individual journals and according to academic discipline. For example, in the arts, humanities and social sciences it is likely that funding for APCs will not be readily available, but Green open access embargo periods need to ensure the sustainability of subscription based journals in these disciplines as recommended in The Report. There are concerns that disciplines with very different characteristics are being treated in the same way, with insufficient account taken of the need for varying, longer, embargo periods. Green open access with short embargo periods cannot be seen as a sustainable option on a global scale.

#### Engagement in research council open access policies and guidance

- A Proposed Policy on Access to Research Outputs was circulated informally by RCUK in March 2012. Publishers were not consulted but we reported a number of issues to RCUK officials and to the Chair of RCUK. These related to the use of the Version of Record, the funding of Gold open access, the application of "unrestricted use", and in particular the imposition of short embargo periods for Green open access across all subjects. No meeting involving publishers took place, which struck us as odd for a Policy which stated that: "ideally the version of a paper to be made open access should be the publisher's final version the Article of Record" yet with no discussion of how this was to be achieved.
- A10 As noted above, the current RCUK Policy was formally published on 16<sup>th</sup> July and again publishers were not consulted. Subsequently we made representations over

Green open access embargo periods, the licensing of re-use, and stewardship of the Version of Record. We invited the appropriate RCUK official to a publishers roundtable meeting on 17<sup>th</sup> September but he was unable to attend and no opportunity for engagement has since been offered other than a joint meeting at the Wellcome Trust on 5<sup>th</sup> October when we were told (along with ALPSP and the International STM Association) about sanctions on researchers for non-compliance and the requirement by both Wellcome and RCUK of the blanket application of a CC-BY licence for publication funded by APCs that derive from their grants. As requested by RCUK and Wellcome, we communicated these dimensions of the RCUK Policy to the publishers at large. We are aware of concerns within the research community around the application of CC-BY, but we have chosen not to take this up as an issue unless our authors decide to do so. The adoption of CC-BY by publishers will mean a loss of considerable secondary income in the medical and biochemical sciences sectors, but most publishers seem willing to accept this in order to continue to provide their authors with the publication service they require.

- All There is continuing uncertainty about RCUK policy on licences associated with articles made open access through the Green model. The RCUK Policy [#4(2)] states that "where a publisher does not offer option I"... [which is immediate Gold open access, with no restriction on re-use (our words)]..."the journal must allow deposit of Accepted Manuscripts that include all changes resulting from peer review....in other repositories without restrictions on non-commercial re-use [our emphasis] and within a defined period." No guidance is given in the RCUK Policy as to what licence should be associated with such re-use. It is common practice for journals to adopt a variety of CC licences and indeed in some instances publishers apply a proprietary licence of their own. For example, the International STM Association has developed a licence based on CC-NC-ND but with additional rights for text mining and translations. However, subsequent to publication of the RCUK Policy, and again without consultation, we hear that RCUK officials have elevated their policy to requiring a CC-BY-NC licence to be associated with Green open access deposits. We anticipate that many publishers may be unwilling to accept this requirement, which will only introduce more confusion among researchers looking for a journal that is compliant with the RCUK Policy.
- A12 As with embargo periods, a similar need for differentiation exists with regard to the blanket requirement for a CC-BY licence for Gold open access. In those disciplines, such as humanities and social science, where interpretation and context are crucial, publishers have heard concern in their author communities that the use of CC-BY will enable the misuse of research, for example by presenting extracts in ways that appear to contradict or undermine the author's meaning. These concerns are sufficiently serious for some authors to refuse to publish on this basis. There is also the practical issue that the blanket requirement for a CC-BY licence assumes that the author is able to grant CC-BY rights on the whole article. However, where articles include third party material, such as poetry in literary studies, images in art history, or research analysing computer code, it is highly likely that the copyright owners will not give the necessary rights to enable the research author to grant a full CC-BY licence. This could limit the ability of UK authors to undertake research, especially on contemporary topics, knowing that they will not be able to publish that research without breaking the terms of their grant and risking sanctions.

# The Publishers Association, Dr Rita Gardner and Steven Hall – Oral evidence (QQ 38-51)

Transcript to be found under Steven Hall

#### Reed Elsevier - Written evidence

- I. Reed Elsevier welcomes this opportunity to submit evidence to the Committee Inquiry on implementation of UK Government policy. We have given our public support for the Finch Report, and have positively engaged directly and via The Publishers Association in support of the work of the Finch Group. There are real opportunities, as well as risks, in this new policy direction so the implementation detail matters very much for all stakeholders. Sustainable, workable models supported by all stakeholders are crucial for the UK's leadership position in research and publishing.
- 2. We support the comments made in the submission to the inquiry by the Publishers Association and would add additional information below based on our own practical experience. To the four key points raised by the Committee:

## Support for universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

- 3. For the system to work well it needs to be fully funded and simple.
- 4. In our experience, where adequate funding is available to authors for open access publishing and administrative processes are simple, it has been possible to achieve 100% compliance with open access policies. This has been the case, for example, with the Austrian Science Fund (FWF) for whose grant recipients we have been publishing on a gold Open Access basis since 2010. FWF cover all costs for their grant recipients and we invoice FWF directly for all articles published by their grant recipients. Our article submissions and other systems have been tailored to ensure FWF grant recipients are aware of the policy and can opt-in. After publication Elsevier deposits the articles in EuropePMC on behalf of FWF-funded authors.
- 5. Where adequate funding is available, but the administrative process remains complicated, it is still possible to achieve high, if not complete, compliance. For example, Elsevier has operated an open access publishing agreement with the Wellcome Trust since 2006 and we have found that Wellcome funded authors are generally happy to comply with their Open Access Policy although they find the payment/reimbursement process somewhat onerous. This element of the policy is important to Wellcome Trust because it aims to make authors more aware of the cost of the scholarly communication system. Authors do, however, appreciate that the deposit of their articles to EuropePMC is handled directly by Elsevier for Wellcome grant recipients. In this way the open access agreement between the Wellcome Trust and Elsevier has operated efficiently and harmoniously since 2006, and we are committed to ensuring that it will continue to do so through 2012 and beyond.
- 6. By contrast, when the provision of funding is a barrier then in our experience compliance with open access policies is low. We believe this is the reason why author compliance with our current open access agreements with UK Research Councils is disappointing; our data indicate compliance with the MRC gold open access mandate is 14%, compliance with the BBSRC gold open access mandate is 4%, and there have been no gold open access articles published with us under the ESRC mandate.

- 7. We believe one new amendment to the RCUK policy will be positive, and this is to no longer limit use of funds for open access publishing during the lifetime of the grant as most papers are published after expiry of the grant period. This has been a significant barrier for authors and the change should now improve author compliance rates.
- 8. However we are concerned about two remaining barriers: the publicly-announced funding shortfall and the added complication of a funding split between UK Research Councils and Universities which will create uncertainty for our authors and administrative costs and challenges for all stakeholders.

#### Embargo periods for articles published under the green model

- 9. Although we offer gold open access option for all articles published in Elsevier owned journals, it seems that the UK Government objective for immediate open access to work by UK funded authors will not be met in the medium term due to limited funding for Article Publication Charges. In this situation, clarification of implementation arrangements for green open access policy is essential.
- 10. Elsevier has a number of <u>agreements</u> with funders and research universities/institutions to enable successful implementation of green open access mandates in ways sustainable for the underlying journals. These agreements, such as the one with the World Bank, enable access to accepted manuscripts via institutional repositories after a title-specific embargo period. Our embargo periods are evidence-based on comprehensive analysis of article usage data. We calculate a usage half-life and position our embargo periods at the time when 50% of the predicted lifetime usage of a typical article within the journal title has passed. Our embargo periods are generally 12-24 months, and vary across subject and titles as one size does not fit all.
- 11. The Finch Report concluded that: "Where an appropriate level of dedicated funding is not provided to meet the costs of open access publishing, we believe that it would be unreasonable to require embargo periods of less than twelve months. (Government, funders, universities)" [Executive Summary #4, xviii, p.10]
- 12. Recognising the need to maintain sustainability of the scholarly publishing system, in his letter to Dame Janet of 16<sup>th</sup> July 2012, David Willetts commented further: "Embargo periods allowed by funding bodies for publishers should be short where publishers have chosen not to take up the preferred option of their receiving an Article Processing Charge (which provides payment in full for immediate publication by the 'gold OA' route). Where APC funds are not available to the publisher or learned society, for the publication of publicly-funded research, then publishers could reasonably insist on a longer more equitable embargo period. This could be up to 12 months for science, technology and engineering publications and longer for publications in those disciplines which require more time to secure payback. Even so, publications with embargo periods longer than two years may find it difficult to argue that they are also serving the public interest."
- 13. At present the RCUK policy is not consistent with either the Finch Report or Government policy as it mandates an embargo of 6 months or less. For the vast majority of publications this is unsustainable. The costs of publishing these journals is met by selling subscriptions, for example to libraries, and so to have a sustainable business

model adequate time is needed to collect subscriptions that will cover the publishing costs.

14. Without steps to align this element of the RCUK policy with a policy that all stakeholders support, as delivered in the Finch Report, there is a significant risk that Government's objectives will not be met.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

- 15. On engagement the Finch Report stated: "Our recommendations are presented as a balanced package, so it is critical that they are implemented in a balanced and sustainable way, with continuing close contact and dialogue between representatives of each of the key groups." [Executive Summary #4, p.8] The Finch Group itself played an extremely important role as the constructive, balanced place in which issues could be aired and addressed collaboratively. We believe that it is therefore crucial that all stakeholders are clear and open about their own concerns and needs, and respectful of the views of the other stakeholders. This has happily been the case for most; however we regret that this has not been our impression of RCUK's response.
- 16. This is despite the very good efforts of the responsible officials at BIS who have engaged with all stakeholders, and continue to play a positive influencing role in attempting to bring all parties together. This is vital because of the importance of a workable solution for open access publishing, not only for the UK, but because it will set a precedent for the European Commission and other European Member States who are watching closely the UK's implementation in advance of their own.

## Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed.

- 17. Universities, publishers and learned societies have all clearly expressed significant concerns about the issues outlined above. All support the Finch Report and Government policy, but all are concerned that RCUK is acting unilaterally and at odds with the consensus carefully crafted amongst stakeholders, captured in the Finch Report, and enshrined in Government policy.
- 18. We respectfully suggest that the Committee recommend:
  - (a) That RCUK bring its policy back into line with Finch/Government policy especially regarding embargoes for green open access.
  - (b) That Government set up an on-going forum to ensure subsequent implementation steps remain on track and in line with Finch/Government policy, and to provide a forum for airing/resolving emerging issues. One such issue is around the licensing of open access content as there is growing unease amongst some academics in some fields about the imposition of a CC-BY license.
- 19. We would also comment that, although beyond the remit of this inquiry, attention is addressed to Finch recommendations aimed at increasing access within the UK to subscription content published by the 94% of authors who are based outside the UK. Initiatives such as free journal access in UK public libraries are clearly progressing well and in partnership between stakeholders. It is, however, unclear how subscription

#### Reed Elsevier – Written evidence

access is being extended in other sectors. This would be another useful topic for the attention of an implementation forum.

20. We thank the Committee for this opportunity to provide input to this review and will be pleased to provide further assistance if required.

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#### Regional Studies Association (RSA) - Written evidence

- I. The Regional Studies Association welcomes the opportunity to present evidence to your Committee.
- 2. The Regional Studies Association is a UK based registered charity and company limited by guarantee. Our organisation is international in scope and impact. Our membership is global as are our activities. We held major conferences in 2012 both in Beijing, China and Delft, Netherlands. Our journals are published under contract by Taylor and Francis and are international in their submission, publication and subscriptions profiles. The Association currently publishes two international journals, both of which have been available in hybrid format for some years although there has been no uptake of this. In 2013, we will introduce two more journals to our portfolio one further hybrid journal and one gold OA journal which is in direct response to the changing working environment in the UK and Europe.
- 3. The Regional Studies Association supports the principle that knowledge should be shared. As a learned society we welcome research results being made more widely available and the dissemination of knowledge is one of our core aims and objects.
- 4. While embracing the principle of open access the Association has a number of concerns. These include the broader impacts of a change in publishing paradigm on learned societies in general and our own society in particular and furthermore how these will impact more broadly on the communities with whom we work academics, policy makers and practitioners.
- 5. In common with many learned societies the Regional Studies Association is highly reliant on publishing receipts to fund many of its activities. We seek to represent the policy related area of regional studies as a field of scholarly endeavour both in the UK and internationally and to support researchers, policy makers and practitioners who are working on regional studies issues. In 2011, publishing receipts represented 67% of our income. These monies are expended on activities such as research grants to early career researchers of £10k each, support for topic specific research networks – we currently support 19 such groups, funding for our international divisions which themselves run events within their territories, conference bursaries, event support schemes, travel awards and support for external events in our field. The Association works hard in the knowledge transfer field in particular with organisations such as the European Commission's DG Regio, the European Committee of the Regions, OECD and World Bank. We are keen to work with Government, HEIs, learned societies, publishers and other relevant bodies to find ways to introduce more access to research while not imperilling the activities of our society.
- 6. In common with other leading associations the RSA seeks to publish the very best research in the field and uses rigorous peer review policies to ensure this. In its crudest form gold OA may be perceived to favour a quantity rather than quality model. This is a concern to us as we work in a policy related field where knowledge exchange is at the heart of many of our activities. The fact that some journals may

- adjust their standards to maximise income may have a knock on effect for peer review which could be damaging to all journals.
- 7. The Association is keen to retain equality of access to journal publishing. There is concern that access to funding for article processing charges (APC) may not be even because within or between higher education institutes depending upon how they choose to allocate funding. For example:
  - a. At the level of the individual the concern is that career stage may influence the institutional decision to fund APCs with the danger that early career researchers may find it difficult to access funds.
  - b. Depending upon individual institutional approaches it may be more difficult for those working in interdisciplinary fields to persuade publishing committees.
    - This follows well rehearsed arguments around the treatment of such areas in other institutional exercises such as the Research Assessment Exercise (RAE).
  - c. Further to the above point, in the regional studies field not all authors are employed by HEIs, some work in consultancies and government bodies and we would not wish to see independent researchers disadvantaged by not having access to APCs.
- 8. We believe that the rapidity of the move to an OA environment in the UK is proving unhelpful. There has been very little consultation with key players. This is having implications for adjustments to new working models, for example on the setting of article processing charges. Currently there is little or no demand for gold OA in our journals. To date we have only published one gold OA article. There is little known about the science of setting APCs and its impact on flow of articles. For us this will be of importance because of the need to ensure authors from departments of geography, economics and political science have an equality of funding with those, for example from business schools. We would hope to see the APCs reflect the costs of article processing, reflecting that it costs more on average to publish a Humanities and Social Science article than a STEM article because HSS articles tend to be longer and because rejection rates in HSS tend to be much higher meaning that the journal has to support increased editorial and peer review costs in manuscript management.
- 9. As our author base is global the Association will also need to consider the geographical ability to pay. Related to this and appropriate to our work is a concern that within the UK, universities in a regional publishing divide may emerge with some institutions in some regions being better able to fund gold APCs.
- 10. The Association is extremely concerned about the length of embargo period for green routes to OA. For the time being the RCUK supports a one year embargo for the social sciences and research by the Publishing Consortium (May 2012) indicates that this is the minimum period that will be sustainable. Given current levels of funding for APCs and the likelihood that they will be concentrated in STEM subjects where OA is more established, the management of green OA will be of critical importance to the RSA. We would welcome further research investigating the

- possible future impacts of varying lengths of embargo from the six months that exist in STEM subjects through to 24 or 36 month embargoes for which a case can be made based on the half-life of Humanities and Social Science (HSS) articles.
- II. The current RCUK rules mandate the use of the very permissive CC-BY licence. We would prefer to see the use of the CC-BY-NC-ND licence which prevents commercial and derivative use. This latter form of licence does not restrict access to the article (or other material) but does offer some protection to the author, publisher and funder. In the context of rapidly changing methods of delivery of higher education including MOOCs and the emergence of private for profit providers, this would restrict the possibility for commercial exploitation of UK funded research.
- 12. The global move towards or away from OA publishing will be of importance to most UK learned societies. Through the EC Framework Programme 7, it is clear that there is European interest in this model but this is much less clear from the US. Little appears to be known about distortion effects in the market and how that will affect the future quality of UK journals.
- 13. From the perspective of a learned society it is clear that the impact of the OA policy will be differential. The Regional Studies Association will be in the vanguard of change because 67% of 2011 income came from journal publishing. If every 2011 article in the journal **Regional Studies** had been published gold OA with an APC of \$2950, there would have been a drop of 63% in our publishing income imperilling many of our research and research support activities. We are a policy oriented field and much of the work that we publish is publicly funded either in the UK or through European programmes and the majority of the articles in this journal are authored in Europe.

#### Conclusion

- 14. The trustees of our Association are concerned to ensure a secure long term future for the Association in order that it continue its work in supporting not only the academic field of regional studies and the careers and work of those who work in it but also because of our important role in knowledge exchange. The Regional Studies Association and other societies form communities of knowledge and practice. We are critical for the representation of our fields as we are the key scale for government and others to consult with. Our interests map the individual researcher, departments, HEIs, national and international interests in our fields. Our collective voice enables us to publish journals, stage conferences and work at the policy interface with an authority that individual HEIs and private providers would be challenged to meet. In spite of global recession membership of the Regional Studies Association is on a rising curve. Individuals and organisations perceive value in engagement with our activities. It would be unfortunate for the UK science base if the learned societies were to be an unintended consequence of the implementation of a policy which is widely supported in the sector.
- 15. In consequence, the Regional Studies Association would like to see a full and considered implementation of the Finch Report's recommendations for a review of the position of the learned societies which talks to many different kinds and sizes of societies in many different sectors.

Regional Studies Association (RSA) – Written evidence

24 January 2013

#### Research Libraries UK (RLUK) - Written evidence

- 3. Research Libraries UK (RLUK) represents 33 major research libraries across the UK, including those in the Russell Group of universities. We believe that the UK should have the best research library support in the world.
- 4. Under the current model of scholarly communications UK HE libraries spend over £150 million annually purchasing subscriptions to a selection of academic journals, with some of our larger universities spending over £1 million per year on the journals of a single publisher.
- 5. No library can purchase all of the journals, and by extension all the articles, that researchers need to be fully effective. Not even the most well-funded libraries in the world are able to fulfil all the information needs of all their researchers. In 2012 Harvard library, possibly the world's best-funded university library, announced that it could no longer afford to sustain current levels of journal purchasing. 95
- 6. This results in gaps in the knowledge base. Most worrying, a UK researcher being funded by one of the UK Research Councils may not have direct access to all of the research published by other UK researchers working in the same field and funded by the same Council.
- 7. Therefore, RLUK wholeheartedly welcomed the statement made by the Minister of State for Universities and Science, the Rt Hon David Willetts MP, that the 'Coalition is committed to the principle of public access to publicly-funded research results'96.
- 8. 'Public access' allows universities to plug the information gap described above, allowing all UK researchers access to publicly funded research output. (It also has the welcome benefit of giving access to researchers at SMEs, teachers, journalists, policy makers, life-long learners, patients and the insatiably curious.)
- 9. We also support the RCUK position that 'Free and open access to publicly-funded research offers significant social and economic benefits'97 and we very much welcome their developing policies on open access.
- 10. The initial RCUK policy was put in place in 2005. This followed an extensive investigation into Open Access by the House of Commons Science and Technology Committee in 2004. The Commons report, Scientific Publications: Free for all?, 98 recommended that all universities set up repositories to house the academic papers produced by their academics and that research funders mandate their grantees to deposit their research papers in these repositories.
- The UK academic library community reacted positively to the Committee's recommendations and all university members of RLUK, as well as many other UK

<sup>95</sup> http://isites.harvard.edu/icb/icb.do?keyword=k77982&tabgroupid=icb.tabgroup I 43448

<sup>96</sup> https://www.gov.uk/government/speeches/public-access-to-publicly-funded-research

<sup>97</sup> http://www.rcuk.ac.uk/research/Pages/outputs.aspx

<sup>98</sup> http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/399.pdf

- universities, have fully functioning, searchable repositories housing a growing body of freely available research outputs from doctoral theses, working papers and conference proceedings, through to journal articles.
- 12. Following extensive consultation with all stakeholders, the Research Councils announced their initial 2005 policy requesting their grantees to deposit copies of their papers in suitable repositories, where allowed to by the copyright constraints of the journals they published in.
- 13. The initial RCUK policy was relatively 'soft', with no sanctions for those who did not follow it and options to opt-out if copyright conditions in specific journals did not allow for deposit.
- 14. Despite the 'softness' of the policy, the UK now leads the world in the provision of freely available research outputs. Recent estimates put the percentage of UK articles freely available at 40%, double the global average of 20%.
- 15. Evidence from institutions worldwide where deposit mandates have been strengthened show that compliance rates can very quickly (within a couple of years) exceed 70% of total research output. Therefore, RLUK very much supports the move of RCUK to a stronger open access policy.
- 16. However, we have a number of concerns regarding the specific implementation of the policy.
- 17. The original House of Commons Science and Technology Report of 2004 placed the emphasis on the deposit of papers in open access repositories (the 'Green route' to open access), with an option for publication in open access journals (the 'Gold route'). The original RCUK policy followed this recommendation. The revised policy reverses this placing the emphasis on open access journals. We believe that all UK-funded research should be made freely available through repositories irrespective of whether the papers are published in open access or subscription journals. This would create an invaluable resource allowing all of the UK's research outputs to be searched, discovered, read, and knowledge contained within them build upon.
- 18. It is acknowledged by all stakeholders that to move from the current, limited-access, subscription-based environment to a fully open access environment will take a number of years. This transition will be complex as institutions will have to simultaneously pay publication fees to make their own papers open access while still purchasing subscriptions to journals. We note that RCUK is only offering to cover 80% of publications costs and believe that this shortfall will inhibit the transition.
- 19. A long term goal of a shift to open access will be to realise a fully-functioning market in article processing charges (the fees associated with publishing in journals). An effective market will result in the total system costs of scholarly communications being lowered for the UK. 99 As a community we require better monitoring of spending through all channels (subscriptions and publication) to ensure that we manage this

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 $<sup>^{99}</sup>$  http://www.rin.ac.uk/our-work/communicating-and-disseminating-research/heading-open-road-costs-and-benefits-transitions-s

- transition successfully. RLUK is already working with other stakeholder groups to ensure effective monitoring procedures and practices are put in place.
- 20. In particular, it is important that any increase in spending by the UK research community on publication charges is matched by decreases in the subscription costs UK libraries pay. It would be unacceptable for publishers to 'double dip' and receive payment from the UK twice both through subscriptions and article processing charges.
- 21. A major issue in all open access policies is the length of time following publication before a paper can be made freely available. Any embargo period is a compromise for the benefit of the publisher. Research is most valuable when it is immediately available and delays inevitably reduce its utility.
- 22. RLUK supports the shortest possible embargoes and we should work towards a point where embargoes are zero. This is already the case in some academic disciplines. For example, in high-energy physics researchers routinely share their papers well before publication on the subject-based repository arXiv. These papers are read, digested and often cited by other researchers *before* 'formal' journal publication.
- 23. There have been concerns raised that shorter embargo periods could result in a fall in subscription levels, leading to the failure of journals. However, over the past fifteen years of increasing levels of open access there has been no evidence to support the contention that short embargo periods damage journals.
  - As mentioned above, high energy physicists have been sharing their papers freely for 20 years. No physics publisher has reported any adverse effect on their subscription levels.
  - 2. Many journals already make their archives freely available with embargoes as short as 3 months.
  - 3. Almost all journals allow the deposit of author versions of manuscripts in repositories on publication (60% allow the peer-reviewed version, 27% the prepeer-reviewed version)
  - 4. Some journals, such as Nature, explicitly encourage authors to deposit their papers in repositories with a six month embargo.
- 34. It is clear that publishers would not make their archives available after short embargoes or allow no-embargo deposit by authors if they saw any effect on their subscription levels.
- 35. In 2012 the extensive €4 million, multi-year PEER project reported. This EC-funded project run by the international publishing association, STM, looked to address the issue of embargo periods by comparing journals with different deposit rates and policies. It found no evidence to support the contention that journals in which authors made their papers freely available after embargo periods suffered greater subscription lose than those that did not.

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<sup>100</sup> http://www.peerproject.eu

- 36. In the RCUK policy there is a distinction made between STEM subjects and social sciences, arts and humanities. While the standard maximum embargo is six months, for research resulting from funding from either the AHRC or ESRC the maximum embargo period is 12 months. However, once again, no evidence can be produced to support a longer embargo period for some subject areas.
- 37. The standard argument in social sciences and arts and humanities is that as these journals have a longer 'shelf-life' and papers are still referred to after a longer period they must have a longer embargo. However, evidence of long-term interest is no evidence of lack of short-term interest. Researchers in all fields want access to the latest research and will not tolerate their library requesting them to return in a year's time when the articles they want to read will be freely available. Therefore, despite the longer shelf-life of articles on some disciplines libraries will continue to take subscriptions.
- 38. The UK library community greatly values the journals that are produced by learned societies. These journals are often of very high value and lower cost than those produced by commercial companies. We would therefore be very concerned if any aspect of the RCUK policy put the work of learned societies at risk.
- 39. However, as described above, there is no evidence to suggest that the embargo periods adopted in the RCUK policy will have any effect on the subscriptions to any journal, including those published by learned societies. In addition, the RCUK policy now makes it easier for UK researchers to use research funds to pay publication charges for open access journals. This allows learned societies greater freedom and security to experiment with new open access business models. In fact, we see an increasing number of society publishers doing this and RLUK is happy to forge stronger links between societies and the UK library community to support these experiments.
- 40. Although the UK is a vital player in research internationally, our total contribution to the research literature stands at only 6% of all papers published annually. It is therefore vital to consider our position in relation to other countries and important to note that the RCUK policy is part of a world-wide move towards open access.
- 41. The world's largest non-military research funding agency, the US National Institutes of Health (NIH), invests over \$30 billion annually in medical research. It has had an open access policy for a number of years whereby researchers who receive NIH grants are required to make copies of their papers freely available after an embargo period. Researchers in the UK now have free access to this repository of over 2.5 million articles in biomedicine and the life sciences. Discussions regarding the possibility of extending this policy to other US federal funders are ongoing.
- 42. While the NIH is the largest single funder, other research funders from around the world are increasingly realising that the dissemination of research findings are an integral part of the research process itself. Many of them have put in place, or are developing, open access policies. Of particular note are the policies from Swedish and Norwegian research funders that share similarities with the RCUK policy. There are also similarities with the proposed policy developed for the next European Framework programme, Horizon 2020. In addition, many universities worldwide are

- adopting open access policies. The RCUK policy should be seen as part of a world-wide drive towards open access.
- 43. In conclusion, RLUK strongly supports the lead that the Department of Business, Innovation and Skills and the Research Councils are taking in the move towards a fairer and more efficient model of scholarly communication. RLUK will work closely with other stakeholders to implement the revised policy in as streamlined and effective manner possible.

18 January 2013

#### Research Councils UK (RCUK) - Written evidence

#### I. Research Councils UK (RCUK)

- Research Councils UK (RCUK) is a strategic partnership of the UK's seven Research Councils who each have a Royal Charter and together annually invest around £3 billion in research. We support excellent research, as judged by peer review, which has an impact on the growth, prosperity and wellbeing of the UK. To maintain the UK's global research position we offer a diverse range of funding opportunities, foster international collaborations and provide access to the best facilities and infrastructure around the world. We also support the training and career development of researchers and work with them to inspire young people and engage the wider public with research. To maximise the impact of research on economic growth and societal wellbeing we work in partnership with other research funders including the Technology Strategy Board, the UK Higher Education Funding Councils, business, Government, and charitable organisations. Further details are available at www.rcuk.ac.uk.
- (ii) This evidence is submitted by RCUK and represents its independent views. It does not include, nor necessarily reflect, the views of the Department for Business, Innovation and Skills (BIS). The submission is made on behalf of the following Councils:
  - Arts and Humanities Research Council (AHRC)
  - Biotechnology and Biological Sciences Research Council (BBSRC)
  - Engineering and Physical Sciences Research Council (EPSRC)
  - Economic and Social Research Council (ESRC)
  - Medical Research Council (MRC)
  - Natural Environment Research Council (NERC)
  - Science and Technology Facilities Council (STFC)

#### 2. Benefits and opportunities of Open Access

A key principle that underpins the RCUK Policy on Open Access is that the ideas 2.1 and knowledge derived from publicly-funded research must be made available and accessible for public use, interrogation and scrutiny, as widely, rapidly and effectively as practicable. The Research Councils thus have a responsibility to ensure the widest possible dissemination of the research we fund, from academics to SMEs, and from the general public to individual innovators. And to us, 'use' means much more than just being able to read research papers – it means having the ability to re-use and exploit research papers in the widest possible sense. This may involve text and data mining to advance new areas of research, representing collections of research papers in particular areas, mashing together elements of research papers with other information to create new information products, etc. With maximal openness and accessibility to the outputs of research comes maximal opportunity to read and to exploit research, and thus maximal opportunity for innovation. And from innovation comes growth, and benefit to the UK as a whole. The Research Councils' preference for Gold OA delivers this maximal openness and opportunity for innovation through the CC-BY licence which we require where we pay an Article Processing Charge (APC).

2.2 This move to openness and reusability is already stimulating innovation. One Learned Society has discussed with RCUK its ideas to create a value-added service built around re-presenting research papers in a specific subject area from a variety of publishers. This is made possible through the use of the CC-BY licence.

#### 3. RCUK Policy on Open Access

- 3.1 The Research Councils have a preference for the Gold model of Open Access and will be supporting this with block grants to eligible institutions to fund the associated APCs. We believe that in-line with government policy and the recommendations of the Finch Report<sup>101</sup>, at the current time, the Gold option provides the best way of delivering immediate, non-restricted access to research papers, which in turn provides potential value to UK research and the broader UK economy. However, we are not anti-Green and are supporting a mixed approach to Open Access. The ultimate decision on which model to follow remains at the discretion of the researcher and their institution.
- 3.2 The RCUK Open Access Policy should be seen in the context of other OA policies, such as those from the Wellcome Trust<sup>102</sup>. The Trust policy is that electronic copies of any research papers that have been accepted for publication in a peer-reviewed journal, and are supported in whole or in part by Trust funding, are made available through the PubMed Central (PMC) and Europe PMC online repositories within six months of publication. Where this requires authors to publish using Gold OA and to pay an APC, the Trust will cover the costs of this by providing additional funding to grant-holders through their institutions. Similar to the RCUK policy, from 1<sup>st</sup> April 2013, the Wellcome Trust will also require use of the CC-BY licence wherever Trust funds are used to pay an OA fee.
- 3.3 The RCUK Policy on Open Access <sup>103</sup> applies to peer-reviewed research papers that would normally be published in journals or conference proceedings, and which acknowledge funding by the Research Councils. It does not apply to other forms of scholarly output, such as books or monographs. The policy builds on individual councils' policies on open access which have been in place since 2005/6.
- 3.4 According to this Policy, it is expected that Peer-reviewed research papers submitted for publication from 1 April 2013:
  - be published in journals which are compliant with Research Council policy on Open Access, and;
  - must include details of the funding that supported the research, and a statement on how the underlying research materials such as data, samples or models can be accessed.
- 3.5 To be compliant with the policy, Journals must offer either a 'Gold' Open Access option, which results in immediate and unrestricted access to the published version of a paper via the journal's web site; or a 'Green' option, allowing deposit

<sup>101</sup> http://www.researchinfonet.org/publish/finch/

<sup>102</sup> http://www.wellcome.ac.uk/About-us/Policy/Policy-and-position-statements/WTD002766.htm

<sup>103</sup> http://www.rcuk.ac.uk/research/Pages/outputs.aspx

of the authors final peer-reviewed manuscript in an institutional or subject-specific repository, with a maximum embargo period on access of 6 months (or 12 months for AHRC & ESRC funded research). In addition, the policy requires publishers to use the Creative Commons 'Attribution' licence (CC-BY), when an Article Processing Charge (APC) is levied. However, as indicated below, RCUK accepts that too sudden a change will be hard to manage productively, especially (but not exclusively) in disciplines supported by the AHRC and ESRC. We will therefore approach the implementation of green option embargo periods with this is mind over the five year transition period (reviewed in 2014). (See also paragraphs 6.5 and 6.7 below.) Details will be finalised in the final guidance to be published in late February.

- 3.6 Where Research Council funds are used to pay the APC for an Open Access paper, we require that the publisher makes the paper freely available under a Creative Commons Attribution (CC-BY) licence. This is the standard licence used by open access journals, and supports the maximum dissemination and reuse of published papers. It allows others to distribute, remix, tweak, and build upon a paper, even commercially, as long as they credit the authors for the original paper, but not in any way that suggests that they endorse the re-user or the re-use of the paper. The Wellcome Trust has adopted a similar requirement for papers where it pays the APC. The CC-BY licence opens up exciting possibilities for new areas of research by the re-use of papers and the content of papers through text and data mining, and for new ways of disseminating research through being able to re-present papers in innovative new ways. Crucially, the CC-BY licence removes any doubt or ambiguity as to what can be done with papers, and allows re-use without having to go back to the publisher to check conditions or ask for specific permissions. It is also worth noting that it is normal for authors to retain copyright of their manuscript and also, in some fields, pre-publication of the manuscript is the norm.
- 3.7 The Research Councils recognise that implementation of its policy on Open Access will require a major change in the way researchers, institutions and publishers manage the process of publishing and otherwise disseminating the results of the research that we fund. The Research Councils are also asking that this cultural shift takes place over a relatively short period of five years. For these reasons, the Research Councils see this transition to full Open Access as a journey and not as a single event.
- 3.8 During the transition period we expect researchers and their institutions to follow the spirit of the policy and strive to achieve full compliance. As the funding we make available for Gold Open Access increases during the transition phase, so will our expectations of compliance. At the end of the transition period we will expect researchers and institutions to be fully compliant with the policy, and for 100% of research papers then arising from the research we fund to be published in journals which are compliant with our policy on Open Access.
- 3.9 It is planned to issue updated guidance on implementation of the policy in late February, following the on-going process of engagement with various

stakeholders. Current guidance is on the RCUK website<sup>104</sup>. We recognise that the funding we are providing to HEIs to implement the policy is based on a number of estimates. We will therefore be undertaking a review of the policy and its implementation in 2014. We are making it clear that if there is real evidence that the policy is not working, that it is producing unintended consequences, or that the level of funding we are making available to support it is insufficient, we will take this evidence very seriously as part of the review. However, at present we are of course unable to make any commitments beyond the current Spending Review period.

- 3.10 Summary of the main RCUK actions since publication of the Finch Report (June 2012):
  - 16 July 2012: Revised RCUK Policy on Open Access launched, alongside the Government response to the Finch report, to come into force on I April 2013.
  - 7 September 2012: Announcement of additional £10M provided by BIS to pump-prime activities in Open Access during FY 2012/13.
  - 8 November 2012: Announcement of RCUK funding mechanism to support payment of Article Processing Charges for 'Gold' OA, and the length of the transition period.
  - 13 November 2012: RCUK workshop for key HEIs on implementation of RCUK OA policy.
  - 6 December 2012: Russell Group convened meeting with PVCs for Research, publishers, learned societies and RCUK to discuss the RCUK OA policy.
  - 9 January 2013: RCUK convened meeting with Russell Group representatives to discuss implementation of the policy.
  - February 2013: BIS convened meeting with representatives from RCUK, publishers, learned societies and HEIs to discuss implementation.
  - 4<sup>th</sup> February 2013: AHRC and ESRC meeting with researchers, Learned Societies and publishers in the Arts, Humanities and Social Sciences research communities to discuss implementation.
  - End of February 2013: Finalised guidance to be published on RCUK website incorporating results of input received from stakeholder engagement activities.

#### 4. International context

- 4.1 It is acknowledged that this is a fast paced and transformative agenda not only for the UK but internationally. The RCUK Policy on Open Access has been developed in discussion with other stakeholders in the international research community. It is also noted that many stakeholders are currently developing their policies around open access based on the position within the UK. Examples of current international positions are given below:
  - For the European Commission, open access will be a key aspect to Horizon 2020 and will apply to all funding. The European Research Council has operated such policy since 2006 for its awards.

<sup>104</sup>http://www.rcuk.ac.uk/documents/documents/Guidance for the RCUK policy on Access to Research Output.pdf

- The European Commission has also made a recommendation to Member States on improving their policies and practices on open access, with preferably 6/12 months embargo periods<sup>105</sup>.
- The Science Europe General Assembly have been considering their Open Access Working Group's action plan. Science Europe is supporting the development of coordinated policies across Europe with a clear aim ultimately to replace the present reader-paid publication system with an author- or institution-paid one. Clear and transparent cost structures have also been identified as essential elements to enable the transition to open access.<sup>106</sup>
- In Germany, Deustche Forschungsgemeinschaft (DFG) has introduced its current open access policy in 2006. DFG expects the publications issued from research it has funded to be made available in open access within 6 to 12 months, either via an institutional electronic archive or published in a recognised peer-review open access journal. Costs to cover APC are eligible as research costs within the grant <sup>107</sup>. In addition, DFG provides Open Access block grants to universities to help them put in place stable funding for open access APCs. In order to be eligible to apply, German universities have to provide from their own funding 25% of the overall amount they expect OA costs will be. DFG has also imposed a cap of €2000 for each publication that is paid from this fund and requires information from the university on how they intend to make the funding of OA sustainable in the future as part of the application criteria <sup>108</sup>.
- FWF, the Austrian research funding agency, has had an open access policy since 2004 for sciences and humanities, and commits to the payment of APCs as a research costs<sup>109</sup>. In 2011, FWF spent around €1.5m on APCs (dedicated budget), for both Gold and hybrid journals (Source: Science Europe Working Group on Open Access survey). The FWF policy states that publications should be available via open access after six months (twelve months in exceptional cases). FWF is also a funding member of Europe PubMedCentral (previously known as UK PubMedCentral), alongside a number of UK biomedical research funders, including the MRC, BBSRC, NIHR and the Wellcome Trust.
- In the USA, NIH has recently announced new measures to enforce its open access mandate, which requires all peer reviewed research papers to be archived in PubMedCentral within 12 months at the latest<sup>110</sup>. A response to a petition submitted to the White House before the election is still expected requiring the NIH mandate to be expanded to all federal research funding<sup>111</sup>. At the same time, a bill with a similar aim is currently progressing through Congress<sup>112</sup>.

 $<sup>\</sup>frac{105}{http://ec.europa.eu/research/science-society/document\_library/pdf\_06/recommendation-access-and-preservation-scientific-information\_en.pdf}$ 

<sup>106</sup> http://www.eurohorcs.org/SiteCollectionDocuments/ESF\_Road%20Map\_long\_0907.pdf and http://www.scienceeurope.org/uploads/GRC/Open%20Access/1\_Georg%20Botz.pdf

<sup>107</sup> http://www.dfg.de/formulare/2\_012e/2\_012e.pdf , section 13

<sup>108</sup> http://www.dfg.de/formulare/12 20/12 20.pdf (in German)

http://www.fwf.ac.at/en/public\_relations/oai/index.html

<sup>110 (</sup>http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-160.html)

III (http://www.timeshighereducation.co.uk/story.asp?storycode=420220)

<sup>112 (</sup>http://thomas.loc.gov/cgi-bin/query/z?c112:H.R.4004:)

- Fast growing nations such as India and China also have Open Access on their agenda and indications are that the focus of discussion is also on shortening the embargo periods to a maximum of 12 months and enabling maximum use and re-use of published research. The emphasis is both on building a repository infrastructure as well as launching new open access journals. (COAR, the repository directory, currently lists 33 repositories for China and 52 for India). Several countries in South America have implemented legislation supporting open access to publication resulting from publicly funded research<sup>113</sup>.
- The newly formed Global Research Council has made Open Access its main agenda item for their meeting in May. The aim is to develop and agree on an action plan for implementing Open Access to Publications as the main means of scholarly scientific communication<sup>114</sup>.
- The Australian Research Council recently announced its open access policy and cites coming in line with other international funding agencies, such as the UK, as one of the reasons for introducing its policy<sup>115</sup>.

## 5. Support for Universities in the form of funds to cover article processing charges and the response of universities and other HEIS to these efforts

5.1 The total amount of funding that RCUK will put into supporting Gold open access is based on estimates of the numbers of publications arising from all Research Council-funded research activities. Publications data from 2010 & 2011 indicate that some 26,000 peer-reviewed research papers per year arise from Research Council-funded research, of which approximately 90% are produced within the HEI sector and 10% from Research Council institutes. The average cost of an APC has been taken from the Finch report (estimated as £1727 plus VAT), though we recognise that these are highly variable, and may often be much lower.

Table I - The total value of the RCUK APC fund for supporting the HEIs implementation of the RCUK policy on Open Access

Year	2013/14	2014/15	2015/16	2016/17	2017/18
Value of RCUK APC	£17M	£20M			
fund					
Estimated % papers	45%	53%	60%	67%	75%
block grant will fund as					
Gold OA					

- 5.2 The value of APC awards from 2015/16 onwards will depend on the outcome of the next Spending Review, and any changes in funding resulting in the review of the policy planned for 2014.
- 5.3 This increase in funding over a five-year transition is a reflection of the time that will be needed for researchers, institutions and publishers to transition into a 'Gold' OA model, as well as to allow existing publication funding, already provided through direct and indirect costs as part of grant funding, to be fully utilised. RCUK estimates that, in time, the steady state will be that some three-quarters of

<sup>113 (</sup>http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/access-by-region/)

<sup>114 (</sup>http://www.globalresearchcouncil.org/meetings#berlin)

<sup>115</sup> http://www.arc.gov.au/applicants/open\_access.htm

research council funded research will be published using the 'Gold' OA route and a quarter using 'Green'. However, we recognise that this will likely be subject-dependent and are not expecting to achieve this from day one of the policy being introduced. We will continue to review this figure during the transition phase as we gather further publications data.

- Universities will receive block grants in proportion to the amount of direct labour costs ('directly-incurred' and 'directly-allocated') awarded on grants, provided it is above a threshold total of £10,000, that they have received over the three years from April 2009 to March 2012. Direct labour costs have been used as a proxy of research effort leading to the generation of publications, independent of the effects of equipment and infrastructure costs, and overheads. The 36 institutions from the Russell and 1994 groups of research intensive HEIs will receive just over 80% of RCUK's APC funding. Seventy-one other institutions share the remaining funding.
- In addition to RCUK's block grant, the top 30 research intensive universities<sup>116</sup>, based on combined Research Council and Funding Council investment, shared an additional £10million made available by the Department of Business, Innovation and Skills to 'pump prime' open access. The ways in which this money can used to support the transition to the new open access model are flexible, with universities investing the money in setting up and administering publication funds, supporting their repositories, and paying APCs.

#### 6. Agreeing embargo periods for articles published under the green model

- 6.1 RCUK sees the implementation of its OA policy as a journey rather than an event, and expects this transition process to take up to five years. RCUK is also committed to an early review of the policy and its implementation towards the end of 2014. During this transition, RCUK recognises that authors and their institutions will need flexibility in how the policy is applied.
- 6.2 Ideally, a research paper should become Open Access as soon as it is published on-line. However, the Research Councils recognise that embargo periods are currently used by some journals with business models which depend on generating revenue through subscriptions. Therefore, where a publisher does not offer a 'pay-to-publish' option the Research Councils will accept a delay between on-line publication and a paper becoming Open Access of no more than six months, except in the case of research papers arising from research funded by the AHRC and the ESRC. Journals are not expected to introduce an embargo period where there has not previously been one, nor to lengthen an existing embargo period.
- 6.3 Because current funding arrangements make a six month embargo period particularly difficult in the arts, humanities and social sciences, where a publisher does not offer a 'pay-to-publish' option, the Research Councils will accept a delay of up to twelve months in the case of research papers arising from research which acknowledges funding by the AHRC and/or the ESRC. However, this is only a transitional arrangement, for a period of up to five years, and both the AHRC and

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http://www.rcuk.ac.uk/media/news/2012news/Pages/070912.aspx

- ESRC are working towards enabling a maximum embargo period of six months for all research papers.
- 6.4 Under the previous policy, only the Medical Research Council (MRC) had a defined maximum embargo period (six months). In future, where the publisher does not offer a 'pay-to-publish' option for Open Access, the Research Councils will no longer be willing to support publisher embargoes of longer than six or twelve months from the date of on-line publication, depending on the Research Council.
- 6.5 Where the first choice of journal offers a 'pay-to-publish' option but there are insufficient funds to pay for this, in order to meet the spirit of the RCUK policy, the Councils strongly prefer the author to seek an alternative journal with an affordable 'pay-to-publish' option or with a Green option with embargo periods of six or twelve months. The Research Councils recognise that this may not be a feasible option in all cases, especially in non-STEM disciplines. In such a case we would expect the paper to be published in a journal which allows Green compliant OA, with an embargo period consistent with the Government's response to the Finch Report of 12 months or 24 months, especially for research that acknowledges funding by the AHRC and/or the ESRC. Research papers in biomedicine should continue to be published with an embargo of no longer than 6 months (as has been the MRC's mandated policy since 2006).
- 6.6 The reasons behind the RCUK policy of embargoes of no more than 12 months are:
  - For open access to be 'open', there should be minimum delay between initial publication and free availability. This is also one reason for the preference of gold over green.
  - The MRC and the Wellcome Trust had had mandated embargoes of six months since 2006.
  - For Arts, Humanities and the Social Sciences especially, it was felt that to
    move immediately to a six-month embargo period would be a step too far,
    both for the academic community and for some publishers and learned
    societies. This would be consistent with the embargo periods of many other
    funders (e.g. NIH embargo period of 12 months).
  - It was intended to encourage publishers to shorten their embargo periods to six/twelve months.
- 6.7 Despite RCUK's, and the Government's, preference for the Gold route to Open Access, the Green route should also be seen as a real option for open access publishing. In the meeting on 9<sup>th</sup> January 2013, between representatives of RCUK and the Russell Group, RCUK committed to considering a way forward that acknowledged the points made by the sector, around the idea of a phased implementation and potential distinctions between disciplines. As set out in the wording above, this discussion has led to the Research Councils making clear that during the transition phase, over the 5 years of introducing the policy, there could be some flexibility applied to embargoes where there are insufficient funds to follow the 'pay to publish' route. It is noted though that this could lead to further potential difficulties in relation to interdisciplinary research, and the Research

Councils will continue to consider this issue. Some disciplines, such as biomedical sciences, already have mandated embargo periods of six months and it would not be sensible for those to change.

- 7. Engagement with publishers, universities, learned societies and other stakeholders in the development of Research Council Open Access policies and guidance.
  - 7.1 Although the Research Councils did not hold a formal consultation before the new Policy on Open Access was launched, the draft policy was circulated in March 2012 to a variety of stakeholders in order to get feedback and input in the development of the policy. These stakeholders included representatives of the Russell Group and other HEIs, through the members of the Finch group; Learned Societies such as Academy of Medical Sciences; and other groups such as UKPMC (now 'Europe PMC') Funders Group. The draft policy was also mentioned in several blogs including Casey Bergman<sup>117</sup>; Peter Suber<sup>118</sup>; @ccess<sup>119</sup>; and Intellectual Property Watch<sup>120</sup> as well as by various other media including Research Fortnight (16<sup>th</sup> March 2012), Times Higher Education (22<sup>nd</sup> March 2012), The Guardian (11<sup>th</sup> April 2012)and Nature<sup>121</sup>.
  - 7.2 Following the launch of the policy, RCUK has been keen to engage with stakeholders on the implementation of the policy as we recognise that this is both a fast-paced and transformative agenda.
  - 7.3 RCUK staff have given numerous talks to explain the policy and engage with HEIs and members of the research communities. This includes AHRC Subject Associations meeting (June 2012); Imperial College Science Communication Forum (September 2012); Westminster Briefing (September 2012); London School of Hygiene and Tropical Medicine Open Access Week event (October 2012); Exeter University (October 2012); British Academy 'Open Access for the Humanities and Social Sciences' (October 2012); Standing Conference of Physics Professors (November 2012); Research Libraries UK (November 2012); British Ecological Society Annual Conference (December 2012); and various Research Council regional engagement sessions with universities and other stakeholders during autumn 2012.
  - 7.4 RCUK organised a workshop on 13<sup>th</sup> November 2012, shortly after the details of the block grant had been announced, in order to answer questions and to engage with representatives from Universities (and some other interested parties) on the details of the policy. The workshop also discussed the mechanisms that RCUK could put in place in order to monitor compliance with the policy. We want to work with the HEI sector to focus on changing the way researchers choose to publish their research, to help facilitate a sustainable transition to a new 'normal' of full Open Access. Engaging with the sector in such a way has enabled us to consider reporting methods that build on existing processes rather than placing an

<sup>117</sup> http://caseybergman.wordpress.com/2012/03/18/comments-on-the-rcuks-new-draft-policy-on-open-access/

<sup>118</sup>https://plus.google.com/109377556796183035206/posts/Y8zPSf5DP5W#109377556796183035206/posts/Y8zPSf5DP5W

http://access.okfn.org/2012/04/05/comment-on-the-rcuk-draft-policy-on-open-access/

http://www.ip-watch.org/2012/04/16/changes-coming-for-open-access-to-research-in-europe/

<sup>121</sup> http://blogs.nature.com/news/2012/03/uk-research-funders-suggest-liberated-open-access-policy.html

- additional administrative burden on HEIs. A note of the meeting is published online <sup>122</sup>.
- 7.5 Following some misunderstandings of the guidance for the policy, RCUK has committed to reviewing it and clarifying some of the wording. Attendees at the November workshop were invited to comment on the guidance and several responses were received.
- 7.6 RCUK will be continuing to engage with a variety of stakeholders throughout the implementation period of the policy. We will be holding a series of bilateral meetings with key stakeholders between now and mid-February 2013, to discuss details of implementation. These include a meeting with the Russell Group, with a range of Learned Societies, and with publishers across the spectrum of disciplines. We expect to recognise the outcomes of these meetings in the final guidance document to be published in February.
- 7.7. There are also several other activities that RCUK has been working on, in partnership with other members of the sector, in order to develop understanding and best practice around the implementation of the policy. These include:
  - Facilitating a project within the HEI sector to develop common processes and procedures, and to share best practice to support implementation of the RCUK policy. RCUK will provide funding to support a project manager and discussions are underway with a number of organisations about hosting the project office.
  - In conjunction with the Wellcome Trust, commissioning the SHERPA-RoMEO group at Nottingham University 123 to develop a support service to provide easily accessible and understandable advice on how journals provide compliance with the RCUK and WT policies.
  - In conjunction with the Wellcome Trust, we have written to the top 60 publishers of Trust and RCUK funded research to inform them of the changes in policy and to ask how they plan to comply with policy. This process has resulted in constructive dialogue with the major publishers and with publisher trade bodies (International Association of Scientific, Technical and Medical Publishers; Association of Learned and Professional Society Publishers; Publishers Association; and Open Access Scholarly Publishers Association). Meetings between RCUK, the Wellcome Trust and the trade bodies are continuing on a regular basis.
  - RCUK in conjunction with the Wellcome Trust have held constructive discussions with major commercial academic publishers, including Wiley-Blackwell, Elsevier, Nature Publishing Group, Oxford University Press and Taylor & Francis, and with learned society publishers such as the Royal Society of Chemistry, Institute of Physics and the American Chemical Society. From these discussions, and from work analysing the current OA status of journals, we are confident that the majority of journals used by UK researchers will be compliant with the policy. However, many publishers have still to make formal policy announcements in this area, especially around the adoption of the CC-BY licence for Gold. Of journals which have already

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<sup>122</sup> http://www.rcuk.ac.uk/documents/documents/NoteRCUKOpenAccessWorkshop3-Nov-2012.pdf

<sup>123</sup> http://www.sherpa.ac.uk/projects/sherparomeo.html

provided OA offerings, those from the Royal Society are both Gold and Green compliant, Nature and Science are both Green compliant, and Institute of Physics journals offer Gold compliance with CC-BY. This is on top of existing policy compliant Open Access journals – such as those from Springer or the Public Library of Science (PLoS). Indeed, the OA journal PLoS One is now the top journal (in terms of number of papers) for research funded by MRC, BBSRC and the Wellcome Trust; the top journal for NERC-funded research is Atmospheric Chemistry and Physics (an OA journal of the European Geosciences Union) 124.

 RCUK, as a member of the UK Open Access Implementation Group (OAIG), is co-sponsoring the development of a number of OAIG activities to support the UK research community. These include an examination of the role of intermediaries in managing the payment of APCs, and an OAIG 'resource pack' for learned societies on OA issues, including the opportunities that OA can offer to learned societies.

### 8. Challenges and concerns raised to date by stakeholders, and how these have been addressed.

- 8.1 Much of the reaction to the new policy has been supportive and the main concerns are not with the policy as such but its implementation and the speed of the transition to a new 'normal' of Open Access.
- 8.2 In addition to the engagement activities described above, RCUK organised a meeting on 9<sup>th</sup> January 2013 to engage specifically with concerns that had been raised by representatives of the Russell Group around the implementation of the policy. The half day meeting involved very constructive discussion and has led RCUK to reflect on the points made and consider introducing some flexibilities around embargoes, monitoring and reporting arrangements and legitimate uses of the block grant.
- 8.3 Some learned societies in the Humanities, Arts and Social Sciences (HASS) have expressed concerns about making the Gold OA model work for their journals, because of specific issues over the small number of authors and the longer average article length, in relation to the number of subscribers, which would result in what are considered to be unsustainably large APCs. There is also some concern in the HASS community that HEIs will spend the RCUK block grant disproportionately on articles in the natural sciences. RCUK has no evidence that this will be the case. Whether it is will be part of the 2014 review.
- 8.4 In addition, there have been objections from some in the HASS community to the requirement to use the CC-BY licence for papers published using the Gold OA model. Some of the issues (for example, use of 3<sup>rd</sup> party material in papers) need further exploration. However, much of the discussion seems to be based on misinterpretation of what the CC-BY licence will and will not allow. RCUK has concerns that some communities are proposing to use the CC-BY-NC licence, which by disallowing commercial re-use, will impose barriers to the full re-use of published papers, and stifle innovation within scholarly publishing.

<sup>124</sup> From an analysis of Web of Science, for papers where authors acknowledge Research Council funding.

- 8.5 Some of the feedback from the HEI community gives the impression that they are expecting RCUK to provide all the solutions, rather than recognising that HEIs, and indeed researchers themselves who provide all the content and much of the reviewing gratis, have a key role to play. It is insufficient just to state that RCUK is not providing sufficient funding, rather than acknowledging that the HEI community must play a key role in negotiating with publishers to drive down subscription and APC costs to enable the available funding to go further.
- 8.6 There is also a continuing and vocal campaign by a number of OA 'pioneers' who consider that RCUK and Finch have made a major mistake in supporting the Gold approach to OA, in preference to Green. Their concerns are based around cost (Gold is using money that could be spent on research) and, from their perspective, the lack of any demonstrated requirement for re-use requiring a CC-BY licence. The RCUK position is that disseminating research is just as much a cost of research as is hiring researchers, buying consumables, and so on.
- 8.7 A common criticism, as noted above, is that the Research Councils are diverting money that would otherwise be spent on research into paying additional money to publishers in Gold APCs. The Finch Report recommended that 'Gold' is the only long-term sustainable solution for publishers. However, RCUK considers that sustainability cuts two ways. The model also needs to be sustainable for funders and institutions. RCUK will make the data they collect on APC fees paid through their block-grant mechanism publicly available. We expect HEIs, JISC Collections and others (e.g. RLUK) to negotiate hard with publishers to drive down subscription charges to reflect the additional funding that they are receiving to support the payment of APCs. Indeed, we would expect publishers to introduce differential pricing in the UK market to reflect additional income they are earning through APCs.

18 January 2013

Evidence Session No. 4

Heard in Public

Questions 52 - 70

#### TUESDAY 29 JANUARY 2013

Members present

Lord Krebs (Chair)
Lord Broers
Lord Dixon-Smith
Baroness Hilton of Eggardon
Lord Rees of Ludlow
Earl of Selborne
Baroness Sharp of Guildford
Lord Willis of Knaresborough
Lord Winston

#### **Examination of Witnesses**

**Professor Rick Rylance**, Chair of Research Councils UK (RCUK), **Professor Douglas Kell**, Information Champion, RCUK, and **David Sweeney**, Director (Research, Innovation and Skills), Higher Education Funding Council for England (HEFCE).

**Q52** The Chairman: I would like to welcome our three witnesses for this third session today of our short inquiry into open access publishing. I just explain to members of the audience that the declared interests of Members of the Select Committee are on the sheet that should be on the chair where you are sitting—it was on the chair—and to remind you that the session is being webcast both in sound and in visual.

In a moment, I am going to invite the three witnesses to introduce themselves for the record, but I just want to make it clear that in this short inquiry we are not raising questions about the whole principle of open access publishing. We accept that it is happening and will move forward. We are concerned very specifically with the way in which the recommendations of Finch are being implemented by the Research Councils, HEFCE and the academic community, and as you will be aware, we have taken evidence this morning from universities and from the publishers, and through their evidence, both written and oral, we have a number of probing questions to put to you, which we hope you will be able to shed some light on for us.

Having set the stage, may I invite you, starting with Professor Rylance, to introduce yourselves for the record?

**Professor Rick Rylance**: Yes. I am Professor Rick Rylance, and I am the Chief Executive of the AHRC and Chair of the RCUK Executive Group.

**Professor Douglas Kell**: I am Douglas Kell. I am the CEO of the Biotechnology and Biological Sciences Research Council. I am also the so-called RCUK Information Champion, and I am also, for 0.2 of my time, still a practising academic, and I have published in the areas of digital libraries, semantic enrichment of text and text mining and so forth, so I have something of an interest to declare, as it were.

**David Sweeney**: I am David Sweeney. I am the Director for Research, Innovation and Skills at HEFCE Funding Council.

**Q53** The Chairman: Thank you very much. We would like to start off looking at the issue of embargoes, and there are a number of strands to this that we would welcome clarification on. The first point is really to get absolute clarity from you on your policy, or proposed policy, on the embargo periods for green open access. As you know, the position that the Science Minister has presented in his evidence to us is that BIS accepts the decision tree that was presented by the Publishers Association for cases where open access funding is or is not available where the journal does or does not have an open access policy. We would like clarity from you, because there is an impression that you—RCUK, that is—have not proposed to implement the same policy that BIS has accepted, so we would like to clarify that. I think, as part of that, we would like clarity on whether you recognise that it may be that the embargo period should be different for different academic disciplines, and again, there has been particular emphasis from some of the witnesses that in the humanities and social sciences, one might expect longer embargo periods than in STEM subjects. Perhaps we could start off with your clarification on those issues.

**Professor Rick Rylance**: Shall I begin? The policy is that we will have six- and 12-month embargo periods after five years, so there will be a five-year implementation phase, but the eventual policy is to bring down embargo periods to the lower level. During that five-year implementation phase, we will be significantly more relaxed about our requirements on embargoes, and this is what we will publish in our revised guidance at the end of February.

The one caveat to this is a caveat around the MRC, which for some years has had a sixmonth embargo period, and it seems wrong to us to change that, so that will continue during that period.

**Q54** The Chairman: That is very helpful. Can I press you a little bit further? When you say, "We will be more relaxed", can you describe what that means? Can you put numbers on it and timescales?

**Professor Rick Rylance**: We will move to a 12- or 24-month embargo period, which is entirely consistent with Government policy.

The Chairman: That is where you start on I April. You will have I2 and 24, as in the decision tree used by the Publishers Association.

Professor Rick Rylance: Indeed, yes.

**The Chairman:** But at the end of five years, everything will have collapsed into the six and 12.

**Professor Rick Rylance**: What will happen during those five years is we will continually monitor the policy, and particularly, we will be having this review at the back end of 2014, in

which we will look at the accumulating evidence over what will then be a 15-month period. That may suggest that we should extend or accelerate that period, but it would be wrong to try to guess when that will be.

The Chairman: Yes, so although you say the aim is to get to six and 12 months after five years, that is not set in stone. If it is apparent to you—and I will ask you what kind of evidence might make it apparent—that there is a need for a longer transition period, or possibly even an equilibrium that is longer than six/12, you would consider that as a possibility?

**Professor Rick Rylance**: Yes. We would have no interest in maintaining a policy that was insecurely founded, so if the evidence came forward to suggest it was then we would want to amend it accordingly, but that could come forward or it could go back, of course.

The Chairman: What kind of evidence would that be?

**Professor Rick Rylance**: I think at the moment what we have is a situation in which there is a great deal of assertion about, for example, the effects of embargo periods, and, to anticipate a little your second question about disciplinary differences, it is likely that the impacts in the biomedical sciences will be different from those in, for example, my disciplinary domains, which are in English, history and so on. I think we would have to take account of what evidence there is accumulating across that spectrum, and that then would inform the way we develop policy. This would be damaging to business models; that is the kind of thing we would be looking at—what the relationship is to subscription costs and so on and so forth.

The Chairman: Yes. Professor Kell?

**Professor Douglas Kell**: The actual implementation: what fraction of papers being published are gold and green, and on what basis, and what is happening in the rest of the world? It is a very non-static landscape, and although our policies are of recent origin, the move towards open access is not. It is well along the path now, and we describe this as a journey, not a fixed point.

**Q55** Lord Dixon-Smith: Can we just hear a little bit about what is being done elsewhere? We say this is not a national thing, so you must have some knowledge of what is being proposed in other countries.

**Professor Douglas Kell**: In our evidence we set down some of the international context. A great number of the European countries are already implementing this. The Australian Research Council is already doing this. The ERC is going to be debating it in its meeting coming up, and the Global Research Council has it as its main agenda item in May in the USA, so there is a very great deal of interest and implementation going on, and much of it following what is going on in the UK. We have a large table, which we intend to submit as post-evidence, because we have looked at all of the implementations in Europe, for instance, and almost every country has a very clear implementation. While we are driving this thing, we are very much not alone.

The Chairman: Sorry, did you say you would provide us with this table?

**Professor Douglas Kell**: We will be happy to do so, and we thought it would be helpful.

The Chairman: Thank you, yes.

**Lord Willis of Knaresborough:** Just arising from that, that is news to me, what you have just said this morning. When you talk about implementation, are you talking about implementation to gold or to green?

Professor Douglas Kell: Our policy is to both, which is—

Lord Willis of Knaresborough: No, not yours. You focus on Australia.

**Professor Douglas Kell**: Yes. The evidence we have gathered speaks to both.

Lord Willis of Knaresborough: It is all moving to gold?

**Professor Douglas Kell**: It is quite a long and complicated table because there are a lot of different countries, but we have analysed from both points of view.

**Q56** Earl of Selborne: In the written evidence we have been given, it is clear that there are a number of countries that see green continuing without any need to migrate the green over to gold eventually. I think I am right in saying—perhaps you could confirm this—that the NIH in the United States have said that they will not express a preference; they leave both options, the gold and the green, available.

That leads me to ask, because in your written evidence to us you said that, "Despite the RCUK's, and the Government's, preference for the gold route to open access, the green route should also be seen as a real option for open access publishing". I really want to ask you, given that you have expressed a preference for gold over green, do you see the green eventually withering away because you would be able to migrate totally to the gold?

**Professor Douglas Kell**: I think, and Finch said the same, the feeling is that gold is the more sustainable route. The market can and will decide, but the feeling from Finch and ourselves and others is that gold is the more sustainable route, but, where green is appropriate, we will admit it.

**Earl of Selborne** Would you accept that while this is certainly true for a number of disciplines—and the Wellcome Trust has given us, to my mind, quite convincing evidence in the case of the medical sciences—this is certainly the preferred route? Of course, for a number of disciplines, where, for example, mining of text or other more sophisticated use of the data is not really a necessity or a requirement, the green route does have something in its favour. First of all, it is cheaper. Secondly, it is available without too much complication and the repositories are already there. I have mentioned the NIH, but you quote Australia. Australia has expressed a preference as from I January to go to what looks like, to me, to be identical to the green route: repositories and a possibility of embargoes. Given that this will be the bulk of publications in the foreseeable future around the world, why would you say that the gold is going to be more sustainable than the green?

**David Sweeney**: The work from John Houghton in Australia, who I think is the premier economist in this area, suggests that that is so. He does raise concerns about the transition period and the additional costs that there may be from pursuing green and gold, but you started off by saying green is cheaper. That is not what the literature says.

I think that we are engaged in speculation. As Professor Kell said, publishers will respond in different ways and funders will respond in different ways over this transition period, and universities will also. It may well be that we come in two or three years time to a different view about the economics. I think what counts now is encouraging the widest possible dissemination of research material.

**Earl of Selborne** We will be coming to cost-benefit, I know, later, but I am amazed to hear that there could be any question that putting, at the author's instigation, a paper into a repository and that is the end of it, subject to embargoes, could be more expensive than paying an APC up front. I just do not understand that.

**David Sweeney**: I am very happy to share John Houghton's published, peer-reviewed work with you.

**Earl of Selborne** I think it would be very helpful to have that.

Q57 The Chairman: Yes, we would like to see that evidence, please. Could I also just pick up on this point we have raised, that both Professor Kell and David Sweeney have said, in a way, we have to see how the story unfolds? Some of the evidence we have had from learned societies and the published journals and other publishers is that the mere uncertainty in itself will be a threat to their future business model, just not knowing where they are heading, whether they are meant to be driving down a road that leads to gold, or whether the end game is green or a mixed economy. As a by-product of "We will wait and see, let the market decide", you may cause certain journals to go extinct. Is that something you would recognise as a possibility, and, if so, would you be comfortable with it?

**David Sweeney**: This is a worldwide movement where all sorts of things are happening, and there is certainly a lack of stability. I think publishers have proved themselves very astute business people in providing different publishing models. We have seen them appear by the week, at the moment. They are, of course, in competition with each other, as well as in competition for academic material. I think, in the worldwide framework, we should not be unduly concerned about establishing a further push towards open access publishing.

**Professor Rick Rylance**: I do not know what the alternative to waiting would be, because we do not want to be in the position where we are predicting what in five or 10 years' time is going to be the situation. We have to—and I think everybody would agree with this—leave a range of options open, and we will discover the best ways through that. Whether or not gold becomes the economically sustainable way of operating for both publishers and funders will be decided, but there are other issues around gold as well and questions around green in terms of interoperability of repositories, and also in terms of long-term curation of these things. I think, in both systems, we are going to think about those things as well.

The Chairman: But in light of what you have just said, was it wise, then, to express such a clear preference for gold as the end point? On the one hand, you are saying you want to head down the journey to gold. On the other hand, you are saying, "We need to wait and see how the story unfolds". Would it not have been better at this stage to say, "We do not know. It could be a mixed economy, it could be mainly green with a bit of gold, it could be mainly gold with a bit of green, but we are dipping our toe in the water to see what happens", rather than, on the one hand, sending a clear directional signal, and on the other hand saying, "We have to wait and see"?

**Professor Douglas Kell**: Given that green with no embargo period is not sustainable as you move towards smaller embargo periods, because one of the benefits and purposes is to make stuff available as soon as possible, that in part is why Finch recognised the desirability of gold, because otherwise the thing would not be sustainable when you are trying to get the stuff out the door as quickly as possible, to buy better science, because then the computers can do all the text mining and so forth.

**Earl of Selborne** Again, I am puzzled, because in the written evidence we were given there are a number of people who say that green without an embargo is a perfectly sustainable option, and indeed, there are many examples of it.

**Professor Douglas Kell**: Gold without an embargo I think would be fine. If you look at the PLOS submission, for instance, which is gold without an embargo, that you may find is perfectly sustainable. Green without an embargo does not bring any income into any publisher or learned society without an article processing charge.

**Q58** Lord Rees of Ludlow: We have discussed that some existing journals might be under threat in this new system, because another thing that is happening already is the establishment of open access journals, likely to be rather low quality, by commercial publishers. It is happening in a big way, and they will undercut the major journals in their charge. Is this not surely a rather worrying development, which is going to be accelerated in so far as you push hard for gold access?

**Professor Rick Rylance**: My observation about this is that we have a rather unpredictable future. You have a multi-agency problem with all sorts of interests, some of which are in agreement and some of which are in conflict. You have what is purported to be evidence but is assertions of opinion, and an atmosphere in which disaster scenarios are being traded on a regular basis. It seems to me just prudent at the moment to wait to see how that dust settles and how the hard evidence emerges. When you come to think about the various commercial interests there are in play in this, there are established publishers, there are the learned societies, and they are in some relationship of different sorts, and also you have an emerging group of people, who perhaps you were referring to at the end, who are, in a lively-minded way, spotting opportunities, and who could turn out to be cowboys or they could turn out to be reputable people. We cannot predict at this stage what those things are going to be, so it seems to me we need a lot harder evidence to make those sorts of announcements.

**David Sweeney**: I do think underpinning your question was that all open access journals are of low quality, and the evidence is just not that this is so. There are some open access journals that, by the metrics that were used, demonstrate a considerable quality. Equally, I accept that not all of them do. Surely we welcome publishers offering different avenues, and we will use the established metrics and the wisdom of our academics in submitting their material to determine which ones will flourish and which ones will not.

**Q59** The Chairman: That is all very well, if it were up to the academics to choose, but if resources are limited and universities or institutes are putting pressure on academics to publish in journals that are less costly in terms of the APC, surely that could undermine the quality of peer review. We were told this morning that the APC for *PLOS ONE* is about half that for *PLOS Medical Science* because the latter journal has a more rigorous peer review system, and surely, under the limit of resource APC model, people will be pushed towards the cheaper journal.

**David Sweeney**: I would like to think that British research added lustre to the journals, not just the journals adding lustre to British research. I would like to think that we were looking at the quality of ideas, the new knowledge that is developed in these publications, not just at some mark of quality because it happens to be published in a journal. We have long said in research assessment that where the journal is published is not the factor in assessing quality. It is the peer review, in our case from our panels.

In Australia, they tried a system that was based on journal impact factors, based on an assessment of the quality of research in the way that you describe, and it was abandoned after a universal criticism, so—

**The Chairman:** But I am talking about peer review. It is following Lord Rees's point, that the quality of a journal ultimately depends on its scrutiny of the submitted material, and if there is a race to the bottom in peer review, that will surely have an adverse effect.

**David Sweeney**: I think the quality of the journal depends also on the quality of the material that is submitted to it, not just on the quality of peer review.

**Professor Rick Rylance**: I cannot see where it would be in the interests of journals to degrade the quality of their work by publishing inferior stuff, and I cannot see why it is in the interests of a university to not allow its own academics—indeed, it ought to positively enable those—to publish in the best places.

I also think we have a very volatile situation in which, in new fields of development and new aspects of fields of development, there are reputations to be made. It is not a hard and fast binary between those respectable journals of yore and upstart and rather immature open access. It is a much more complicated picture.

**Professor Douglas Kell**: I think there is plenty of evidence for you. There are these so-called predatory publishers on the cowboy end of the spectrum, who just see it as a quick buck and are likely to accept anything. There is a website that tells you which they are. There is an established market working this kind of thing out, and sensible academics are not going to send their stuff to such places, so I think we have the evidence already.

**Q60 Baroness Sharp of Guildford:** Can I pick up the issue that we have already touched on, which is the costs of publishing? It has become very clear, I think, both in the evidence that we have received and in the oral evidence that we have received, that certainly during the transition period there will be a dual economy. On the one hand, there is the pressure to publish through the gold open access route, and particularly I think in the sciences we will be going in that direction. Equally, because we only publish 6% of the world's publications and other countries are not necessarily going in this direction, many of the journals will be offering a hybrid. There will be some open access articles and some that are not, and they will go on charging subscriptions, and quite clearly our university libraries are going to have to go on paying those subscriptions.

At the same time, we are putting money into the pot, or you are putting money into the pot, in order to enable the APCs to be met from university funds, or partly from university funds. Therefore, what we would like to know is: did you do any sort of cost-benefit analysis on this to start with to have a look at how long that transition period was going to be and what sort of costs it was going to impose? In particular, since the funds that you are putting into universities are funds that you are finding and, therefore, the opportunity costs are project funding otherwise that you might have, what impact do you feel this might have upon research as a whole?

**Professor Rick Rylance**: Shall I begin and then go to you? First of all, I do think the most unfortunate outcome one can imagine is where researchers get squeezed from both sides. They have to pay to publish and pay to receive. That is an unfortunate thing, because that will clearly push up costs. It is, therefore, it seems to me, an obligation on all the parties within this, including university libraries and institutions, to put pressure on those costs, to

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<sup>&</sup>lt;sup>125</sup> Note from witness: <a href="http://scholarlyoa.com/publishers/">http://scholarlyoa.com/publishers/</a>

drive them down at the APC level and also the subscription level. In a recent conversation with the Russell Group, which included the Chair of the current Research Libraries group, we undertook as part of the 2014 review to try to look at that data as well as the data about our particular charges, so we need a holistic picture from it. We are very mindful of that problem, and I think it would be deeply regrettable if this produced that sort of outcome in the end.

The Chairman: It is one thing to be mindful of it. It is another thing as to whether it is actually going to happen. It does seem it is likely to happen.

**Professor Rick Rylance**: It is only 15 months away, this, and we need to try to gather evidence in those 15 months to see whether it is the case or it is not the case. It is, we will all be aware, very difficult to get hard information about subscription costs from publishers. It is extremely difficult to get that, so we have to find a way of trying to share that data.

**Professor Douglas Kell**: The evidence on the cost of doing it seems to be that it is about 1% to 1.5% of the costs of the research that is itself funded by—speaking for the STEM subjects.

Baroness Sharp of Guildford: That is the Wellcome figures that you have.

**Professor Douglas Kell**: That is the Wellcome figure, but it is consistent with other data that can be seen, and the average of that of course is based on the volume of publication and the average APC. The numbers that came out in both Finch and the Wellcome evidence that they analysed with the commission's work at Edinburgh came out within £14 of each other, around £1,700. These are past numbers; there is evidence that these are going down. SAGE has just offered £99, for instance, in social sciences. Peer] has something similar.

One can model on the basis of that kind of number. It is seen, I think, universally, that part of the costs of doing research is disseminating it, and that is, therefore, a legitimate cost that we expect to bear as funders of research. Mitigating the cost of transition: there are already some examples of good practice, such as the Royal Society of Chemistry, who, when you pay a gold APC to one of their journals, mitigate that in terms of some of their subscriptions to essentially ease the transition, and we hope that that kind of behaviour, which we wish to encourage, will go on more widely.

The last thing is that the long-term cost-benefit. There are examples, such as the Human Genome Project, which I know is data as much as publication, in which the return on investment in that is seen as \$141, according to one analysis, per dollar invested in it. We believe that the cost-benefit analysis to the knock-on in the wider economy as a whole will be very great, but that is not our purview and we are hoping that BIS will initiate some analyses of that. Again, looking to the future is a little hard to predict.

**David Sweeney**: University research budgets over the last two years across the sector have increased by 8%, so there is some room for manoeuvre. I do not want to downplay the budget pressures there are on universities to manage within that increased amount of funding, but we have, as you say, a dual economy. We have a cost increase of 1% to 1.5%. There is some money in university research budgets, and we want to monitor this as we go year by year. I think it is difficult to assess in monetary terms the benefit from open access, but it is clearly, as you said at the start, a worldwide objective to go that way, and I think the initiative we are making in this country sounds manageable in the context of the figures, not only the figures that we have but those that Wellcome and others have.

**Q61 Baroness Sharp of Guildford:** Yes. We were, for example, this morning, talking about the science fee remaining at a subscription-only journal, for the moment. In so far as you want to publish in a top-ranking journal in the scientific field, this is the one that one would want to publish in. Therefore, it does depend very much on how far the mixed route goes, how long you have to go on paying subscriptions and whether those subscriptions are substantially reduced as a result of this, and the way in which other countries go, which are all the uncertainties.

I wonder whether you could give us some indication of what you see as being the major benefits arising from this, that go on the other side of the costs.

**David Sweeney**: As we said, we are very keen that the fruits of British research are unlocked for other use of British business and industry, indeed for their use more widely.

**Baroness Sharp of Guildford:** Do you see industry benefiting a great deal from having— **Professor Rick Rylance**: Absolutely.

**Baroness Sharp of Guildford:** —given that a lot of the articles are already put in repositories of one sort of another?

**David Sweeney**: If they are put in repositories, then they are being published to open access already, but businesses tell us that they want it and it does not seem an unreasonable thing to ask. I think there are many taxpayers who want to read scholarly publications and cannot do so because they have no institutional affiliation. It seems to me entirely reasonable that they—

The Chairman: This is not strictly British business, so it could be Chinese or Brazilian.

David Sweeney: That is true.

**The Chairman:** Absolutely, so it is a way of the UK possibly subsidising economic growth in other countries. Is that how you would see the benefit?

**David Sweeney**: I do not think we can adopt a protectionist attitude to British research. We are very practised at using intellectual property techniques to develop benefit for universities and for Britain from research, but research is a global industry. We work collaboratively. You have probably worked collaboratively with colleagues in other countries.

**Professor Douglas Kell**: If a journal goes open access, it is the journal that goes open access; it is not the country that goes open access. As we effect culture change, we will get the benefits of having access to the literature, and that will benefit British industry big time, but where a research council has it, it will mainly benefit science enormously. The number of peer-reviewed papers you know being published in biomedicine alone is two per minute. In the whole peer-reviewed literature, it is five per minute. No one can read them. Only computers can read them. If we can get that to that state, we buy better science. There is not any doubt about it. That is the major reason why I am so keen on the open access movement, personally, from a scientific point of view.

**Professor Rick Rylance**: On the international competitor issue, it seems to me, under current arrangements, a predatory commercial interest in China can gain access to this readily by simply buying a subscription. It is going to be a little bit easier and a little bit cheaper, but the hard work is still to come, as they gain access to this.

**The Chairman:** Then it seems to undermine your previous argument, that this will greatly increase the innovation in industry.

**Q62** Earl of Selborne I wanted to come back, if I might, to the pros and cons of green open access compared to gold, and I think we recognise that, for the life sciences, gold is highly desirable and has many advantages, not least to allow text and data mining in an easier form. But Professor Carroll told me that green open access implies always there is going to be an embargo. I must just quote to you written evidence we have had from the Scholarly Publishing and Academic Resource Coalition, SPARC. It says, "It is a factual error that the Finch report implies that green open access is always embargoed. This is incorrect. 60% of journals allow immediate opening up of the peer-reviewed version of the article, and a further 27% permit the opening up of the submitted version. 16% even allow the published version, the version of record, to be placed in a repository immediately upon publication". I think it is very important we do understand what the costs are of green versus gold, and I think we have accepted that for life sciences there will be some very obvious advantages and a cost of 1.5% or whatever one can calculate might well be returned for the added benefits. Equally, we have had a lot of evidence, as you could expect, particularly from humanities and social sciences, which says that, quite frankly, text and data mining is not so much an issue with them. They need read alone. I still remain to be convinced by you that putting a paper, whether the final print or whatever version, into a repository is going to cost as much as the APC. Certainly, the evidence that we have had time and time again suggests it is going to be a cheaper version. Even maintaining the repository, which does need maintaining—the Finch report suggested that there should be a bit of top-up funds for that. I quite accept that, but I simply do not understand how you maintain that this green route is going to cost 1.5%. That is my comment, anyway.

**Professor Douglas Kell**: Sorry, I recognise that I forgot to add one important rider. I was describing the circumstances in which we were not counting the payments of subscriptions. That is why I said that if there were no subscriptions and everything is green with no embargo, then of course it is hard to have a business model—

## Earl of Selborne That is a helpful—

**Professor Douglas Kell**: My apologies, and thank you for the opportunity to clarify.

On the question of text mining in non-STEM subjects, these subjects benefit enormously from text mining, and already do, as more and more arts and humanities work goes digital. There will be huge opportunities coming.

**David Sweeney**: I think these things are difficult to get to the bottom of. We have the publishers saying that without lengthy embargo periods, they do not have a business model; you are just quoting evidence to us that says more or less the opposite. I think it is not for people like us to try to interfere in the different offerings that publishers make. What matters to us is that scholarly information is as widely disseminated as possible, and we look forward to publishers trying different options.

**Earl of Selborne** With respect, it is certainly not for us to interfere, but it is for us, I think, to challenge the assumptions on which this policy has been determined. We would expect you to have been able to show what the cost of the two systems is likely to be, what the benefits or the disbenefits are likely to be, bearing in mind that we are 6% of an international market and that, whether we like it or not, subscription journals in many disciplines, however popular the gold option might be for OA, are likely to continue because that is the

way other people are going to continue to publish. These are the factors we need to understand, and if we have gone for an option that appears to be heroically ambitious because these other factors have not been taken into account, then it is surely the job of Parliament at least to ask you to justify your decision.

**Professor Douglas Kell**: It absolutely is, and as we mentioned several times, of course, it is somewhat uncertain, but there are some boundary conditions that we know, such as the 1% to 1.5% of turnover cost of the actual costs of funding the publications through gold APCs, so that is well known. We recognise that we will be able to gather some evidence quite quickly by having this review at the end of quarter 4 of 2014. I think that is a good position to be in to seek to get the evidence, as you would hope we would do.

**Q63** Lord Rees of Ludlow: A comment on Lord Selborne. Physics is certainly a subject area where there is, in effect, green access with no embargo period, so there are certainly a number of important areas where this would make no difference at all to availability.

I would like to really go back to the cost-benefit analysis because we have talked about 1.5%, but there is also, is there not, going to be a sort of cost in terms of the petty accounting and administration? This is going to happen in every university, in every department, in deciding how to allocate the funds for gold access. Certainly, if HEFCE is going to require open access in the REF, someone in HEFCE has to police all the world's journals to see if they are enforcing the embargo they are saying they are, which is consistent. Is it not going to be a huge and rather tiresome effort on the part of both universities and bodies like yours to ensure that this is implemented?

**David Sweeney**: I do not think so. There is a site, SHERPA-ROMEO, that polices the conditions that journals place around the publishing. Now it does not seem to be an unduly taxing item for us to support. We do have several universities that already have article processing charge funds because, after all, we are in a dual environment, and this has not been at the top of university concerns about administrative costs at the moment. I do not want to downplay that there will be effort involved, but already universities run repositories, they manage processing charges, and we will talk at length with them about the efficient ways to do that, providing tools, if we can, to help them.

The Chairman: Just to pick up on the point of universities that already have APC funds, we took evidence this morning from Imperial College, which has such a fund, but it was explained to us that at the moment there is no competition among academics for access to the fund because there is more than enough money to go round, given the limited number of papers that are published in gold open access journals, but as the policy of going for gold is implemented, there will be pressure and there will be a bureaucracy to make the hard decisions about who gets the money, and that was acknowledged, I think, by Imperial College this morning. It is, if I may say so, a bit complacent to assume that because some small funds are not imposing bureaucratic burdens on universities right now, they will not be in the future.

**David Sweeney**: It may be, but I think we have to wait and see what evidence there is. We do not know how much competition there will be for APC funds. We do not know, indeed, whether there will be a rather larger take-up of green and that will ease the position.

**The Chairman:** There must have been some modelling. There is enough money to fund 45% of papers that people want to publish, so you must have had some thoughts about what the administrative burdens would be on universities.

**Professor Douglas Kell**: Yes, that exactly was the modelling, so we have a good estimate of the number of papers that are likely to be published. We can make an estimate—that is the 45%—of the compliance at a certain time, and we can make an estimate of the average processing charge, and those three numbers multiply together to give you the actual cost, so we have a pretty decent estimate, we believe. Clearly, there are elasticities in that, but the estimates are self-consistent when you do them from a number of sources in a number of ways. I do not think we are being complacent. I think we are making a decent fist of having a good estimation of what is likely to be the case.

**Baroness Sharp of Guildford:** Is there a paper that gives us some detail of what your modelling was here? Could you let us have it?

**Professor Rick Rylance**: Yes. Can I make an observation? Clearly, the publications we are funding come from the work we are funding, not the totality of productions from a university, which is deriving its income for research through different sources, including through the QR funding stream and so on. It is best to be clear that what we are talking about are the bits we fund, which are based on algorithms to do with the amount of work that is put in over a historical period, and then the totality of it is a different kind of question because there are other sorts of variables in it.

**Q64** The Chairman: Can I just ask, before I turn to Lord Willis, one question about the international aspect? What will be your policy on academics, who, using your funds, publish in international journals that are not compliant with your policy? Will they essentially be barred from publishing in those journals, even if they were high-profile, highly desirable journals to publish in?

**Professor Rick Rylance**: The trend evidence we have is that the top-line journals are going to be OA compliant. It is possible to imagine exactly the scenario you sketch there, and if that is a considerable problem, given that what we want is the excellent and best research—if that is a disincentive to producing that—we are going to have to look at that very carefully in 2014. The evidence we have at the moment is that that is not going to be a great obstacle, despite people being anxious about it.

**Lord Broers:** We hear through you, Chairman, that *Science*, for example, is not going to be an open access journal.

**Professor Rick Rylance**: That is not my understanding. I may be wrong.

Professor Douglas Kell: Science is compliant.

Lord Broers: It is compliant with what? With the embargo?

**Professor Douglas Kell**: It is compliant with our policy, which is what we are looking for journals to be. What *Science* may or may not do in the future is to be determined, and a journal like *Science* people like me buy more for the front pages than for the papers themselves they get through their institutions. No, I do not—

**Professor Rick Rylance**: I think, clearly, if you are getting a view that *Science* is non-compliant and our understanding is that it is compliant, we need outside the room to try to—

**The Chairman:** Perhaps you could clarify that for us in a follow-up note, because we did ask the university witness panel to clarify for us which journals they would name as major

non-compliant journals and *Science* was mentioned as one of them. Perhaps you could help with that.

**Professor Douglas Kell**: We will get chapter and verse.

Baroness Sharp of Guildford: I take it that—

The Chairman: Sorry, I would like to turn to Lord Willis.

Q65 Lord Willis of Knaresborough: Can I say I welcome the fact that you have come along this afternoon in a bullish mood to defend your policy? I think that that gives the Committee a real opportunity to question that, rather than just simply deal in platitudes. I would very much like, in addition to the funding model, to have some background, if you could send it to the Committee, in terms of this model of how it is good for UK business. I can see that if there is gold access across the globe—let us say that is the ultimate goal, and I think this is a great, noble gesture at the moment—then we get access to 94% of all the other science, and our business gets that. I can see that. I cannot see the trade-off at the moment, but perhaps that is something. You must have done some work on that and there must be some figures somewhere that indicate there is going to be some real advantage. Why on earth would you want to lead this on a global scale if you could not justify that?

**David Sweeney**: I do not understand the, "We are leading it on a global scale". All over the world—and indeed the Research Councils will provide you with our table—people are adopting open access policies. You said at the start of the meeting that you were taking it for granted that open access was a good thing. The costs we have alluded to, and—

Lord Willis of Knaresborough: Can I just stop you there before you get excited? We do that, but the purpose of the Committee is really to examine the hypothesis on which you have developed your policy. I will move on briefly from that because time is limited.

Taking the community with you, the broader community, both the academic and the publishing community, is absolutely fundamental. Would you agree with that? Is that a good starting point to this conversation?

David Sweeney: Yes.

Professor Rick Rylance: Yes.
Professor Douglas Kell: Yes.

**Q66** Lord Willis of Knaresborough: Finch reported on 18 June 2012. Twenty-eight days later, you produced a policy. Did that give you adequate time to consult this community on which the success of the policy depends?

**Professor Rick Rylance**: What we produced was a draft policy, so it was in itself a consultative document. It was a Green Paper, as it were, that people could then respond to, and they did. On the very day that Finch published, I was talking to an arts and humanities subject association meeting about the question of open access, and that has happened repeatedly all the way through these periods. These sorts of meetings, visits to HEIs, convened events by the British Academy and others, those things have been going on all this time.

Lord Willis of Knaresborough: So, there was no attempt then to have any consultation during that period, that month? When the Publishers Association said to us, "RCUK has acted unilaterally and in isolation", they are wrong or they are right?

**Professor Rick Rylance**: I do not think we did act in isolation or unilaterally. We had been quite open about—

**Lord Willis of Knaresborough:** So, when the British Academy, the British Sociological Association, the Economic History Society, the Institute of Physics, SAGE, SOB, SPARC, all saying the same thing, they are wrong?

**Professor Rick Rylance**: But I do not think they give a true portrait of the extent to which we have engaged with the subject—

Lord Willis of Knaresborough: You have not engaged at all. That is the point.

**Professor Rick Rylance**: In which case I do say they are wrong, then, because all of us have repeatedly met publishers, academics and so on, in public and in small group meetings, to discuss these things. On Monday we have a meeting, 4 February, about the arts and humanities convening directly with the ESRC and AHRC. These things are going on repeatedly.

**Lord Winston:** I am probably right, but I am not quite clear about this. Are you saying that your deliberations were completed at the time the Minister made his public announcement? It was the same week that Mark Walport came forward and said that this was going to happen. Do you remember? Can you recall when that was?

**Professor Rick Rylance**: I cannot remember the exact dates. Can you? What we did was we published a draft policy, and we have had subsequent meetings with various interested parties since then. We have made a commitment to publish the final version of that at the end of February, so that has allowed eight months, give or take, in which we have repeatedly met various sorts of interested parties and responded to others, face to face at public meetings and also in terms of correspondence and so on. I do think it is a good deal of consultation, and if the impression you are deriving is—and if they have derived an impression—of our failure to engage with them in conversations about that thing, I would have to say they are wrong.

Lord Willis of Knaresborough: All of those organisations, plus another dozen, said exactly that, so there is clearly a misunderstanding. Can I move on from that? You are now consulting, having produced your draft policy. On I April, it is going to be implemented and sent forward. Do you feel that that is a sufficient timeline in order for universities in particular and other research groups to get up to speed in terms of implementing this policy? This morning, we had Oxford here and we had Imperial—it is on public record—who do not have a policy yet because they are struggling to look at the various components. We want to get this right, do we not?

**Professor Rick Rylance**: We do indeed, and that is partly why we have this five-year implementation phase, in which people can discover the best way of operating on both sides. They can discover the best way of operating this new system. Our feeling was that if we delayed any more, you lose the momentum that came out of Finch. We have talked a little around the international situation. There is some degree of advantage to be gained from being a first mover. There are also risks, of course, involved in that, and that is what we have to try to calculate on a regular basis. I April is a tough ask, but it is not

unmanageable, I think. Of course, it is worth remembering that RCUK has had a policy on open access for some years now, which has not been comprehensively implemented.

**Lord Willis of Knaresborough:** There is no question that you are missing that I April date.

Professor Rick Rylance: No.

**Professor Douglas Kell**: No. The implementation, again, is a recognition that compliance will not be absolute instantly, and in the Wellcome Trust evidence you will note that they have had their policy, which they have been quite tough about, for seven years, and they are still only 60% compliant, so we recognise it is a journey.

**Lord Winston:** Just for clarity, just checking on the web, it looks as if the announcement was made about I May.

**David Sweeney**: In terms of the Research Excellence Framework, where we have the luxury of considerable time until the next exercise, we have been taking time to talk before we publish a draft. However, we have had repeated demands to be clear about what we are going to do. I think it is very difficult to get the balance between consulting before you publish a draft and publishing a draft and then consulting. We have seen the Research Councils adopt one approach. We have adopted the other. We have both received criticism, but we are determined that together we have the foundation of a policy that is based on open access, and as far as we are concerned, we take that forward with the Research Excellence Framework.

**Lord Broers:** And you are both working closely together.

David Sweeney: Oh yes.

**Lord Broers:** I am out of date, I am afraid, with the REF in its latest implementation, but as an engineer I had sort of heard that things had been adjusted. I am wondering, what do you do with patents?

**David Sweeney**: Patents bear no essential relation to this. We are still talking patents as opposed to published outputs. We have had ways of handling those for years, and those will continue.

**Lord Broers:** Yes, but they are counted in arrears.

**David Sweeney**: Yes, that is true, but I think that has no bearing on the open access distinction.

Lord Broers: That has no bearing—

**David Sweeney**: We have not changed in that sense.

**Lord Broers:** Getting back to the question we had before, you have joined with RCUK in surveying all the journals you think are going to be important in the REF, and confident that they are all meeting—

**David Sweeney**: Not at all. People are entitled to submit to the Research Excellence Framework whatever they want. We, as I said earlier, do not look at the journal in which it is published. We will welcome submissions for the, I assume, 2020 REF. We have established a principle that, where reasonably achievable—and teasing that out with the

community will be the main focus—we will expect submissions to be open access, following the criteria that is generally agreed. For the purposes of research assessment, there is no choice required. We do not care whether it is gold or whether it is green. It is the free dissemination of information that is important.

When it comes to the definition of open access, we will fall back on the embargo periods of the Research Councils that are agreed with the publishers and the community, and indeed, we do participate in that.

**Q67 Earl of Selborne** I would like to touch on licences, and I think we all recognise that one component that has to be discussed with the stakeholders is the appropriate licence, and I know you have a preference for the CC BY, which is the Creative Commons Attribution Licence. That clearly is the most advantageous if you want to put research findings funded by public sources into circulation as quickly as possible. Can you imagine that some of the other licences might be appropriate in certain circumstances? Would it be, for example, possible for a stakeholder who felt that a non-derivative or non-commercial option was more appropriate in their case? Would it be open for them to discuss that with you?

**Professor Rick Rylance**: Speaking personally, I prefer something that is simple. One of the advantages of the CC BY is that it provides the baseline expectation. It is possible, even in my area, to imagine circumstances in which that may not be quite appropriate. I am thinking about issues around translation, for instance, or issues around third party copyright holders, which is embedded within it, although there are quite careful protocols within CC BY about how you handle that kind of thing. We have, collectively, a mutual education about the advantages and the real pitfalls of this, and this is why, again, this 2014 review is so crucial. If we get a weight of evidence that CC BY as the norm is creating real difficulties in certain kinds of areas, then that is something we would take very, very careful account of. At the moment, everybody is so alarmed about the possibility of this, but nobody has quite said to me, "In this area, that is a real obstacle".

**Earl of Selborne** As the Chairman has said, our take on this is that OA is desirable and it has to happen. It is simply a question of trying to work out how the transition is going to operate most smoothly for all stakeholders. Whether the date is I April or I May, there is clearly going to be a lot of unfinished business.

Professor Rick Rylance: Indeed.

**Earl of Selborne** It is not a detail. Would you accept that this is a matter of some concern, not least to the publishers, but to the authors and to the institutions? Would it not be sensible, perhaps, to park issues like this on one side and say, "Let us go with the main thrust, but there are lots of issues that we will need to discuss and certainly review"?

**Professor Rick Rylance**: My quick observation about that is that, certainly, keeping these things under scrutiny over an extended period of time is absolutely necessary, but I think you start from a position whereby CC BY is the default position, and then you try to discover what is wrong with that. Otherwise, what you are going to get is a chaotic sense of difference—are there about 10 options now under CC BY licences that people could opt for? Including a more radical one, CC—

**The Chairman:** Professor Kell, and we are going to have to draw the session to a close very shortly.

**Professor Douglas Kell**: There is a lot of existence of proof out there already where CC BY has become the norm, so I think we can start from a good position, which, as Professor Rylance says, makes life simple. There are easy, well known ways of dealing with, for instance, third party works that you have included, and I will just give an anecdotal example. A recent paper I published—the most recent was open access and gave away a lot of software as well, except for a bit that we had got a licence for, which was not give-awayable, and, therefore, that was the condition, "You can have all of ours, but you cannot have the bit that we licensed. You will have to go and ask the original licence-holder for that". These are well established in this world, this sort of stuff, so I am pretty confident that CC BY is the right way to go, and then everyone can use stuff unencumbered. Since one or two people have raised probably the question, "Is it plagiarism?", no, it is not at all. There is a lot of explanation as to why CC BY does not allow plagiarism, if you look at what the licence says.

**Q68** Lord Rees of Ludlow: This question is really about the strong UK journals, which depend on getting a large proportion of their authors from abroad. Do you think there is going to be any risk of that being jeopardised and, therefore, the standards of the journals being jeopardised, if they change in response to UK policy?

**Professor Rick Rylance**: We clearly did have some conversations with the likes of *Nature* and so on about that kind of question. *Nature* are not saying to us, "We are really anxious about this". They have a bullish confidence in their own place in the world and do not expect that that will be threatened. The same probably is true of *Lancet* and so on.

**Lord Rees of Ludlow:** That may not be typical of the more specialised journal, which is highly rated because it has an international authorship.

**Professor Rick Rylance**: That could be the case, but I would want to look at it on a journal-by-journal basis, rather than saying, "I am deeply anxious about everything in area X".

**Baroness Sharp of Guildford:** Just a very quick question. I was wondering what sort of consultation you had about the CC BY licences and so forth, either beforehand or during the process. As you rightly say, you have had a series of meetings since you published your *RCUK Policy on Open Access* last July. Has it come up as a major issue of consultation?

**Professor Rick Rylance**: I just observe that the two topics that come up repeatedly are the issue around embargoes and the issue about CC BY. Those are typically the two most commonly presented points.

**Baroness Sharp of Guildford:** Have you had any discussion with industry, other than the publishing industry, about it?

Professor Rick Rylance: About CC BY? I have not.

**Professor Douglas Kell**: No. In my world, it has not been seen as a particular issue because the desire is to disseminate your stuff as much as possible and in an unencumbered way. Of course, most of the history of recent OA publishing has been in biology-type journals, so we have not seen it as a particularly big issue, in truth.

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<sup>&</sup>lt;sup>126</sup> Note from witness: O'Hagan S, Knowles J, Kell DB: Exploiting genomic knowledge in optimising molecular breeding programmes: algorithms from evolutionary computing. PLoS ONE 2012; 7:e48862).

**Professor Rick Rylance**: The kind of thing that is coming at me from my end are people who want to publish a novel, so with the trade press, and there are clear differences there, but of course this is about journal articles and not about books. Then there is a rather complicated area around design as well, which is not finished.

**Q69** The Chairman: I think I need to draw it to a close because we have run out of time, but I would like to thank you very much indeed for the answers to our questions.

There are a number of things that you have kindly agreed to follow up with. There was the table, the international summary of where different countries are on open access and their plans and policies for green and gold open access in the future. There is whatever material you have on the cost-benefit modelling, both in terms of the costs of green in relation to gold, where you said, I think, there was a study that demonstrated that gold was a cheaper option than green, and on the cost-benefit modelling of the cost to the higher education sector in terms of transfer to open access and the benefits to UK industry, if you have any modelling on that. Finally, you said you would provide us with some information on major journals that are not compliant with RCUK policy, if indeed there are any. We have asked the higher education witness panel to provide us with some evidence, so it will be interesting to see how your list compares with theirs.

**Professor Rick Rylance**: With particular reference to Science, I think.

**Q70** The Chairman: Science was one example, but others, if you have any others. You will of course receive a transcript in draft form in a short period, and you will have an opportunity to make any editorial changes you wish to, but in the meantime I would like to thank you very much indeed for your evidence. Thanks very much. A very good session.

Further to the House of Lords Science and Technology Committee's evidence session on the 29<sup>th</sup> January 2013 about Open Access, please find below the additional information that we promised to provide. This letter also contains the information requested in your letter dated 31<sup>st</sup> January with regard to the embargo periods for journal articles resulting from MRC funded research.

It is worth emphasising that the drive to Open Access is not a new endeavour. There has been much activity in this space for at least the last decade including the Research Councils original policies being introduced in 2006. There are some excellent international examples, such as PubMedCentral, which have been providing free access to full papers for years and we would hope that other disciplines would be able to replicate their success. In addition, RCUK is not alone or unique in offering funds to promote Gold Open Access. NIH invests around \$100million a year in APCs but does not offer similar support to Green repositories.

## I. Embargo Periods

Further to our evidence during the session, we want to clarify that the RCUK policy, with regards to embargo periods for the green model of Open Access, has not changed. We still see the advantage to having shorter embargo periods of 6/12 months in opening up access to the journal articles in a more timely manner, and will be encouraging authors and institutions to opt for these shorter embargoes whenever possible. However, we recognise that this may not always be possible in the early stages of implementation. So, in line with Government policy, we have ensured that where there is no funding available for paying the Gold APC, there is flexibility for the longer embargo periods of 12/24 months to be used. This was set out in our written evidence to the Committee (Paragraphs 6.4 and 6.5). The exception is in the medical area where 6 months has been the norm for MRC for some time. We can see no compelling reason to alter this at this stage (see below).

We will continue to engage with various groups across the sector during the transition period to monitor the impact of embargo periods and will ensure that this is one area of focus for the 2014 review. Evidence gathered will allow us to ensure that the pace of transition is appropriate. We anticipate that the transition period will last for around five years (subject to review).

## 2. Embargo periods for MRC-funded research

Further to your letter dated 31<sup>st</sup> January requesting further information on the situation for journal papers resulting from MRC-funded research, we can confirm the MRC Open Access mandate has been in place since 2006 and is consistent with that of the Wellcome Trust. It was never expected that compliance would reach 100% quickly. Compliance has increased from about 24% in 2006 to about 48% in 2012. In answer to the specific questions:

i) RCUK will not actively offer flexibility over compliance with embargo period requirements for MRC-funded research, though during the five-year transition

phase compliance with the RCUK policy is expected to increase (and is expected to reach 100% by year-5).

ii) The RCUK review will include a review of embargo periods. However, given that i) the MRC policy has been in place since 2006, and ii) over the past six years nearly all biomedical journals have become compliant with MRC/Wellcome Trust policy (if they were not so already), it is hard at this stage to see what evidence would lead to a relaxation of embargo periods for papers arising from MRC-funded research.

## 3. Table of European Research funders positions on Open Access

During our evidence we mentioned a table that detailed the positions of international funders on Open Access, specifically those in Europe. This is attached at annex A. The information contained in the table is currently work in progress to be published on the Science Europe website shortly and updated as more information becomes available. We are all conscious that this is a fast evolving situation, sometimes changing weekly, though the dominant direction of travel is towards enabling Open Access.

Further information about the positions of research funders outside of Europe can be found in our original written evidence.

## 4. Modelling of the costs of the RCUK policy

The Committee requested during the evidence session further information on how RCUK had modelled the costs of the policy. The total amount of funding that RCUK will put into supporting APC payments is based on estimates of the numbers of publications arising from Research Council funded research in both HEIs and Research Council institutes. Data from 2010 & 2011 indicate that some 26,000 peer-reviewed research papers per year arise from Research Council funded research, of which approximately 90% are produced within the HEI sector and 10% from Research Council institutes. The average cost of an APC has been taken from the Finch report (estimated as £1727 plus VAT) and, using agreed principles, funding is provided to institutions at 80% of full economic cost. The total value of the RCUK APC fund for supporting the HEI sector has therefore been set as follows:

Year	2013/14	2014/15	2015/16	2016/17	2017/18
Value of	£17M	£20M	tbc	tbc	tbc
RCUK APC					
fund					
Estimated %	45%	53%	60%	67%	75%
papers block					
grant will fund					
as Gold OA					

The figure for direct labour includes both directly incurred staff costs and directly allocated costs for investigators.

The value of APC awards for years 3, 4 & 5 cannot be safely indicated at this stage, because of Treasury's constraint on the commitment of funds beyond the current SR period and the level of funding available will be dependent on the outcome of the next Spending Review.

However, Research Councils estimate that the total allocation that they will need to be prepared to make for APCs over the five year period could be in excess of £100m.

## 5. Benefits of Open Access to Business and Industry

The Research Councils have a responsibility to ensure the widest possible dissemination of the research we fund. This includes academics, businesses (both the corporate and SME sectors), the general public, the public and third sectors, and individual innovators. For us, 'use' means much more than just being able to read research papers – it means having the ability to re-use and exploit research papers in the widest possible sense. This may involve text and data mining to advance new areas of research, re-presenting collections of research papers in particular areas, mashing together elements of research papers with other information to create new information products, etc. With maximum open access to the outputs of research comes maximal opportunity to read and exploit research, and thus maximal opportunity for innovation. And from innovation comes growth, and benefit to the UK as a whole. The Research Councils' preference for Gold OA delivers this maximal openness and opportunity for innovation through the CC-BY licence which we require where we pay an Article Processing Charge (APC).

This move to openness and reusability is already stimulating innovation. One Learned Society has discussed with RCUK its ideas to create a value-added service built around representing research papers in a specific subject area from a variety of publishers. This is made possible through the use of the CC-BY licence. We also consider that open access to published research will help those individuals and organisations acting as knowledge brokers, enabling them to call on a much wider range of material to summarise, synthesise and report on in their role as intermediaries between researchers and industry.

Further commercial impact of the policy will be monitored over time but it is expected that there will be considerable benefits from the policy directly to business and other sectors.

## 6. Compliance of journals with the RCUK Open Access Policy

RCUK, in conjunction with the Wellcome Trust, has written to the top-60 publishers (in terms of volume) of Research Council and Trust funded research to inform them about the requirements of the policy and to understand how they intend to comply. This has led to a constructive dialogue with a range of commercial and learned society publishers, many of whom have provided us with 'commercial in confidence' information on their plans for compliance with the RCUK and Wellcome Trust policies. Many publishers have yet to make formal public announcements of their plans, however, we are confident that a large majority of journals, especially within the STM sector, will become either green or gold compliant. We recognise that there could well be some key journals in the HSS sector which will not be compliant when our policy comes into force, and we are working to identify these and to engage with the relevant publishers to understand their reasons for non-compliance. We view compliance for journals in the same way as we see compliance for authors and institutions - as a journey and not an event.

## 7. Current position on journal compliance

In order to be able to give a snapshot of the current compliance position, each Research Council has identified what it considers to be a representative sample of the journals which

are of high importance to their community – regardless the country in which the journal is published. The current compliance status of these journals has been compiled from information held by the Research Councils and from the SHERPA/ROMEO project (<a href="http://www.sherpa.ac.uk/romeo">http://www.sherpa.ac.uk/romeo</a>) at the Centre for Research Communications at Nottingham University (<a href="http://crc.nottingham.ac.uk">http://crc.nottingham.ac.uk</a>). The table in Annex B gives the result of this analysis. It should be noted that this is the current position, and does not reflect the announcements about compliance that many publishers will soon be making. Out of 89 journals, 63 (71%) are compliant, the compliance of 17 (19%) is currently unclear, and 9 (10%) are not compliant.

## 8. Chronology of the development of the RCUK policy

During the evidence session there may have been some confusion with regards to the timeline for the release of the policy and the engagement that has been undertaken with the various stakeholders. The chronology below hopefully clarifies the timings. As RCUK had representation on and was involved in the work of the Finch Group, it was possible to develop the policy and engage with stakeholders about it in parallel. Although the chronology notes the major points of engagement with stakeholders, discussions have been on-going, and will continue to take place, with researchers, institutions, publishers and learned societies throughout this period.

2006	Research Councils publish their first Open Access policies
October 2011	Finch Group established. RCUK has representation on the group.
March 2012	Informed by the work of the Finch Group, RCUK circulates a draft policy to representatives within the different research communities and to members of the Finch Group for comment.
18 <sup>th</sup> June 2012	Finch Group publishes its report
16 <sup>th</sup> July 2012	Government publishes its response to the Finch Report and, simultaneously, RCUK publishes the finalised policy having taken on board comments from stakeholders.
17 <sup>th</sup> July 2012	European Commission publishes their position on Open Access
7 <sup>th</sup> September	Government announces and additional £10million investment to "pump prime" Open Access, to be administered by RCUK.
27 <sup>th</sup> September	Sci-Comms Forum debate on Open Access. RCUK represented by Mark Thorley
22 <sup>nd</sup> – 28 <sup>th</sup> October	Open Access Week. Many RCUK staff gave presentations and talks at universities across the Country about the policy.
8 <sup>th</sup> November	RCUK announced details of the block grant.
13 <sup>th</sup> November	Workshop on the policy held by RCUK. Around 60 representatives from universities, research organisations, learned societies and other

sector organisations were able to discuss the policy and ask questions about it. RCUK also used the event to engage with the sector on the best ways to monitor compliance with the policy.

9<sup>th</sup> January 2013 Meeting between RCUK and representatives of the Russell Group to

discuss the policy.

4<sup>th</sup> February Meeting between AHRC, ESRC and representatives from the Arts,

Humanities and Social Sciences communities.

12<sup>th</sup> February BIS convened meeting between publishers, learned societies and

universities. RCUK will also be represented.

Late February Finalised guidance to accompany the policy will be published. Input

has been sought from a variety of stakeholders to ensure that it

provides clear guidance for implementation.

I<sup>st</sup> April New policy comes into effect.

Autumn 2014 First review of the policy and its implementation will take place.

RCUK will be continuing to engage with a variety of stakeholders throughout the implementation period of the policy. These will take the form of regular discipline based or institutional level meetings as well as ad hoc meetings with other stakeholders, such as the publishers, on a regular basis. We expect to recognise the outcomes of these meetings in the final guidance document to be published in February and for the continued dialogue to be integral to the 2014 review.

5 February 2013

		nex A - Scier			nber orga	nisations Ope	n Access <sub>I</sub>	oositions		
Country	Organisation	OA policy	Green	Gold	Hybrid	APC paid Amount and % research budget (if available)	Specific OA fund	Embargo 6/12 months	Libre/ Gratis	Comments
Austria	FWF - Austrian Science Fund	2004	Yes	Yes	Yes	Yes €1.4m (0.7%)	Yes	Yes		Also covers monographs
Belgium	Research Foundation - Flanders	2007	Yes	Yes	No	Yes		12		Part of grant funding
Belgium	Fond de la Recherche Scientifique	2009	No	Yes		No				Part of grant funding
Czech Republic	Czech Science Foundation	2008	Yes	Yes	Yes	Yes	No			Part of grant funding
Denmark	Danish Council for Strategic Research	2012	Yes	Yes	Yes	Yes	No	Yes		Part of grant funding
Denmark	Danish National Research Foundation	2012	Yes	Yes	Yes	Yes	No	Yes		Part of grant funding
Denmark	The Danish Council for Independent Research	2009	Yes	Yes	No	Yes	Yes			Clear opposition to hybrid and double dipping
Estonia	Estonian Research Council	Planning								
Finland	Academy of Finland	2006	Yes	Yes	Yes	Yes	No			Part of grant funding
France	ANR	2007	Yes							Deposit is mandated in A&H and SS,

	Anr					nisations Ope	n Access i	positions		
Country	Organisation	OA policy	Green	Gold	Hybrid	APC paid Amount and % research budget (if available)	Specific OA fund	Embargo 6/12 months	Libre/ Gratis	Comments
						,				but not sciences
France	CEA*	Planned								
France	INRIA *	2010	Yes	No	Yes					
France	Inserm *	2003	Yes	Yes	Yes					
France	IRD*	2006	Yes	No		No	No			
Germany	Alfred Wegener Institute *	Planned								
Germany	Forschungszentru m Jülich *	Planned				Yes €100,000 (0.02%)				
Germany	Helmholtz- Zentrum Berlin für Materialien und Energie GmbH *	2006	Yes	No		Don't know				
Germany	German Research Foundation (DFG)	2006	Yes	Yes	Yes	Yes	Yes	Yes		Part of grant and top up fund
Germany	Karlsruhe Institute of Technology *	2010	Yes	Yes		Yes €70,800 (8.85%)	Yes			
Germany	Max Planck Digital Library *	2003	Yes	Yes	Yes	Yes €440,000 (0.03%)	Yes			
Germany	German National Library of Medicine; Cologne/Bonn *	2007	Yes	Yes	Yes	Yes				
Hungary	Hungarian	2010	Yes	Yes		Yes				

	Anı					nisations Ope	n Access i	oositions		
Country	Organisation	OA policy	Green	Gold	Hybrid	APC paid Amount and % research budget (if available)	Specific OA fund	Embargo 6/12 months	Libre/ Gratis	Comments
	Scientific Research Fund (OTKA)									
Hungary	Hungarian Academy of Sciences *	2013	Yes	Yes		Yes		12	Yes	
Iceland	Iceland Centre for Research	2013	Yes	Yes	Yes	Yes	Yes	Yes		Favours Gold immediate OA
Ireland	Health Research Board	2012	Yes	Yes		No				Favouring green and national repository
Ireland	Irish Research Council	2012	Yes					12		
Ireland	Science Foundation Ireland	2009	Yes					12		
ltaly	National Research Council	2012								Signed Berlin declaration in Sep 2012
Luxembourg	National Research Fund	Planned				Yes				
Netherlands	Netherlands Organisation for Scientific Research	2010	Yes	Yes	Yes	Yes €500,000 (0.07%)	Yes	9 months		OA fund capped on max. € 5000 per NWO- project
Norway	Research council of Norway	2009	Yes	No		No				
Poland	National Science	Planned				Yes				Cost covered in

		nex A - Scier			nber orga	nisations Ope	n Access	positions		
Country	Organisation	OA policy	Green	Gold	Hybrid	APC paid Amount and % research budget (if available)	Specific OA fund	Embargo 6/12 months	Libre/ Gratis	Comments
	Centre									grant
Portugal	Foundation for Science and Technology	Planned	Yes	Yes		Yes		Yes	Yes	Modelled on RCUK and WT policy. Will be mandated. National repository
Slovakia	Slovak Research and Development Agency	Planned				Yes				
Slovenia	Slovenian Research Agency	2012				No				
Spain	Council for Scientific Research *	2008	Yes	Yes		Yes €26,780 (0.003%)				National law requiring green archiving within 12 months
Sweden	Swedish Research Council	2010	Yes	Yes	Yes	Yes				
Sweden	Swedish Council for Working Life and Social Research	2012	No	Yes		Yes				
Sweden	Swedish Research Council for Environment, Agricultural Science and Spatial Planning	2010	Yes	Yes		Yes				

Research Councils UK (RCUK) – Supplementary written evidence

	Anı	nex A - Scier	ce Euro	pe Men	nber orga	nisations Ope	n Access	oositions		
Country	Organisation	OA policy	Green	Gold	Hybrid	APC paid Amount and % research budget (if available)	Specific OA fund	Embargo 6/12 months	Libre/ Gratis	Comments
Switzerland	Swiss National Science Foundation (SNSF)	2007	Yes	Yes	No	Yes				Part of the grant
United Kingdom	RCUK	2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
* Research Perfor	ming organisations	(others are Re	esearch Fu	unding O	rganisation	ns)	•			

Source: Science Europe Survey Oct 2012, Sherpa Juliet, OpenAire, and funders websites

							Cush and		
Country	OA policy	Green	Gold	Hybrid	APC paid	Specific OA fund	Embargo 6/12 months	Libre/Gratis	Comments
Belgium	Oct 2012	Yes	Yes		Yes		Yes		Declaration of Brussels
France	Jan 2013	Yes	Yes		Yes		?		Minister Fioraso speech January 2013 – Journee Couperin Promotion of platinum model free to readers and authors – publication itself sponsored
Ireland	Oct 2012	Yes	Yes		Yes		Yes		
Spain	2011	Yes			Yes		12		This is implemented through a national law.
Sweden	In preparatio n								
nited Kingdom	July 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

## Pan National organisations

Country	OA policy	Green	Gold	Hybrid	APC paid	Specific OA fund	Embargo 6/12 months	Libre/Gratis	Comments
European Commission	July 2012	Yes	Yes	Yes	Yes		Yes		H2020 announcement confirmed FP7 pilot. Recommendation to all member states to implement national policy
European Research Council	2006	Yes	Yes	Yes	Yes		6		Part of grant



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## Annex B - Compliance of Journals

## Amended table of compliant journals - 7th February 2013

Due to a technical error the previous table submitted did not include the full spread of journals that had been intended. Both the table and the accompanying analysis have been corrected.

## Compliance of journals with the RCUK Open Access Policy

RCUK, in conjunction with the Wellcome Trust, has written to the top-60 publishers (in terms of volume) of Research Council and Trust funded research to inform them about the requirements of the policy and to understand how they intend to comply. This has led to a constructive dialogue with a range of commercial and learned society publishers, many of whom have provided us with 'commercial in confidence' information on their plans for compliance with the RCUK and Wellcome Trust policies. Many publishers have yet to make formal public announcements of their plans, however, we are confident that a large majority of journals, especially within the STM sector, will become either green or gold compliant. We recognise that there could well be some key journals in the HSS sector which will not be compliant when our policy comes into force, and we are working to identify these and to engage with the relevant publishers to understand their reasons for non-compliance. We view compliance for journals in the same way as we see compliance for authors and institutions - as a journey and not an event.

## Current position on journal compliance

In order to be able to give a snapshot of the current compliance position, each Research Council has identified what it considers to be a representative sample of the journals which are of importance to their community – regardless the country in which the journal is published. The current compliance status of these journals has been compiled from information held by the Research Councils and from the SHERPA/ROMEO project (<a href="http://www.sherpa.ac.uk/romeo">http://www.sherpa.ac.uk/romeo</a>) at the Centre for Research Communications at Nottingham University (<a href="http://crc.nottingham.ac.uk">http://crc.nottingham.ac.uk</a>). The table below gives the result of this analysis. It should be noted that this is the current position, and does not reflect the announcements about compliance that many publishers will soon be making. Out of 108 journals, 69 (64%) are compliant, the compliance of 21 (19%) is currently unclear, and 18 (17%) are not compliant.

RCUK 6 February 2013

Journal	Publisher in RoMEO	Gold Compliant	Green Compliant	Compliance Method	Comment
Acta	Elsevier	N/A	N/A	No	No
Biomaterialia					agreement with funder
Advanced	Wiley-VCH	Yes	No	Gold	
Functional					
Materials					
Advanced	Wiley-VCH	Yes	No	Gold	
Materials					

American	American	N/A	Yes	Green	
Economic Review	Economic Association				
American Historical Review	Oxford University Press: Policy E	N/A	No	No	
Angewandte Chemie International Edition	Wiley-VCH	Yes	No	Gold	
Antiquity	Antiquity Publication	N/A	Yes	Green	
Applied and Computational Harmonic Analysis	Elsevier	N/A	N/A	No	No agreement with funder
Applied Physics Letters	American Institute of Physics	Unclear	Yes	Green	Gold licence unclear
Art History	Wiley-Blackwell	Yes	Maybe	Gold	Green embargo period unclear
Astronomical Journal	American Astronomical Society	No	No	No	
Astronomy and Astrophysics	EDP Sciences	Yes	Yes	Both	
Astrophysical Journal	American Astronomical Society	No	No	No	
Atmospheric Chemistry and Physics	European Geosciences Union	Yes	Yes	Gold	
Automatica	Elsevier	N/A	N/A	No	No agreement with funder
Behavioral and brain sciences	Cambridge University Press	Yes	Yes	Green	
Bioinformatics	Oxford University Press: Policy B	Maybe	No	Gold Maybe	Gold licence unclear
Biomaterials	Elsevier	N/A	N/A	No	No agreement with funder
British Educational Research Journal	Taylor & Francis (Routledge)	Unclear	Maybe	Green Maybe	Green embargo period unclear
British Journal of Management	Wiley-Blackwell	Yes	No	Gold	

British Journal of	Wiley-Blackwell	Yes	Maybe	Gold	
Sociology Cell	Elsevier (Cell Press)	Yes	No	Unclear	Green location unclear
Chaos	American Institute of Physics	Unclear	Yes	Green	
Chemical Communications	Royal Society of Chemistry	Maybe	No	Gold Maybe	Gold licence unclear
Chemical Engineering Science	Elsevier	N/A	N/A	No	No agreement with funder
Chemical Society Reviews	Royal Society of Chemistry	Maybe	No	Gold Maybe	Gold licence unclear
Circulation	American Heart Association	N/A	Yes	Green	
Computer Methods in Applied Mechanics and Engineering	Elsevier	N/A	N/A	No	No agreement with funder
Critical Quarterly	Wiley-Blackwell	Yes	Maybe	Gold	Green embargo period unclear
Dalton Transations	Royal Society of Chemistry	Maybe	No	Gold Maybe	Gold licence unclear
Design Studies	Elsevier	No	Yes	Green	
Econometrica	Econometric Society	N/A	No	No	
Economic Journal	Wiley-Blackwell	Yes	Maybe	Gold	
EMBO Journal	Nature Publishing Group: EMBO	No	Yes	Green	EMBO has a separate policy to Nature Publishing Group
Energy & Environmental Science	Royal Society of Chemistry	Maybe	No	Gold Maybe	Gold licence unclear
English Language and Linguistics	Cambridge University Press	Maybe	Yes	Green	
Environmental Microbiology	Wiley-Blackwell	Yes	No	Gold	
European Physical Journal C	EDP Sciences	Yes	Yes	Both	

Gender and History	Wiley-Blackwell	Yes	Maybe	Gold	Green embargo period unclear
Genes and Development	Cold Spring Harbor Laboratory Press	Yes	Yes	Green	
Genome Research	Cold Spring Harbor Laboratory Press	Yes	Yes	Green	
Global Change Biology	Wiley-Blackwell	Yes	No	Gold	
History of Religions	University of Chicago Press	N/A	Yes	Green	
IEEE Transactions on Fuzzy Systems	IEEE	N/A	Yes	Green	
IEEE Transactions on Neural Networks	IEEE	N/A	Yes	Green	
IEEE Transactions on Systems, Man and Cybernetics Part B- Cybernetics	IEEE	N/A	Yes	Green	
Immunity	Elsevier	Maybe	No	Gold Maybe	Gold licence unclear
International Journal for Numerical Methods in Engineering	Wiley-Blackwell	Yes	No	Gold	
JAMA : the Journal of the American Medical Association	American medical association	N/A	Yes	Green	
Journal of Archaeological Science	Elsevier	No	Yes	Green	
Journal of Cell Biology	Rockerfeller University Press	N/A	Yes	Green	
Journal of Clinical Oncology : official journal of the American Society of Clinical Oncology	American Society of Clinical Oncology	N/A	No	No	
Journal of Computational	Elsevier	N/A	N/A	No	No agreement

Physics					with funder
Journal of Cosmology and Astroparticle Physics	Institute of Physics	Yes	No	Gold	
Journal of High Energy Physics	Springer Verlag	Yes	Yes	Both	
Journal of Management Studies	Wiley-Blackwell	Yes	Maybe	Gold	
Journal of Materials Chemistry	Royal Society of Chemistry	Maybe	No	Gold Maybe	Gold licence unclear
Journal of Physical Chemistry	American Chemical Society	No	Maybe	Green Maybe	Green embargo waiver required
Journal of Physical Chemistry C	American Chemical Society	No	Maybe	Green Maybe	Green embargo waiver required; Gold licence wrong
Journal of Physics G: Nuclear and Particle Physics	Institute of Physics	Yes	No	Gold	
Journal of Roman Studies	Cambridge University Press	N/A	Yes	Green	
Journal of Social Policy	Cambridge University Press	Yes	No	Gold	
Journal of the American Chemical Society	American Chemical Society	No	Maybe	Green Maybe	Green embargo waiver required
Lancet	Elsevier	Maybe	No	Gold Maybe	Gold licence unclear
Langmuir	American Chemical Society	No	Maybe	Green Maybe	Green embargo waiver required; Gold licence wrong
Mind	Oxford University Press	Maybe	Maybe	Maybe	Green embargo period unclear; Gold licence

Modern Language Review	Modern Humanities Research	N/A	No	No	
	Association				
Modern Law Review	Wiley-Blackwell	Yes	Yes	Both	
Molecular Ecology	Wiley-Blackwell	Yes	No	Gold	
Monthly Notices of the Royal Astronomical Society	Oxford University Press: Policy P	No	Yes	Green	
Nano Letters	American Chemical Society	No	Maybe	Green Maybe	Green embargo waiver required; Gold licence wrong
Nature	Nature Publishing Group	No	Yes	Green	
Nature Chemistry	Nature Publishing Group	N/A	Yes	Green	
Nature Geoscience	Nature Publishing Group	Yes	Yes	Both	
Nature Materials	Nature Publishing Group	N/A	Yes	Green	
Nature Photonics	Nature Publishing Group	N/A	Yes	Green	
Neural Networks	Elsevier	N/A	N/A	No	No agreement with funder
Neuron	Elsevier	Maybe	No	Gold Maybe	Gold licence unclear
New England Journal of Medicine	Massacheusetts Medical society	N/A	Yes	Green	
Nuclear Physics B	Elsevier	Yes	No	Gold	
Optics Express	Optical Society of America	No	Yes	Green	
Organic Letters	American Chemical Society	No	Maybe	Green Maybe	Green embargo waiver required; Gold

					licence wrong
Past and Present	Oxford University Press: Policy E	N/A	No	No	
Philosophical Transactions of the Royal Society B- Biological	Royal Society	Yes	Yes	Both	
Philosophy of Science	Philosophy of Science Association	N/A	No	No	
Physica D- Nonlinear Phenomena	Elsevier	N/A	N/A	No	No agreement with funder
Physical Chemistry Chemical Physics	Royal Society of Chemistry	Maybe	No	Gold Maybe	Gold licence unclear
Physical Review A	American Physical Society	No	Yes	Green	
Physical Review B	American Physical Society	No	Yes	Green	
Physical Review C (Nuclear Physics)	American Physical Society	No	Yes	Green	
Physical Review D	American Physical Society	No	Yes	Green	
Physical Review Letters	American Physical Society	No	Yes	Green	
Physics Letters A	Elsevier	Yes	No	Gold	
Physics Letters B	Elsevier	Yes	No	Gold	
Plant Cell	American Society of Plant Biologists	N/A	Yes	Green	
PLoS Biology	Public Library of Science	Yes	N/A	Gold	
PLoS Medicine	Public Library of Science	Yes	N/A	Gold	
PLoS One	Public Library of Science	Yes	N/A	Gold	
Political Studies	Wiley-Blackwell	Yes	Maybe	Gold	
Proceedings of the National Academy of Sciences of the USA	National Academy of Sciences	n/a	Yes	Green	
Proceedings of the Royal Society B- Biological Sciences	Royal Society	Yes	Yes	Both	

Progress in Human Geography	SAGE Publications	No	Yes	Green	
Quarterly Journal of Economics	Oxford University Press: Policy E	N/A	No	No	
Regional Studies	Taylor & Francis (Routledge)	Unclear	Maybe	Green Maybe	Green embargo period unclear
Reviews of Modern Physics	American Physical Society	No	Yes	Green	Gold wrong version
Science	American Association for the Advancement of Science	N/A	Yes	Green	
Textual Practice	Taylor & Francis (Routledge)	Maybe	Maybe	Maybe	Green embargo period unclear; Gold licence unclear
The Classical Quarterly	Cambridge University Press	N/A	Yes	Green	

## Royal Astronomical Society - Written evidence

## Introduction

- 1. With around 3750 members (Fellows), the Royal Astronomical Society (RAS) is the leading learned society representing the interests of astronomers, space scientists, planetary scientists and geophysicists.
- 2. Through Oxford University Press (OUP), the RAS publishes two major peer-reviewed journals, Monthly Notices of the Royal Astronomical Society (MNRAS) and (with the German Geophysische Gesellschaft) Geophysical Journal International or GJI.
- 3. Monthly Notices is one of the world's leading primary research journals in astronomy and astrophysics. It is circulated to 4446 institutions worldwide with a further 1663 institutions receiving it through a third party database. In addition there is a philanthropic circulation of this journal to 173 libraries and institutes in developing countries. The number of papers submitted to MNRAS is increasing by 5-10% each year. 2551 papers were accepted in 2012, of which 575 (23%) were from the UK.
- 4. GJI publishes papers on all aspects of theoretical, computational, applied and observational geophysics. Over 4000 libraries worldwide have access to this journal. Paper submissions to GJI increased by 11% from 2010 to 2011 but remained steady in 2012. 475 papers were accepted in 2012, of which 37 (8%) were from the UK.
- 5. MNRAS and GJI are so-called 'hybrid' journals that allow papers to be submitted on a 'gold' Open Access basis (whereby authors pay an Article Processing Charge (APC) once their paper is accepted) or through an embargoed route where authors can publish at no cost but papers are not freely available for three years. Until now the Open Access option for our journals has been little used, with only 1 or 2 requests each year.
- 6. MNRAS and GJI may thus already be compatible with the new Open Access policy set out by Research Councils UK (RCUK) that stipulates a preference for publication through gold Open Access. In the case of MNRAS, around 90% of submitted papers are placed in the ArXiV repository alongside publication in the journal and these are then freely available. UK astronomy researchers appear to see publication in a respected journal alongside Open Access through ArXiV as the best way to give their work both the stamp of peer review approval and to disseminate it to the widest possible audience.
- 7. We are unconvinced that Open Access to scientific papers will lead to an increase in public engagement in the disciplines of astronomy and space science. The community of researchers in these areas has been heavily and successfully involved in 'science and society' activity for many years, with a key aim of this work being to explain complex topics to a diverse audience.

8. Given that the overwhelming majority of papers in astronomy are already placed in the ArXiV repository, the general public has had free access to most of these since 1992. We are not aware of any evidence that there has been a significant take up of this resource outside of the scientific community. It therefore seems unlikely that the new Open Access regime will lead to a significant widening of the research paper readership.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies

- 9. Along with many other learned societies such as the Geological Society and the Institute of Physics, the Society receives a significant fraction of its income through its publishing activities. This allows the RAS to remain independent of Government as we do not receive any direct funding from the public sector.
- 10. Oxford University Press are a not for profit enterprise. The Society sees many benefits from using a professional publisher including a consistent journal "brand", professional copy editing, language improvement services, indexing, journal marketing, currency conversion, control of permissions and rights, support for authors against plagiarism and new access technologies.
- II. As a registered charity the Society must by law use its income, including that derived from publishing, to serve its charitable objectives. In the case of the RAS the publication surplus funds activities including 15-20 scientific meetings per year, student and post-doctoral travel grants and undergraduate summer bursaries, underpins accessible journals such as Astronomy and Geophysics and supports open lectures for the public. All these activities directly or indirectly contribute to an environment in which more science is accomplished and therefore more science is available for publication. We therefore argue that this publication income contributes to a virtuous circle if intelligently deployed.
- 12. The two research councils that interact most closely with the RAS are the Science and Technology Facilities Council (STFC) and the Natural Environment Research Council (NERC). STFC engage with the Society via convened meetings such as our Astronomy Forum that brings together heads of groups and external contributors to discuss current science policy issues. We have plans in place to establish formal mechanisms for dialogue with NERC but these are at a nascent stage.
- 13. STFC has been diligent in outlining how the new Open Access regime will affect funding and how they plan to implement this system. However the opportunities for the community to interact with e.g. RCUK have been more limited and there remain concerns about issues such as international competitiveness and the administration of funding with higher education institutions.
- 14. We urge Committee members to examine this in more detail. Learned societies are a key stakeholder and a conduit for the views of the scientific community, so engagement with institutions like the RAS is essential.
- 15. We further believe that the peer review model is vital to the scientific process, and that the management of this is underpinned by a sustainable income stream. Many of

the most distinguished scientists describe how their published papers benefit from inputs from their peers and how the final version may be quite different to the original draft. The Open Access reforms should not be allowed to threaten what has until now been a successful model that gives UK science its strength on the world stage.

- 16. Whatever developments take place in scientific publishing, if the benefits of publicly funded research are to be delivered and maintained, both for the science itself and for any applications, then certain basic principles must be adhered to:
  - (a) High quality scientific journals must maintain peer-review by independent professional experts in the field if they are to retain the confidence of readers and contribute soundly to scientific progress.
  - (b) Any scientific publishing system must maintain an accessible "version of record" in a sustainable way which is also capable of migrating to future technologies.
  - (c) There should be no undue restriction on scientists to publish in the journals of their choice and at the rate their scientific discipline demands.
  - (d) Whatever business model develops for high quality scientific journals, the responsible agencies must provide the funds needed to maintain the quality of publications and the academic freedom of the authors, as outlined in the recommendations (a)-(c) above.

# Support for universities in the form of funds to cover article processing charges, and the response of universities and other higher education institutions (HEIs) to these efforts

- 17. There are a number of challenges and concerns that have been raised by the scientific community, particularly around the management of APCs by universities and in handling international collaborations.
- 18. On the first of these, through the implementation of the Finch review recommendations, library funding that covered journal subscriptions has been moved out of the Higher Education Funding Council for England and the equivalents in Wales, Scotland and Northern Ireland to RCUK and will now be distributed to the central administration of grant receiving higher education institutions (HEIs).
- 19. Researchers in universities have a number of concerns about the way in which this will operate. Until now, the decision to publish a paper lay in the hands of the researcher as in most cases this was done at no charge. In the new regime, RCUK funded researchers are effectively mandated to publish their work as Open Access. Most peer review journals will demand an article processing charge (APC) for Open Access papers once they have been accepted. It may then fall to senior university managers, who do not necessarily have expertise in the scientific field, to decide whether they wish to spend a portion of their budget on an APC. In any case it is at present unclear how research groups will access APC funding.
- 20. There is a further risk that research-intensive institutions may be penalised for their activity, in that they pay more for APCs for publishing papers than they did to subscribe to journals.

21. HEIs not in receipt of RCUK grants will not have access to the new APC funds, so researchers there may be disadvantaged as a result. RCUK guidelines indicate that 99% of researchers will be unaffected, but we recommend that this, the overall costs of moving to the new model and its implementation are closely monitored as the rules change.

### International issues

- 22. The UK appears to be the first country in the world to adopt a national Open Access policy for publicly-funded research. Australia has now done the same but this is not yet the case for major research competitors such as the United States, other EU nations, Japan and China.
- 23. The RAS is concerned that this places UK based researchers at a competitive disadvantage. Here researchers will need to pay an APC, after which their work will be freely available to anyone in the world. In other countries researchers can continue to publish in journals at no cost but UK researchers may well need their institutions to pay an access fee or subscription to read the work of their scientific peers.
- 24. The RAS therefore believes that the UK government should act swiftly to resolve these concerns and Committee members may wish to explore this further. There is a need to negotiate at EU level and in other international bodies to work to harmonise national scientific publishing policies.
- 25. International research collaborations are commonplace in astronomy and geophysics and the lead scientist in these teams is often the first author on any publications that result. If the team leader is based in the UK, they may in future ask a colleague overseas to take the first author role and avoid the APC. The new RCUK policy does not address this issue and this should be clarified as a matter of urgency.

18 January 2013

## Royal Historical Society of the UK (RHS) - Written evidence

Introduction: The Royal Historical Society The RHS is the UK's largest and oldest learned society in History, founded in 1868 and with over 3,000 Fellows and members. Our purpose is to promote and defend the scholarly study of the past, which we do through a wide range of publications, events, grants and prizes (<a href="http://www.royalhistoricalsociety.org/">http://www.royalhistoricalsociety.org/</a>).

The RHS fully supports initiatives to make scholarship as widely and freely available as possible, especially online, and welcomes efforts to identify a sustainable model for transition to OA. However, we have serious concerns about several aspects of the proposed implementation of the policy, which risks causing irreparable damage to the UK research environment that underpins our world-leading reputation, to the capacity of UK universities to collaborate with international partners and to academic freedom.

#### We set out below:

- 1) four broad areas of concern arising from the Finch Report (hereafter: Finch):
  - 1.1. Lack of the "orderly transition" specified by Finch
  - 1.2. Threats to the competitive position of UK universities
  - 1.3. Risks of requiring OA for HEFCE research assessment
  - 1.4. Risks of a one-size-fits-all model
- 2) why the only sustainable model for History is Green, which in itself requires very careful Implementation;
- 3) our Desiderata for implementation of OA.

## I. Our general concerns

## I.I. LACK OF THE "ORDERLY TRANSITION" SPECIFIED BY FINCH

We are alarmed less because HEFCE and RCUK propose to implement Finch but because in some crucial respects they seem to be doing precisely the opposite. Their current proposals on OA ignore many of Finch's carefully formulated recommendations about the need for a carefully coordinated transition based on extensive consultation, evidence-gathering and monitoring in order to "preserve the complex ecology of research". The government's announcement that OA would come into effect in April 2013, less than one year after the publication of Finch, makes such an orderly transition impossible. None of the participants has had time to carry out the necessary economic modelling, consultations or preparation. As Finch sets out in detail, without such an orderly transition, paying particular attention to developments elsewhere, there are severe threats to the quality of the UK's world-leading research base. There's no point in having full Open Access if what is openly accessible is not worth reading.

## 1.2. THREATS TO THE COMPETITIVE POSITION OF UK UNIVERSITIES

Most OA policies in other countries support Green. Some see it as a stage on the way to Gold, others do not, but all recognise the risks of going out on a limb. The UK has already been a pioneer of Green OA, which is to be applauded, but a decision to go Gold now, when none of our major competitors is doing the same, means that the UK assumes most of the risks while competitors reap most of the benefits. US academics and publishers are asking why the UK government intends to subsidise US journal publishing by paying APCs, which they see as a welcome but inexplicable free handout. Moreover, UK

universities face an increasingly competitive international environment, not least given the high levels of investment in universities in South-East Asia (Singapore, Malaysia, Hong Kong). We cannot afford any reduction in the quality of our research publications, which is at risk if the business model of journal publishing is severely disrupted AND universities are forced to divert scarce research funds to paying APCs while still paying the subscription charges that Finch notes are unlikely to be reduced in the near future. Finch emphasises that caution about the pace of implementation, taking fully into account that OA can only work as a "global endeavour", is crucial "to deliver the benefits but minimise the risks" to the UK. Ignoring those wise recommendations means that the UK is likely to be regarded as a pioneer only in the sense that other countries will see us as a test case of precisely how NOT to implement OA.

## I.3. RISKS OF REQUIRING OA PUBLICATION FOR POST-2014 RESEARCH ASSESSMENT

HEFCE's intention to make OA compulsory for publications in the post-2014 research funding allocation exercise makes the problems outlined above far worse. The journals are international in authorship as well as readership. Journals in the USA, Europe or elsewhere show no sign of going Gold and not all of them offer Green OA. Authors overseas, deterred by the lack of control over their intellectual property entailed by the proposed CC BY license, are likely to bypass UK journals, thereby drawing good research from elsewhere away from UK journals. Even more importantly, the uneven pace of implementation of OA around the world currently means that even a requirement for Green could exclude UK authors from many outlets. UK-based academics will only be able to publish in some of the best journals in their field if they accept that such work will not count for HEFCE research assessment, upon which their jobs depend. In any case, their employers, university research managers, could not afford to allow them to do so. And when UK universities hire, they will not be able to take someone from elsewhere who has not published in OA journals, because s/he will not have the publications required for research assessment. All this adds up to severe deterrents to working at UK universities. In order to thrive, History Departments have to be able to draw upon staff as well as students from all over the world. If OA publication becomes a HEFCE requirement, the risk is that academic History in the UK will become increasingly parochial and marginalised when it can only continue to thrive by sustaining and strengthening its extensive international networks. The direction of all other UK research policy is towards greater international connection and collaboration – all that work should not be jeopardised by a hasty rush to OA.

# I.4. A ONE-SIZE-FITS-ALL MODEL THAT IS OUT OF LINE WITH OTHER GOVERNMENT POLICY

For all the strengths of Finch, its recognition of "the complex ecology of research" did not translate into recognition of the major differences between the humanities/social sciences (HSS) and bio-medicine (plus some --but by no means all-- other STEM subjects). Bio-medicine has been taken to be the rule when it is actually often the exception. A one-size-fits-all approach does not reflect government policy in other areas, e.g. REF, and poses acute risks for History and cognate subjects. Finch's recommendation of Gold Access will probably work well for bio-medicine and similar disciplines, but Finch also recognised the need for a mixed economy. The only sustainable model for History is Green. We explain why below.

## 2. Why the only sustainable model for History is Green

- 2.1. Most History journals are published not by commercial publishers who charge huge subscriptions but by university presses and/or learned societies. Subscriptions for institutions are typically £200-£300 p.a.; for individuals, who usually also gain the benefits of membership of a learned society, £25-40 p.a. Where profits are generated, they are used to finance the charitable work of learned societies, which is crucial to the successful functioning of the discipline. Learned societies vary greatly in their size and resources, but it should be noted that the Royal Geographical Society, the Director of which served on the Finch working party, is atypical for the humanities, with its 15,000 members, annual turnover of £4.3 million and ownership of a building in central London. In comparison, the RHS, the largest of the historical societies, has 3,000 members, an income of £300,000 and two rooms in UCL. Other History societies operate on even smaller budgets, but all of them manage to fund many activities to support their area of work: research trips to archives at home and abroad, conference organisation and attendance, writing-up grants for PhD students, who nearly always take a year more than RCUK funding allows). Small amounts of money, widely distributed on a competitive basis, yield extraordinarily productive results. No government agency would have the resources to administer grants on this scale, yet they play a vital role in enabling historical research to take place. All the learned societies attach particular importance to helping early career scholars, offering writing-up fellowships and postdoctoral fellowships as funds permit, plus dedicated funds to help with their research costs. This is all part of what Finch referred to as "the complex ecology of research" that should not be put at risk invaluable work in relation to their constituencies. The report advocated particular caution in relation to the learned societies, which seems to have been ignored in subsequent policy-drafting.
- 2.2. History journals typically publish 4 issues a year, each containing 4-5 articles, say 20 articles, each about 25pp, each year. In contrast, quarterly bio-medical journals typically contain at least 12, shorter articles; those published more frequently often contain more, even shorter, pieces. Hence the APC needed to sustain bio-medical journal publishing can be far lower than in History (and other HSS). The estimate in Finch of £1800 per article is an average and therefore highly misleading in relation to the operating budgets of History journals. In bio-medicine the APCs are usually substantially lower (offset by the fact that more material is published), but preliminary modelling among History journal publishers suggests that £3000 is more realistic, not least because the maintenance of high standards means that far more articles are peer-reviewed than are published. The most prestigious journals, such as Past and Present, which have very high submission to acceptance ratios, would need to charge in the region of £7000 or more. Once articles are accepted, there is all the work involved in paying scrupulous attention to scholarly accuracy, which is particularly important for history articles because they have a much longer after-life than most science articles. Even though academics do much of the work of peer review for free, journals need skilled editorial and administrative staff to make it possible to maintain the highest standards of scholarship upon which the reputation of UK historical research and historical journals depend. Thus online systems for tracking peer-review and production, while very useful, can only go so far in reducing costs.
- 2.3. As the majority of History research is still funded out of QR rather than by RCUK or charitable funders, the majority of historians will find themselves in competition for scarce resources to secure the funds to publish in the journal of their choice. It is difficult to envisage a good method for deciding the allocation of such funds within universities; whatever procedure is chosen is likely to involve non-expert review and the risk of infringement of academic freedom on the grounds of financial necessity. There is a real

danger of replacing one form of unfairness (inequality of access) with another, viz. inequality of opportunity to publish.

- 2.4. A great deal of valuable historical research is done by people who are not funded either by research grants or by HEFCE. Particularly important are early-career scholars, many of whom have to publish BEFORE they stand a chance of getting a post-doctoral fellowship, let alone a permanent post. University managers are unlikely to allocate APC funds to people who are starting out, as most ECRs do, on temporary teaching contracts or short-term fellowships. Even on a Green model, if HEFCE requires Green OA, early-career scholars will have to publish in Green-compliant journals in order to make themselves employable in the UK, but this will not necessarily be compatible with building up a competitive publication record to become employable elsewhere. The profession also risks losing the work of experienced and often highly distinguished Emeritus and independent scholars, who are also outside the funding frameworks.
- 2.5. History journals publish a range of other material, in addition to articles, especially book reviews. These are crucial to the intellectual vitality of the discipline, especially given that the main way of presenting historical research is still in book-length writing. Book reviews do not count for REF nor are they covered by any other funds, so no-one is going to pay APCs for them.
- 2.6. Intellectual property rights are particularly important for historians, because, unlike STEM scholars, our work does not involve patent rights. The CC-BY license, even if non-commercial, is particularly problematic and is likely to deter overseas scholars from publishing in UK journals.
- 2.7. Summary: Gold OA, which is often promoted as the desirable outcome for *all* subjects, on the flawed assumption that they all work like bio-medicine, is not compatible with sustaining the internationally recognised excellence of the UK's historical journals. We accept Finch's point that insufficient progress has been made towards Green OA, but that is no reason now to go for Gold, with all the risks that entails to the UK's research infrastructure. Green is more viable and far more cost-effective, but it will need careful planning and coordination if it is not to undermine a successful research infra-structure that has been built up over many decades.

### 3. Desiderata (in order of priority):

- 3.1. Extension of timescale of implementation to allow time for consultation and coordination to ensure the orderly transition specified in Finch.
- 3.2. Recognition of inadequacy of one-size-fits-all approach and the threats posed to many subjects, especially HSS, by the Gold route or by hybrid Gold/Green.
- 3.3. Revision of decision to require OA publication for HEFCE research assessment (unless and until there is near-universal implementation of OA worldwide). This will enable HEFCE to continue fulfilling the REF commitment to assessing the best research wherever it is found.
- 3.4. Coordination of discussion of viable embargo periods, based on the realities of the operating budgets of most learned societies and journals. Over twenty History journals

have calculated that they would need an embargo period of 36 months to be viable. Evidence needs to be gathered about the effect on subscription income as the transition to OA takes place and there needs to be adequate time for planning to preserve the high reputations of the UK's historical journals. There is already evidence that short embargo periods have a catastrophic effect on library subscriptions: <a href="http://www.publishingresearch.net/documents/ALPSPPApotentialresultsofsixmonthsembargofv.pdf">http://www.publishingresearch.net/documents/ALPSPPApotentialresultsofsixmonthsembargofv.pdf</a>

3.5. Exploration of other ways of speeding up public access to research published in journals, e.g. the option of making the not-for-profit journals repository JSTOR more widely available, e.g. by implementing Finch recommendation to make it available in community public libraries (if closures prevented/halted). JSTOR is already looking at ways of extending free access to individuals outside subscribing institution.

### The Royal Society - Written evidence

The Royal Society has noted the Committee's consultation on Open Access with interest. This is an area in which the Society performs two relevant roles: one as the national academy of sciences and funder of research, and the other as a publisher.

In keeping with our role as the UK's national academy of science, the Royal Society is committed to the widest possible dissemination of research outputs. Consequently, our own publishing operation is one of the most open access of all science publishers. We offer the following types of open and free access to our journal articles;

1. Gold open access: Through EXiS Open Choice, authors may have their article made freely available to all, immediately upon publication, by payment of an article processing charge (APC). Such articles are covered by a Creative Commons license allowing redistribution and re-use, and we deposit them in <a href="PubMedCentral">PubMedCentral</a> on the author's behalf. <a href="Open Biology">Open Biology</a> 128 is an entirely open access journal, where there are currently no charges to the author (although this will increase to a regular charge of £1200), the Creative Commons license applies here, and articles are also deposited in PubMedCentral on the author's behalf.

The Royal Society also offers an open access membership programme <sup>129</sup> that enables academic and research institutions, funders and corporations to actively encourage open access in scholarly communication. Our membership programme grants a saving of 25% on all article-processing charges, allowing authors at member institutions to publish more content as open access, growing the institution's research exposure and citation of articles.

- 2. Green open access: Authors may deposit a pre-print or a final, accepted manuscript version (post-print) of their article in a repository at any time.
- 3. Delayed free access: Articles more than 12 months old (biological sciences) and 24 months old (physical sciences) are freely available to all. This excludes articles in the Digital Journal Archive published between 1942 and 2002.
- 4. Developing world access: The Royal Society is a partner in a number of international schemes operated by the UN and WHO to make scientific journal articles available immediately and free of charge to the world's poorest nations. We currently belong to the following schemes: PERii/INASP<sup>130</sup>, HINARI<sup>131</sup>, AGORA<sup>132</sup> and OARE<sup>133</sup>.

The Society also offers a waiver of article processing charges to Royal Society funded research fellows if they publish in one of the Royal Society journals.

<sup>127</sup> http://www.ncbi.nlm.nih.gov/pmc/

<sup>128</sup> http://rsob.royalsocietypublishing.org/

<sup>129</sup> http://royalsocietypublishing.org/site/librarians/membership.xhtml

<sup>130</sup> http://www.inasp.info/file/5f65fc9017860338882881402dc594e4/perii.html

http://www.who.int/hinari/en/

<sup>132</sup> http://www.aginternetwork.org/en/

<sup>133</sup> http://www.unep.org/oare/en/

In July 2012, the President of the Royal Society welcomed the publication of the Finch report on expanding access to published research findings. In a published letter to the Minister of State for Universities and Science (available on the Royal Society website 134), Sir Paul highlighted the importance of publishing income to the Royal Society, and other learned societies, and the valuable reinvestment in science that this allows these organisations to undertake. He urged that a sustainable model for OA publishing be developed, which, through APCs and appropriate embargo periods, would allow scholarly publishing to flourish.

### RCUK Open Access Policy

The Royal Society welcomes the government's commitment to move to an open access model of publication as there are potentially huge benefits to the research community and society in general.

Now that the details have been published of the method of distributing funds from RCUK to the research institutions to cover costs, it is clear that this will effectively impose a limit on the number of articles a given researcher may publish in 'gold' open access mode. On the basis of the number of RCUK funded scientists and the average number of articles they publish per year (26,000 peer-reviewed research papers between 2010-2011), it has been estimated that the cost to RCUK of funding 100% of APCs in full would be of the order of £55m per year (average cost APC article of £1727 plus VAT). The current assumption by RCUK is 45% compliance with the mandate in the first year for which £17m has been allocated (1 April 2013 to 31<sup>st</sup> March 2014)<sup>135</sup>. Once this money has been spent, the universities will be expected to cover the cost of APCs or the authors will be expected to comply via the green route. It is as yet not clear how articles with multiple authors will be funded, i.e. which author pays the APC.

The Royal Society has noted a number of issues that require clarifications. The principal concerns are;

- 1. That the level of funding provided will not meet the demand to publish via the gold
- 2. The potential impact on learned societies' publishing income from those authors forced to "go green".
- 3. How institutions will distribute the funds to researchers.
- 4. What happens in the case of multi-authored articles (especially where co-authors are not RCUK funded and/or from outside the UK).
- 5. How RCUK will work with publishers to ensure their copyright conditions do not undermine the RCUK definition of Open Access by preventing text and data mining.

Depending on how these issues are addressed, a number of unintended consequences may arise from the new policy;

- 1. Authors may find they have to publish in 'green' mode and accept an embargo.
- 2. Authors may not be able to publish in some journals at all (if those journals do not meet RCUK criteria). This may be a significant problem in small fields.

<sup>134</sup>http://royalsociety.org/uploadedFiles/Royal\_Society\_Content/Downloads/News/Royal%20Society%20Letter%20on%20Finch%20report.pdf

<sup>135</sup> http://www.rcuk.ac.uk/media/news/2012news/Pages/121108.aspx

- 3. The extra impetus towards green open access caused by inadequate levels of gold funding may lead to subscription cancellations and loss of income to learned society publishers.
- 4. Downward pressure on APCs (due to limited funds) may damage journals from smaller society publishers who may not be able to meet their costs.
- 5. There may be pressure on high rejection journals (whose publishing costs per article are higher) to change their peer review standards in order to be able to set more competitive APCs.
- 6. Authors may feel pressured (as a consequence of limited block grants) to choose journals with cheaper APCs and lower standards of peer review.
- 7. If text and data mining are inhibited by publishers, the benefits of past results for future research may not be optimised.

The Royal Society with the Academy of Medical Sciences, Society of Biology, Royal Society of Chemistry, Institute of Physics, and Institute of Physics Publishing will be holding a conference to discuss these challenges on the 25<sup>th</sup> February, titled *Open Access in the UK and what it means for scientific research*, at the Royal Society.

The Royal Society continue to be interested in Open Access and await the outcomes of the Committee's review. If you have any questions about our policy please contact Stuart Taylor, Commercial Director, who will be able to assist you. We also look forward to discussing the committee's findings at the Open Access conference in February, to which I understand you have been invited.

### Royal Statistical Society (RSS) - Written evidence

The Royal Statistical Society (RSS) welcomed the Finch Review, and the overview it provided of the complex issues surrounding how to increase accessibility of published research. As a learned society, we support the principle that underpins open access: that sharing of knowledge is a good thing. As a member of the mathematical sciences research community, we welcome the aim of increasing the accessibility of research. Indeed, the RSS's journals <sup>136</sup> have for some years been 'hybrid', and allowed authors to pay an up-front fee to enable their article to be open access (though take-up of this option is low).

We do, however, also have a number of concerns, which we would like to see addressed within the inquiry. UK learned societies play an important role in supporting their academic disciplines, and many – the RSS among them – produce high quality journals where any surpluses are ploughed directly back into support for the discipline, which in turn helps to ensure that the UK sustains a strong international research presence. We thus have an interest in open access working well from two main perspectives. First, we seek to advance and support our research communities and disciplines, and therefore want to support and encourage the publication of good research, sustaining the UK national research profile. Second, as a publisher of journals, we are keen that open access is implemented in such a way as not unintentionally to undermine the financial sustainability of learned societies. At present, journals provide the RSS's largest single income stream, <sup>137</sup> cross-subsidising most other activities of the Society, and are thus fundamental to our business model. These two perspectives are interlinked: a reduction in income from journals will have a significant knock-on impact on the Society's ability to advance and support our research communities and disciplines.

Our concerns, then, represent this dual perspective:

- An open access model where the author pays (the 'gold' model) could significantly alter incentives to publish high quality research. Our Society's journals seek to maintain high quality standards, and we publish relatively few papers. An 'author pays' model of open access may not be workable in this context. Such a model also changes the incentives for publishers towards a quantity rather than quality publishing model, as publishers will generate income from the number of papers published. This could undermine faith in the peer review process.
- The 'author pays' approach may also severely limit the publishing of good research which is done independently, or where there is no external funding to cover author contributions. Such research is common in statistics, and in other disciplines where good research can be done without major experimental or equipment costs (including the mathematical sciences more broadly).
- A further concern about the 'gold' model is on how internal university funding
  allocation decisions will be made (for researchers who do not otherwise have funds
  to publish a paper). Rather than a peer review process leading to the best work being
  published, an institutional process potentially led by non-experts in the field could
  make these decisions. In practice, this is likely to disadvantage the mathematical

<sup>&</sup>lt;sup>136</sup> The RSS publishes three journals: 'Series A: Statistics in Society', 'Series B: Statistical Methodology', and 'Series C: Applied Statistics'.

<sup>&</sup>lt;sup>137</sup> Representing approximately 35% of the Society's income in 2012, against, for example, 28% from membership.

- sciences, as disciplines which tend to have relatively small research groups in most universities, and with relatively low levels of RCUK funding.
- More broadly, work needs to be done to determine sustainable article processing charges (APCs) for the full range of learned society journals, including those of the RSS. Crucially, this analysis needs to be linked to an assessment of a discipline's ability to pay.
- A 'green' open access model comes with challenges around determining a sustainable embargo period. In particular, an open access model based on short embargo periods is not workable for the mathematical sciences. Several different analyses by commercial publishers have shown that the citation half-life and readerships half-life of scholarly journals across a wide range of science, social science and humanities disciplines is between 3 and 4 years. The half-life of statistics journal articles can be significantly longer, often with citation half-lives of over ten years. Moreover, a recent survey by the Association of Learned, Professional and Society Publishers found that in the case of a move to 'green' open access, only 56% of libraries would continue with full subscriptions for scientific, technical and medical journals, and only 35% of libraries would continue with full subscriptions for arts, humanities and social science journals. In this instance, the half-life of statistics journal articles is more likely to mirror those of arts, humanities and social sciences articles, meaning the latter figure is a better guide for the impact on RSS journals. Overall, therefore, we have major concerns about a 'green' open access route.
- Timing in relation to other parts of the world is a key consideration, both for UK journals and for UK researchers. First, enhanced competition for UK papers from non-UK leading journals in countries that do not fully engage or engage more slowly with the open access model could leave UK journals competing on uneven terms to publish the best research. Second, it is important not to set a policy that disadvantages our UK researchers through imposing unique restrictions on where they may publish. It is crucial that UK research is able to be published in the most appropriate place, and so there is a challenge in ensuring that UK-funded research is able to be published in the top international journals with the highest impact factors, which may be non-open access (at least initially), or may have extremely high charges. In addition to timing, realistically sustainable APC charges (see above) are highly important here.
- Regarding implementation in general, we are concerned both that the timescale proposed is too tight, and that insufficient money has been allocated to support transition to open access. Changes in the publication landscape have yet to be communicated adequately to academics, while libraries and institutions face the dual financial burden of being locked into existing contracts, while needing to absorb new costs around publication fees. It is crucial that enough time and resources are committed to ensure that transition to open access is as smooth as possible, as this will minimise any potential collateral damage, to learned societies, but also to the quality and profile of UK research.
- There are also practical problems around open access which need to be considered carefully. For example, a mechanism is needed for handling research which is coauthored, where one or more authors is UK-funded while one or more authors is not.

We welcome the Finch Review's recommended action 'iv. - Keep under review the position of learned societies that rely on publishing revenues to fund their core activities, the speed with which

they can change their publishing business models, and the impact on the services they provide to the UK research community'. (p.8). We further note the Minister of State for Universities and Science's comments on 2nd May of last year that there 'could be collateral damage for our learned societies'. We would welcome a focus within the Committee's inquiry on how the Finch Review recommendations will be practically implemented, and about the concerns we have highlighted above.

Dr Meera Sabaratnam, University of Cambridge and Dr Paul Kirby, University of Sussex – Written evidence

# Dr Meera Sabaratnam, University of Cambridge and Dr Paul Kirby, University of Sussex – Written evidence

Submission to be found under Dr Paul Kirby, University of Sussex

### Russell Group - Written evidence

### **Summary**

- The Russell Group is committed to open access, but the sector, and in particular research intensive universities, face a number of challenges in the implementation of open access policy.
- We welcome recent engagement with Research Councils UK (RCUK) to discuss many of these challenges. We hope solutions can be found to ensure universities are not unnecessarily burdened and we will continue to work with RCUK and BIS to address our ongoing concerns.
- RCUK funding may only be enough to cover Gold open access costs for around 10% of papers published by Russell Group universities. It is important that universities have as much flexibility as possible in how they use their block grant to achieve open access.
- The Green route should be considered as a viable and cost effective route for delivering open access. Embargo periods still need to be agreed and could be phased with the intention to deliver shorter periods over time. Greater freedom could also be given on licence requirements to help keep costs down and ensure researchers aren't overly restricted in where they can publish.
- Universities should not be penalised on efficiency savings related to the Wakeham Review as they deliver on open access.
- The Government should look in more detail at the potential unintended consequences of implementing open access policy and should include this with the RCUK review of implementation in a year's time.

#### I. Introduction

- 1.1 We welcome the opportunity to contribute to this timely inquiry into open access publishing. As well as submitting this short note, we would be happy to contribute oral evidence if required.
- 1.2 The purpose of The Russell Group is to provide thought leadership and strategic direction for the 24 major research-intensive universities of the UK; we aim to ensure that policy development in a wide range of issues relating to higher education is underpinned by a robust evidence base and a commitment to civic responsibility, improving life chances, raising aspirations and contributing to economic prosperity and innovation.
- 1.3 The Russell Group has been monitoring the development of open access (OA) policy for some time. We followed the 'Finch Review' and Royal Society work on science as an open enterprise with interest and the Russell Group is now represented on the Research Sector Transparency Board which will be covering OA, open data and other issues over the coming year. We have recently had a number of meetings with Research Councils UK (RCUK) to discuss implementation of OA policy.

### 2. Russell Group position on open access publishing

2.1 The Russell Group is committed to open access publication, but we need to ensure the implementation of policy works for the sector, hence our on-going discussions with RCUK. We understand that the Higher Education Funding Council for England

- (HEFCE) will broadly follow RCUK's lead on OA for future rounds of the Research Excellence Framework (REF), so it is vitally important to get this policy and its implementation right first time.
- 2.2 Implementation of OA policy creates significant challenges and risks to universities even more so for research intensive universities because of their higher volumes of publications and focus on publishing in journals with the highest standing. Gold OA publishing, where an up-front 'article processing charge' (APC) allows instant open access, may well become the standard international model in future, but there will be a long transition period. It is important that the UK is not disadvantaged or burdened with unreasonable costs or other requirements during the transition. At all costs, implementation of OA policy must avoid damaging the UK's standing for world-class research.
- 2.3 We have a wider concern about the overall business case for the Government's OA policy that arises from some of these implementation issues. Ultimately, universities could see savings from a world-wide move to Gold OA as this would allow current subscription fees (which some universities report are increasing at rates well above inflation) to be repurposed to pay for APCs. Other low-cost online OA publishing models are also likely to emerge. But in the meantime, universities in the UK will need to continue paying subscription charges to access journals and will be widening their payment of APCs, while at the same time our international competitors will increasingly be able to access our best research papers for free.
- 2.4 The Government should work with universities, research funders and other stakeholders to monitor development of the OA market and whether subscription rates do indeed start to come down and come down substantially as payment of APCs increases. The UK produces approximately 6% of the world's published research articles, so the risk is that the UK will only see subscription rates come down by this much overall.
- 2.5 We would also like to see the full business case from Government on the benefits and costs of moving swiftly towards Gold OA, ahead of many of our international competitor nations, and why benefits to the economy such as increased exploitation of research outputs cannot be achieved more cost effectively through Green OA. We have already expressed concern to BIS about the top-slicing of Research Council funds to pay for open access and the concomitant reduction in research that they will be able to fund as a result.
- 2.6 The main issues around implementation that still need to be addressed are listed below, along with our proposed solutions. Where funding may be required to address these issues this should be <u>additional</u>, new money, rather than being taken from research budgets. If this is not possible, other alternative solutions may be required, for example allowing universities more freedom on how the block grant can be used and/or altering OA target levels to create a phased approach to OA over a longer time period.

### **Engagement with RCUK**

2.7 We welcome the willingness of RCUK to engage with us on the implementation of OA policy. Recent discussions we have had with RCUK have been constructive and

- we are hopeful that some of our concerns will now be addressed before the OA policy goes live this spring.
- 2.8 At our most recent meeting with RCUK, which also involved Research Libraries UK and HEFCE, we discussed each of the points set out in sections 3-5, below. It was clear that all those involved shared common ground on ensuring OA policy is implemented well.
- 2.9 We have been particularly grateful for the clarifications that RCUK has been able to provide on its publication targets, compliance and other matters, and its willingness to review policy implementation in a year's time. We welcome that RCUK describes the implementation of its OA policy as a journey over at least five years rather than being a 'day I' requirement. This will allow much needed breathing space for universities to make further steps towards open access. Ultimately, moves in the direction of OA will probably take longer than five years.
- 2.10 We now look forward to confirmation of the position RCUK will take as it finalises its guidance notes on implementing OA policy and hope that the final guidelines will reflect the proposals agreed at the meeting.

### 3. Funding for open access

- 3.1 RCUK will be providing a block grant to universities to accelerate Gold OA publishing in the UK from 1 April 2013. The Government has also provided £10 million split between 30 institutions to pump prime OA publication ahead of the RCUK block grant being released.
- 3.2 While 107 institutions will receive some RCUK funding, Russell Group universities will receive 74% of the overall block grant for the two years that have been costed by RCUK. Russell Group universities are set to receive approximately £12.5 million in Year 1 and £14.7 million in Year 2.
- 3.3 These amounts relate to achieving an RCUK target of 45% Gold OA for publications arising from Research Council funded research in Year I and 53% in Year 2. As an example, RCUK expects the grant to fund the Gold OA publication of around 170 papers from Durham University in Year I, 500 from the University of Manchester, and around 700 papers each from the University of Oxford, the University of Cambridge and University College London. However, RCUK is only providing funds to cover the publication of 38 papers from the London School of Economics and Political Science.
- 3.4 In total, the funding is expected to cover the publication of around 7,500 papers by Russell Group universities in Year I (out of universities total of approximately 10,000) and 8,800 papers in Year 2.
- 3.5 We estimate that Russell Group universities publish around 72,000 papers a year. Although not all of these papers will derive from Research Council funded activity it is important to note that the Government's moves to encourage Gold OA may therefore only fund this for around 10% of Russell Group publications in Year 1.

#### **Full economic costs**

- 3.6 The Wellcome Trust is willing to fully fund APCs and is also open to additional funding requests so that researchers are not constrained by an artificial funding cycle when delivering their own OA policy.
- 3.7 RCUK's proposed policy (set out in a draft guidance note issued in November 2012) had been to pay 80% of the full economic costs for Gold OA on papers from the research it funds as an indirect cost of research. This would leave universities to find the other 20% of Gold OA costs to deliver a policy that is in addition to OA measures universities are themselves already taking.
- 3.8 In discussion with RCUK they have now made it clear that this will not be the case and that how the block grant is used to cover APCs will be left to the institution, with RCUK focusing on monitoring progress towards their Gold OA targets. This is a welcome move that puts the emphasis on outcomes rather than how they are achieved.

### Administration and management costs

- 3.9 The administrative and management costs for universities of establishing and operating a new OA model are high. The costs are recurring and will need to be covered for the full period of policy implementation. We have recommended to RCUK that universities should be free to use the block grant to cover reasonable costs associated with OA, rather than being overly prescriptive. This additional freedom would allow universities to be flexible in how they administer the block grant, deliver culture change for the future (e.g. with training), provide oversight of publishing strategies and explore other options that can lead to more open access in the future.
- 3.10 RCUK has now agreed to look at how further flexibility could be introduced.

#### PhD students

- 3.11 Inclusion of PhD students in the policy creates additional challenges (e.g. in terms of monitoring, administration and additional costs). If insufficient funds are available to cover all OA costs then researchers in the early stages of their careers are more likely to be disadvantaged.
- 3.12 We have proposed that an element of additional support for PhD students should be included to ensure they are not adversely affected and we will monitor the situation closely.

### Collaborative research

- 3.13 Most research is a collaborative effort and therefore the RCUK's draft guideline that OA policy will apply to all research funded "wholly or in part" by the Research Councils is impractical. It is almost impossible to disaggregate research outputs to determine if papers include an element of Research Council funded activity or not and in particular if the original research was done many years ago or elsewhere.
- 3.14 Policy needs to recognise the practicalities of implementation. If the policy is to apply to research funded in part by the Research Councils then this needs to be a significant part of the project funding so it can be identified easily; a limitation period is also required so researchers do not have to determine if previous projects that

have contributed to the research paper were funded by the Research Councils. We have asked RCUK to look at the wording of its draft guidelines to provide a solution that is simple and practical to use and which will not create unnecessary burdens.

### 4. Green open access, embargo periods and licence issues

#### Green open access

- 4.1 Green OA was recognised as being important in the Finch Review, and is also accepted as part of the OA landscape by BIS and RCUK. A quarter of Research Council funded papers are expected to be made open access through Green routes in five years time in the RCUK model.
- 4.2 Green OA can include self-archiving in institutional or discipline-based repositories and/or archiving in repositories operated by publishers. Publishers may then allow free access to deposited material after an embargo period. Institutional repositories are already searchable by current web engines in an effective way.
- 4.3 The Green route is a simple, genuine and cost effective way of delivering OA, but there is no additional RCUK support for Green OA even though it is a part of their overall OA model. We recognise that the Government and RCUK have a stated preference for Gold OA, but we would like to see a wider acceptance and financial support for Green OA routes as a valid option. The Finch Review recommended an additional £10 million should be made available for repository enhancements.

### **Embargo periods**

- 4.4 There is some uncertainty over the allowable embargo period for Green OA. The RCUK expectation is only 6-12 months (depending on funder) in all cases, whereas BIS, following Finch Review recommendations, allows 12-24 months in certain circumstances. Publishers in some disciplines are now asking for even longer embargo periods, which would then restrict the publishing options available to UK researchers.
- 4.5 Green OA with reasonable embargo periods is an important element in the mix of options for all researchers and in particular for disciplines in arts, humanities and social sciences.
- 4.6 We have suggested that RCUK should follow the Finch Review recommendations, but recognising that some disciplines have already moved to six month embargoes as the norm and so not pulling back in these areas. RCUK could then take a phased approach to implementation, reducing the expected embargo period over a number of years if and when disciplines are able to move in that direction.

#### **CC-BY** licences

4.7 OA costs are likely to be higher than modelled for the Finch Review because of the requirement for Gold OA to be accompanied by a CC-BY (creative commons by attribution) licence allowing commercial and all other forms of re-use and modification. Some journals have already increased their APCs where this licence is available, others are unlikely to offer the highest level CC-BY licence as an option and this will restrict journal choice for researchers.

4.8 We recognise that a CC-BY licence removes doubt about how research papers and their content may be reused, but we would like to see the licence requirement widened to include other CC-BY non-commercial and share-alike licences. This will help to keep OA costs down and will ensure researchers are not unduly restricted in where they can publish. Again, there could be a phased approach over a number of years to encourage CC-BY in the long-term.

### 5. Other challenges

### Wakeham efficiencies

- 5.1 Implementation of OA policy introduces additional administrative burdens on universities which is contrary to efforts on improving efficiency that universities are making in light of the Wakeham Review.
- 5.2 We would welcome a statement from the Government that universities will not be penalised on efficiency savings related to indirect costs as a result of implementing OA policy.

### **Unintended consequences**

- 5.3 Open access policy implementation may create unintended behavioural consequences, for example in publishing strategies among academics or in the perceived attractiveness of the UK to overseas researchers. In turn, this may have important knock-on consequences. This may, for example, be seen as an impact on the international standing of UK universities if there is an overall reduction in the number of research papers submitted to the most highly-rated journals because of cost or licence restrictions or if the proportion of international researchers in UK institutions is affected.
- 5.4 In some disciplines, including physics and economics, it is already fairly standard practice for working versions of papers to be circulated on the web or shared through open repositories for comment and further input. It is possible these activities could be put at risk by some approaches to OA publication.
- 5.5 These potential unintended consequences need to be better understood and balanced against opportunities that might arise from OA. We would welcome a commitment from Government to investigate these issues further and publish its findings at the same time as RCUK reviews implementation of OA policy.

### Arts, humanities and social sciences

- 5.6 The current OA policy applies only to research papers (in journals and conference proceedings) so it is likely to exclude much arts, humanities and social science research. This creates a discipline-level split on OA, which will need to be addressed.
- 5.7 However, what works for STEM disciplines may not always work in other areas and it is possible that different approaches may be needed for some arts, humanities and social science disciplines.
- 5.8 We understand that steps are now starting to be taken to address these disciplinespecific issues, and additional challenges for Learned Societies publishing, and we

### Russell Group – Written evidence

welcome the opportunity to engage with RCUK and other stakeholders as these develop.

### **SAGE** Publications Ltd – Written evidence

I. Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

We are concerned as well that the signals coming from the Research Councils are that they do not appear to recognise fully the central role that publishers must play in the implementation of open access policies.

1.1 SAGE is a leading global academic publisher, with its roots very firmly in the social and behavioural sciences. We are writing regarding the implementation of the Finch report, prompted in large part by questions and concerns raised by our learned society publishing partners and others in the author communities we serve. SAGE is supportive of the 'balanced package' proposed by Dame Janet Finch, and subsequently endorsed by the government, and has no wish to undo the good work that was done by the Finch committee. SAGE and our publishing partners are concerned by developments in the implementation of the Finch recommendations by the Research Councils, most notably as these appear to adopt something of a "one size fits all" approach. Such an approach risks severely damaging scholarship and publishing in the Arts, Humanities and Social Sciences in the UK.

### 2. Embargo periods for articles published under the green model

While the Finch Report, and the government, recognise that embargo periods for articles published under the green model will need reflect the different characteristics of different disciplines, not least the availability of APC funding, this does not appear to be being followed through in the guidance from research councils.

- 2.1 The Finch report was clear on the need for extended embargoes where there is no Article Processing Charge (APC) paid, and that sustainability for journals requires 12 months as an absolute minimum:
  - 9.11 Where dedicated funding is not provided to support open access publications, and therefore researchers are unable to use this route, we believe that it would be unreasonable to require that embargo periods are shorter than twelve months. For in that case, with no direct funding support for an open access publication, it would be unreasonable to put the sustainability of subscription-based journals at risk. Moreover, in subject areas where the half-life of the articles in each issue of a journal is several years, there may be a case for a longer period
- 2.2 In the arts, humanities and social sciences, it is likely in many cases that direct funding will not be available. In such instances, embargo periods that ensure the sustainability of subscription-based journals are not only recommended by the Finch report but required in order to ensure the survival of the journals that provide outlets for this research.
- 2.3 Historians, and Editors of history journals in particular, are deeply concerned. You may be aware of the comments from many leading history journals (http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access), calling

for embargo periods of 36 months. These calls are based on real concerns about sustainability, and about the risk of being lumped in with biomedicine and other disciplines with very different characteristics. There are currently signals from the funding bodies (such as RCUK) which imply that not even lip service will be paid to the longer embargo periods required by these disciplines.

2.4 There is potentially a national interest in early access to the latest research in medicine, engineering and other areas which have a direct application in business activity and which can contribute to innovation and change. There is no reason to believe that early access to the research published in history journals has this potential economic benefit. On the other hand, there is a risk that the UK's world leading position as a publisher of academic research in history and related humanities and social science disciplines, with all the export income and employment resulting, could be seriously endangered. The insistence on inappropriately short embargoes for research in the humanities and social sciences is not compatible with the Finch report's emphasis on sustainability and excellence.

### 3. Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

A specific concern raised by author communities, and shared by learned societies and publishers in the arts, humanities and social sciences is around the apparent blanket insistence by the research councils on the use of the CCBY licence across all disciplines.

- 3.1 There is real concern is over the blanket move towards compulsory use of the CC-BY licence for open access articles. While this has logic where the issue is to get the data out in ways which enable others to re-analyse it, this holds much less water in the arts, humanities and social sciences, where interpretation and context are crucial. There is widespread and real concern expressed in these author communities that blanket use of CC-BY licences will enable misuse of research for example by presenting chunks or soundbites in ways that appear to contradict or undermine the author's research and meaning. These concerns are serious enough to lead some authors to refuse to publish on this basis. The history journal editors (see link in paragraph 2.3) are calling for use of the CCBY NC ND licence only. Different disciplines have different needs, and those needs must be taken into account in the move forward into an open access world.
- 3.2 In addition, there is a practical issue with the blanket use of the CC-BY licence, in that its use assumes that the author is able to grant CC-BY rights on the whole article. This is a particular concern in the humanities. Where articles include material from third parties (e.g. poetry in literary studies journals, images in art history journals etc) it is highly unlikely that the copyright owners of those third party materials will give the authors the necessary rights in that material to enable the authors to grant a CC-BY licence. This could actually limit the ability of UK authors to undertake research on (especially contemporary) topics, knowing that they will not be able to publish that research. This issue could also apply to research analysing computer programs or code.

### 4. Sustainability in the Arts, Humanities and Social Sciences

There is a real danger that the "one size fits all" model which is currently being promulgated could have serious, damaging consequences for UK published journals and UK research.

- 4.1 Given the lack of direct funding for research in these disciplines, journals will need long-enough embargoes to maintain the subscription model. Most possibly all journals are <u>not</u> dependent on UK-funded authors, and so will have no great reason to compromise their own stability by agreeing to perilously short embargo periods because these are required by a minority of the authors' funders. At the same time, insistence on CC-BY will limit UK authors' ability to undertake or publish certain sorts of research. The vacuum will be filled by researchers in other countries who are not constrained by their funders' insistence on an inappropriate licence.
- 4.2 The guidance given by the Finch report, and endorsed by the government, was clear on the need for embargoes long enough to support sustainability. The requirement for CC-BY licences has been imposed by other actors since the Finch report, and is a blunt instrument that does not recognise the different needs of different disciplines.

#### **About SAGE**

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### Sainsbury Laboratory and John Innes Centre – Written evidence

Submission to be found under the John Innes Centre

### Social History Society - Written evidence

- We welcome the decision of your Lordships' Committee to undertake a short inquiry into Open Access (OA). Important issues are at stake. These are not about the protection of vested commercial interests but concern intellectual values that lie at the very heart of the UK Higher Education's outstanding achievement in the humanities and social sciences (HSS). We therefore wish to suggest that:
  - Government, research councils and HEFCE should extend the period over which the Finch recommendations are implemented, to permit full consultation and financial modelling of the potential consequences and until the research funding allocation exercise after the current Research Excellence Framework (REF) is completed.
  - The applicability of Open Access publishing to the key research media of monographs and edited volumes needs detailed appraisal.
  - The 'green', not the 'gold', route should be specified as the appropriate potential pathway for HSS journal publishing.
- Founded in 1976, the Social History Society has some 430 members. Like many UK learned societies, it publishes a refereed academic journal. *Cultural & Social History: the Journal of the Social History Society* is placed by the European Science Foundation in its top category, INT1, defined as 'international publications with high visibility and influence among researchers in the various research domains in different countries, regularly cited all over the world.' As is common with such journals, subscription revenue from the journal funds the basic costs of editing and of rigorous peer review of submissions (the editors and their advisory board are unpaid). Revenue also helps fund the Society's other activities, which include the provision of bursaries and an annual prize for postgraduate researchers, and the organisation of a substantial annual conference, attracting researchers from across the world to the UK.
- The Society fully supports initiatives to make scholarship as widely and freely available as possible. However, we have serious concerns about the current proposals to implement a policy to this end. High subscription charges are a barrier to the flow of information. Thus Open Access (OA) looks attractive. However, the regime proposed by the Finch Report (and endorsed by the UK research councils, HEFCE and the Government) threatens to replace this barrier with another, no-more conducive to enhancing the pace at which knowledge accumulates and which has the potential to undermine an academic culture that currently makes the UK a world leader in arts and humanities research.
- The arts and humanities are fields where the UK 'punches above its weight', in terms both of the volume and the quality of work published by researchers. A powerful factor underpinning UK performance in HSS is the work of a plethora of learned societies. 'The Finch Report', in the fourth of its Key Actions clearly called for 'the position of

<sup>138</sup> http://www.esf.org/research-areas/humanities/erih-european-reference-index-for-the-humanities/erih-foreword.html

learned societies that rely on publishing revenues to fund their core activities, the speed with which they can change their publishing business models, and the impact on the services they provide to the UK research community' to be kept under review. It is a matter of regret that, until now, little attention has been paid to the position of learned societies. The headlong pace at which policy to introduce OA is being developed by the Government, HEFCE and the research councils paradoxically threatens the 'complex ecology of research' recognised by the Finch Report.

- The 'gold model' advocated in the Finch Report, along with the Article Processing Charges (APCs) upon which it depends, is being driven through more forcefully than the Finch Report advocated. It is essentially geared to the research culture and *modus operandi* of medical and natural sciences and has limited compatibility with the arts and humanities, where journal subscriptions are typically lower, and articles have a longer 'half-life', impacting for longer on their discipline.
- Furthermore, monographs and edited volumes (and journals' reviews of these), are central to the intellectual vitality of UK historical research. As the Finch Report itself noted, 'the difficulties now faced by authors and publishers [in the humanities] in developing a secure future for monographs is a matter of concern'. OA policies should not be developed without taking appropriate account of the need to safeguard these key media for disseminating research.
- The editors of *Cultural & Social History*, with the support of the Society's Chair, have signed an open letter on OA (along with the editors of 20 other eminent UK history journals). These editors have rightly signalled that they will accept gold APCs on the condition that publication by this route will be a creative commons non-commercial non-derivative licence only (that is, it will not allow commercial reuse, or tweaking or reuse of parts of an article [text mining]). However, the Government has specified that 'gold' access is to be given an unfettered creative commons licence, one that permits commercial re-use, offers virtually no protection against plagiarism (republication of an author's work will be possible, subject to the author being merely 'credited'). Unfettered creative commons licensing would constitute a serious infringement of intellectual property rights and pose a threat to UK intellectual capital.
- 8 Trust in the integrity of process by which academic journals process the submissions they receive may also be jeopardized by OA. Editors of learned journals and the boards and reviewers who assist them gain no direct monetary advantage from the present system: while they may receive (often nominal) expenses, their inputs are made on a pro bono basis. A contributor-based APC system jeopardizes this: it will be open to the suspicion that quality judgments may be trumped by financial considerations.
- 9 APCs for HSS journals will not be negligible. HSS journals appear with lower frequency than their STEM counterparts and contain fewer and typically longer articles. The gold OA model requires researchers who wish to publish in a journal to pay up front. A 'producer pays' principle will privilege those researchers whose funders can afford to pay gold APCs. Independent scholars and retired HE staff, self-financed postgraduate and post-doctoral researchers (a significant proportion of the UK postgraduate

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<sup>139</sup> Finch Report, p. 46.

<sup>140</sup> http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access

- community), early career researchers on fixed-term contracts, and those whose academic departments are unable to meet the costs of APCs, may be forced to submit research to other than their first choice journals or, conceivably not to publish at all in the main recognized journals in their field.
- Powerful questions of academic freedom are also posed, not least because following the 2014 REF direct funding for research from HEFCE will only be awarded to research graded 3\* or 4\* research in the REF. Limited scope for direct commercial sponsorship means that humanities departments depend upon this funding to a considerably greater extent than their STEM counterparts; indeed, it is the primary source of research funding for many departments. Researchers judged to be at the lower margin of 3\* or below, as judged internally, might face restricted access to funding for APCs. Even highly rated researchers might find that the number funded of APCs is limited. (The current REF requires, like its precursors, assesses a maximum of four research outputs over the period it covers for each researcher submitted.) And if, as HEFCE have suggested, OA publication will be a pre-condition for an output to be considered in any successor exercise to the REF then UK researchers may find themselves effectively banned from publishing their research in many top-rated non-UK journals. Meanwhile, the Research Councils are moving towards requiring that the outputs of all their funded research be OA published, with the same potentially deleterious consequences.
- II The UK's many internationally renowned journals are a key component of the nation's knowledge-based economy. Their contributors, no less than their readers, come from across the global scholarly community. However, there is a danger that a rapid and unmoderated move to OA may render them increasingly parochial. Non-UK researchers with significant international reputations regularly publish in UK journals. Working within different funding regimes, there will be a strong disincentive to publish in British journals. It is likely to be particularly difficult for researchers from the developing world to meet the costs of APCs.
- A resolution to the problems posed by gold OA rests in 'green' OA publication, where no fee is paid by the author to a journal. Instead, articles must be made freely available on-line after an embargo period. It has been mooted that this period might be as little as six to twelve months, or in the case of the humanities perhaps up to 24 months. This is insufficient. The open letter from editors of eminent UK history journals (see 6 above) affirms the availability of a green route, but argues that a period of embargo of 36 months is the shortest possible period that would still protect the viability of the subscription-funded organisations, which have to pay for copy editing and the management of peer review. It is fully consistent with the need to make research publicly available, and better reflects the longer 'half life' of HSS journal articles (see 5 above).
- 13 To conclude: the development of OA publishing is to be welcomed but OA is not an unqualified good. In particular, the hasty imposition of gold OA, as is presently contemplated, will have an adverse impact on the UK's international academic standing: it could diminish the publication of non-UK international research in British journals, restrict the capacity of UK researchers to publish outside Britain, jeopardise international collaboration, and fetter where and with what frequency researchers publish their work. It may also jeopardise the viability of important UK academic journals with an international reputation in their field.

- Government, research councils and HEFCE should therefore extend the period over which the Finch recommendations are implemented, to permit full consultation and financial modelling of the potential consequences.
- Consultation should not be limited to journals, as the applicability of OA to the key research media of monographs and edited volumes needs detailed appraisal.
- Until the research funding allocation exercise after the current REF is completed, the green route, not gold, should be specified as the appropriate pathway for HSS journal publishing.

## Society for Research into Higher Education (SRHE) – Written evidence

### **Section A Executive Summary**

Our executive summary sets out the Society's main concerns relating to the impact of the report from the Working Group on Expanding Access to Published Research Findings, published on 16 July 2012, the *Finch Report*, and the subsequent policy pronouncements which have followed, particularly from BIS, RCUK and HEFCE.

AI The Working Group on Open Access Publishing (OA) set up by BIS was given the remit to examine <a href="https://www.nc.nc/model/nc.nc/">how to introduce a policy requirement for OA publication of all UK publicly-funded research. It was specifically asked not to address any issues about <a href="https://www.whether.co">whether</a> to introduce such a policy; this was already stipulated as a foregone conclusion. Consequently there are significant issues for higher education research which have not been properly examined and conclusions which remain unchallenged.

**A2** Despite this limited and very specific remit, the *Finch Report* has been heavily relied on in justifying the swift and broad adoption one very particular route to achieving Open Access, without proper scrutiny or a full appreciation of the consequences. This is not the fault of the Working Group. However, some analysis of the long-term financial issues and consequences remains distinctly lacking.

A3 The Working Group were not asked to carry out any cost-benefit analysis and did not do so, either in relation to Open Access policies in general or their main finding, namely that a "Gold" route to OA could work if, and only if, provision was made for a gradual transition period. The RCUK decision to require all research funded in whole or in part, from "the UK public purse" to be published in an OA compliant journal from April 2013, plus the anticipated HEFCE requirements for the REF 2020 which will impose similar OA conditions both fly in the face of this strong recommendation.

**A4** The decision to place OA funding with HEIs through the block grant fails to recognise the potential differential impact, acknowledged in the *Finch Report*, on the humanities and social sciences (HSS) subjects. Universities will now determine what gets published.

**A5** Recent decisions on student fees and student visa controls are having a considerable impact on UK higher education, especially on our international reputation. An author-pays model of OA has the potential to cause further disruption and potentially damage our academic research reputation as well. The apparent desire for the UK to "lead the field" in OA publishing without any real assessment of the international position must be subjected to rigorous and open scrutiny. Any potential short-term gains for UK higher education budgets and the UK tax payer are questionable and need to be balanced against the wider international issues at stake.

**A6** The engagement with stakeholders in the development of these OA policies has been extremely limited and narrowly focused. This issue merits a proper consultative process.

**A7** Other issues, some of which received passing consideration in the *Finch Report*, but which demand much closer attention include:

- (i) The fact that "hybrid" journals which allow for both OA and non-OA content will not work in the HSS subjects
- (ii) The lack of protection for author rights and the potential for the commercial exploitation of UK funded research
- (iii) The future of peer review and impact on journal quality and reputation
- (iv) The impact on early career researchers, career returners and new entrants to research from other disciplines
- (v) The narrow focus on the UK position rather than a full appreciation of the global nature of the academic publishing business and markets
- (vi) Insufficient consideration given to other OA approaches
- (vii) The impact on the Learned Societies and their future capacity to support and sustain their academic communities

#### **Section B Evidence**

### BI The fact that "hybrid" journals which allow for both OA and non-OA content will not work in the HSS subjects

- BI.I The OA policy proposed gives rise to different problems for different disciplines but these concerns have been dismissed as solvable through gradual transition and the introduction of "hybrid" journals, publishing some OA/author-funded articles whilst continuing to "sell" the journal on a subscription model. Such a model has already been attacked by universities as giving publishers the opportunity to "double dip": that is to take OA money from universities whilst still "selling" them the journal on a subscription basis. This hybrid model can only possibly work for the most prestigious international academic journals, where the content is largely drawn from non-UK researchers, and even this possibility is uncertain.
- **B1.2** No library is going to continue to subscribe to a journal where the majority of the content is "freely" available on OA. Where a journal has a high level of articles from UK-funded researchers, no hybrid subscriber model will be sustainable. In this regard we have argued vociferously for the introduction of longer embargo periods for HSS subjects, of 18/24 months rather than 6 months, which might sustain these hybrid journals but this has been ignored. These are not major concerns for the STEM subjects but are crucial for the HSS subjects.
- **B1.3** The fact that hybrid journals will not work for any of our publications has already been made clear to us by our current UK subscriber base. Social science research impact is "slow burn"; waiting 6 months to access an article on OA, rather than by subscribing to a journal and getting "online first" early publication access, is not seen by libraries as any great loss. For STEM research the pressure to get immediate access to available research data is much

greater. Longer embargo periods for HSS subjects, accepted by the UK agencies, are essential to sustaining a subscription base but this will only offer a short term possible solution. In the longer term, a subscription model will be simply unsustainable.

**B1.4** If we cannot sustain our journals how will libraries continue to provide access for their researchers to non-UK research articles? By subscribing to US and other international journals, at higher cost than ours, thus taking UK tax payer money out of the UK and income away the UK-based Learned Societies and helping our international competitors to flourish.

### **B2** The lack of protection for author rights and the potential for the commercial exploitation of **UK** funded research

- **B2.1** We are extremely concerned about the current policy decision to require only the lowest form of protection for authors and all publishing partners by limiting copyright licensing arrangements to Creative Commons Attribution (CC BY). We strongly support and advise a full Attribution-Non Commercial-No Derivatives (CC BY NC- ND) form of licensing.
- **B2.2** We do so for two reasons. Firstly this form of licensing places no restriction on the access to research material but protects the author, publisher and the funders from commercial and derivative re-use of their material and data. Secondly we believe that with a world-wide interest in developing online resources in higher education, which will largely be offered through private for-profit businesses, any lesser form of licensing arrangements will allow for the commercial exploitation of UK funded research as an unintended consequence of enabling Open Access.

### B3 The future of peer review and impact on journal quality and reputation

- **B3.1** The value of current published research rests in the quality of the peer review process. We are already seeing the OA initiatives impacting on the willingness of HEIs and the academic community to engage in peer review without a commercial return. This has consequences beyond published research. Academic conferences also rely heavily on peer review to identify the best and most robust papers, rooted in the relevant literature and representing the highest quality of research integrity.
- **B3.2** We know that OA funding for the HSS subjects will be limited and rationed. Currently decisions on the acceptance of articles are entirely the prerogative of journal editors based on peer review. This editorial freedom is inevitably going to come under commercial pressure. This impact on the peer review process may well be unavoidable but it should not be overlooked as a significant issue.
- **B3.3** An author-pays model of achieving OA will place journals and editors under pressure to accept articles where author funding is available and the consequences are likely to be both perverse and pernicious. Within the HSS subject areas we already find that areas of the world with high-quality research outputs have great difficulty in funding conference submissions and attendance whilst areas with important but nonetheless a less developed research base have no such difficulty. We struggle to manage this effectively and a "Gold" OA policy will introduce similar concerns in maintaining journal quality.

### **B4** The impact on early career researchers, career returners and new entrants to research from other disciplines

- **B4.1**. The academic community has been slow to engage with the impact of OA. Initially the response within HEIs was to focus on the potential benefit of reducing the cost of journal subscriptions; an understandable if rather narrow focus. Now the wider implications are beginning to be a concern, especially for researchers in subject areas without significant research funding available.
- **B4.2** In the field of higher education research there is a wide spread of journals and the higher ranked journals have, up until now, supported less commercially successful journals. We anticipate that overall the range of UK journals in our field will diminish. It has been argued that a reduction in the overall number of journals could be a positive development but in HSS subjects the result will be that much valuable work and analysis will have very limited publication opportunities.
- **B4.3** The availability of funds to support OA in our field is a very particular area of concern. The same level of concern applies to newer and early career researchers and the greatly reduced opportunities they will have to develop the publishing profile on which their academic careers will still depend. In the social sciences, small grants often held by an individual or small collaborative teams of researchers are the norm rather than larger block grants.
- **B4.4** It is a legitimate and important concern that universities holding block funds to support APCs will feel the need to allocate these funds to their most established researchers. The link between the REF 2020 and OA publication routes will only exacerbate this tendency and has the potential to marginalise early career researchers, those new to academic research or from different disciplines and career returners.

### **B5** The narrow focus on the **UK** position rather than a full appreciation of the global nature of the academic publishing business and markets

- **B5.1** It is important in a global context to recognise that 85% of the subscription income from the SRHE's top performing journal comes from outside the UK and only 33% of articles in this journal have a UK author. Consequently just as our membership income is derived from a global academic community, so is our publications income.
- **B5.2** We serve a global community and the intentions of other countries in respect of OA will impact on Learned Societies and on the UK academic research community. The USA has for instance signalled its intention not to go down the Gold OA route. There is potentially a sustainable global income stream for the very best journals but UK OA funded authors are likely to have limited access to these in the future.

### **B6** Insufficient consideration given to other **OA** approaches-"Gold" versus "Green" **OA**.

**B6.1** Insufficient consideration has been given to other possible means of implementing OA. The dominance of the big commercial academic publishers on the Working Group, made this inevitable. We have yet to make a full cost-benefit analysis of a Green approach but on a

first look there appear to be fewer negative consequences, provided that certain safeguards are in place.

**B6.2** We recognise that an acceptable Green model would leave in place the subscription base and not deliver the apparent immediate "savings" currently envisaged for the UK taxpayer, but we do not believe that such supposed savings have been fully quantified or proven for this consideration to rule out further analysis of other options.

### B7 The impact on the Learned Societies and their future capacity to support and sustain their academic communities

- **B7.1** The Society (in common with a great many other social science Learned Societies) is a major publisher of research. We own the title to the UK's highest ISI ranked journal in our field and have publishing partnership contracts on other titles with a range of commercial academic publishers. Although these arrangements have evolved over time, these publications were established in the 1960s and have been crucial to resourcing the Society's activities since its formation in 1965.
- **B7.2** Income from publications accounts for 87% of the Society's total annual income. This percentage has risen significantly over the last 10 years, as Learned Societies have sought to sustain publications in increasingly competitive international environments and to compensate for falling revenues from corporate membership fees from HEIs and other bodies in the face of budget cuts and other factors.
- **B7.3** Society publishing contracts have always taken full account of issues of access to published research. We are able to exert control over the setting of journal subscription rates and fully support placement of articles in university depositories and negotiate and support a wide range of affordable access initiatives to published research globally, especially in the developing world. This particular OA agenda has handed back to the commercial publishers aspects we had gained control over and where we could represent academic research interests.
- **B7.5** All of our income from publication partnerships is ploughed back directly into supporting research and researchers. Deriving income from publication contracts, as opposed to an over reliance on a membership base and income stream, has enabled the Society to extend significantly its public benefit, freeing us to offer services and facilities to a much wider public group without society membership being a limiting factor on access to our work and services.
- **B7.6** Our major concerns on UK Government plans for OA are not protectionist and do not stem from financial concerns. We exist to support and sustain research and researchers in our field and do not seek to protect an income stream against a well-made case for greater open access to published research.

### **C** Conclusions

CI Of great concern is the speed with which the UK Government and its agencies have initiated and introduced a policy on Open Access without a full and in-depth consideration of the key issues, their full impact both nationally and internationally, and the potential for

collateral damage. The opportunities for consultation prior to reaching policy decisions have been inadequate and very carefully controlled. It has not been open or transparent process.

C2 The BIS initiatives on OA have been dominated by considerations relevant specifically to the STEM subjects. This is understandable given the investment in STEM research. However many of the concerns we have expressed apply across all subject areas. Concerns about the impact on our international reputation, the quality of our research publications and especially the potential for commercial exploitation are very much universal concerns.

C3 Perversely, whilst the apparent aims of this OA initiative were to reduce costs and restrict commercial exploitation of UK research, we are in danger of achieving neither objective. The commercial academic publishers were well represented on the Working Group and the form of "Gold" OA recommended follows this agenda.

**C4** We are therefore now in a position where we have an OA policy which continues to enable funds to flow into publications through APCs (Author Processing/Publication charges) but in a form which significantly reduces the power of both the academic research community and Learned Societies with publishing contracts to leverage benefit for their research communities.

**C5** We do not believe that the *Finch Report* provides a sufficiently robust and broad analysis of all the issues to provide a sound basis for an OA policy for the UK across all subject areas. This House of Lords Select Committee Inquiry offers a significant opportunity to address some important questions before any further policy decisions are taken and implemented.

We hope that in the course of taking evidence and in their deliberations the Committee may have the time to consider these questions:

- (i) What steps can now be taken to ensure that such a major policy issue is subject to proper analysis and review? What further process of investigation and inquiry should be recommended before policy decisions are implemented?
- (ii) Has sufficient consideration been given to the consequential impact of policy announcements made so far and have the Finch Report recommendations on transition been unreasonably overridden?
- (iii) Is there sufficient understanding on the global position of academic publishing to be certain that this form of OA policy will serve the UK well, now and in the future, in what is a global publishing market?
- (iv) Is a "one size fits all" approach to OA the right decision for the UK when the impact on the social sciences, arts and humanities will be very different to the impact for the STEM subjects?
- (v) Has the position for authors, and especially early career researchers, and for the academic reputation of UK research been properly examined? Have the issues of intellectual property rights and the potential for commercial exploitation and misuse of research work been properly assessed and understood?

### **Society of Biology – Written evidence**

The Society of Biology is a single unified voice for Biology: offering advice to Government and influencing policy; advancing education and professional development; supporting our members, and engaging and encouraging public interest in the life sciences. The Society represents a diverse membership of over 80,000 - including practicing scientists, journal readers, authors, reviewers, editors and publishers - as individuals, or through the learned societies and other organisations listed below.

### **Summary**

- The current policies on open access (OA) publishing have the potential for significant
  unintended consequences on the UK research base and economy it is vital that these
  are addressed. Some of these potential impacts are indicated in the Finch Report, but
  there has been little concerted action to address them thus far and the lapse of time is
  adding to concern.
- Researchers will experience variation across disciplines and institutions in terms allocation of funds for OA publication charges, required embargo periods, and the impact of international collaborations.
- Many learned societies view OA developments from a broad perspective, assisting their charitable objectives to maximise access to research outputs, while at the same time making uncertain their financial capacity for future support of their discipline. The potential loss of income will impact major activities within their discipline; supporting the skills pipeline and career development, engaging with the public dissemination of science and offering expert advice to policy makers.
- We are therefore keen to enter into dialogue on the opportunities and challenges of OA
  with government, the higher education community, funding bodies and publishers, to
  determine appropriate solutions that will maximise both access to research outputs and
  the capacity to underpin growth and excellence in the research community.

The Society welcomes the interest of the Committee and is pleased to offer these comments, gathered in consultation with our members and advisors for your consideration.

## Support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

1. The RCUK initial funding and the subsequent block grants to aid implementation of its policy on OA are welcome. The RCUK initial funds have been an important catalyst for the establishment of University OA funds and the clarification of OA publishing policies, however there is concern that the RCUK has seriously underestimated the funds needed for OA publishing. As funding has only been provided for 45% of article processing charges (APC) for RCUK funded research in 2013/14, it is difficult to see how research institutions will pick up this shortfall, particularly over the transition period. Future funding levels are insufficient to cover APCs and sustain the level of publishing previously achieved. Some Universities are piloting internal funding mechanisms to address underfunding of (or indeed unfunded)

likely to increase so will the strain on these provisions.

- 2. A great deal of research is funded by small scale grants (e.g. PhD research and minor charity funding) or occurs as a 'spin off' from major research projects, and is not funded directly. Funds are not generally available within universities and other institutions to pay for OA publication of this type of research. Smaller organisations and specialist societies are likely to be hit especially hard, and retired scientists are unlikely to have access to these funds. It is also unclear how indirect grant moneys will be handled given the TRAC methodology for allocating overheads. As most research outputs are published after the end of the grant, they cannot be included in the direct grant funding. The TRAC methodology makes it difficult to introduce new funding strands to indirect grant funding.
- 3. It is unclear how funds will be accessed by researchers and how money will be ringfenced and managed by universities. It seems to have fallen to universities to establish an effective mechanism for OA funding, but greater guidance from government and funders is needed. There is uncertainty about the methods of allocation of funds, as well as concern that funding may be inequitably distributed amongst authors. Prioritising access based on seniority of the researcher or research area, and the OA funding requirements of primary and secondary authors, particularly for international research, will be problematic; this may discourage UK authors from taking primary authorship. If APCs apply across the board, it may be that some researchers will feel unable to submit their work to the most appropriate (and possibly highest impact) journal as they are unable to access APCs.
- 4. The allocation of APCs is unclear for multi-authored papers that are funded by multiple grants, and similarly when a researcher moves institution mid-way through a project.
- 5. Funds will also be needed to sustain the costs of maintaining journal subscriptions in the transition period, as researchers require access to material in other publications and to material for which no APC has been paid.
- 6. Insufficient funding for APCs could lead to the loss of some high-impact journals, especially those published by societies, which are currently often very reasonably-priced. This would also create a loss of significant export revenue for the UK.
- 7. It is not clear that the full implications to universities of transfer of funding from the Funding Councils [Scottish Funding Council (SFC), Higher Education Funding Councils for England (HEFCE) and Wales (HEFCW) and Department for Employment and Learning, Northern Ireland (DELNI)] to research budgets have been considered.

### Embargo periods for articles published under the green model

8. A six month embargo period will have a different effect on publication readership and subscription according to discipline. There is a wide range of readership patterns

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<sup>141</sup> http://www.nottingham.ac.uk/is/finding/openaccess.aspx

within the life sciences; articles from some disciplines (such as environmental science) will have a long half-life, and the journal will be valued by the community ten years after publication. In other disciplines, a six month wait for access to an article would be untenable and unthinkable; for instance in Pharmacology, the need for timely scientific exchange is vital. In contrast, for disciplines with a long half-life, an expected decline in journal subscriptions due to a short embargo period would make certain journals economically unsustainable. The embargo period will also impact differently on the range of article types (for instance review articles or primary research papers) and according to the publishing business models.

- 9. The Association of Learned Society and Professional Publishers (ALPSP) and The Publishers Association produced a report on what the six month embargo period means for publishers, asking libraries if they would continue to subscribe to journals if they would be made publicly available after six months<sup>142</sup>. Only just over half of the respondent libraries (56%) said they would continue with all their subscriptions and this figure was higher in the UK than in the major US market. North American subscriptions are hugely important in terms of journal income and authorship. This study therefore reinforces the view that a mandated maximum six month embargo across the board (without appropriate compensatory mechanisms) could have a disastrous effect on some journals.
- 10. It is unclear whether the short embargo periods mandated by RCUK apply to journals that offer gold OA in instances where the author has no funding to pay the APC. More clarity is needed on scenarios such as this.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

- II. The Research Councils should keep their OA policies under review as new market mechanisms develop. For example, institutional journal (or bundle) subscriptions have been developed that exempt or discount APCs for members of that institution.
- 12. Research institutions need more guidance from funders about how to allocate OA funding, and University administrators need training and support to understand the policy and inform researchers of their publishing options and requirements.
- 13. Currently there appears to be a lack of clarity among researchers about publishing in mixed model journals, and over the different license arrangements. Uptake of OA routes in mixed model journals has been slow, with many authors choosing instead to publish in fully open access journals. There are also concerns about the Creative Commons Attribution (CC-BY) licence and the commercial use of research. Clearer guidance is needed and leadership by the Research Councils would promote progress. Learned societies have an important role to play in informing their membership and are best placed to do this alongside the Research Councils; the Society of Biology and several of our member organisations have run meetings and workshops with publishers and researchers to address these issues.

<sup>&</sup>lt;sup>142</sup> The potential effect of making journals free after a six month embargo. A report for the Association of Learned, Professional and Society Publishers [ALPSP] and The Publishers Association. May 2012. http://www.publishers.org.uk/index.php?option=com\_docman&task=doc\_download&gid=758&Itemid=

### Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

- 14. Publishing research is very much a global phenomenon, and so OA policy raises concerns about the capacity of UK publishers to remain internationally competitive. The UK is a relatively small market for publishers, so a major challenge will remain until international publishers universally adopt publishing approaches that are acceptable to UK authors, funders and the Government. As many of the highest-impact bioscience society publishers are based in the USA and may not offer optional open access or appropriate embargos, this may become a closed publication avenue for UK researchers, thus damaging the UK bioscience base.
- 15. The APC model may also discriminate against scientists from the developing world who may not have access to funding. Currently many learned societies provide journal access to developing countries at reduced rate or free of charge and there are voluntary schemes whereby publishers waive APC for disadvantaged authors.
- 16. A stringent peer review process must be maintained. There are concerns that an additional strain on expert reviewers may lead to the use of less expert referees, causing downstream impacts on the reliability of scientific data.
- 17. Learned societies play a critical role in the UK research community and yet a rapid transition period will undoubtedly lead to many learned society publishers losing out in the long term. Many of the Society of Biology's member organisations are learned societies for whom journal income provides a vital resource to the scientific communities they represent, with this income being used to support academic research and other activities of benefit to academia in the UK. This income therefore provides an important and essential role, alongside government and private-sector funding, in supporting key areas of UK science. In addition to directly supporting the career development of the next generation through research grants and specialist training, learned societies work to ensure the skills pipeline of scientific disciplines, host forums that bring together practitioners and scientists from government, NGOs, private sector and universities to formulate solutions to pressing problems, organising and support events that contribute to the public dissemination of science and advise parliamentarians and government agencies on issues of public concern. Losing journal income may jeopardise the ability of learned societies to support the community in this way. It is therefore vital that learned societies are formally invited to discuss OA policy with the main public funders of research in the UK.
- 18. Commercial publishers, with greater resources and revenue behind them, are likely to be more successful during this period than Society publishers as they can be quicker to adapt, invest more in change and experiment with a more diverse journal portfolio. The Finch Report highlighted well the challenges and risks in any rapid transition to a new publishing model, and stated that the Government should keep 'under review' the position of learned societies with significant dependence on publishing. It is not clear how this is being done.
- 19. The need for more technical investment, establishment of sustainable market rates and the renegotiation of existing publishing agreements are all areas that could cause difficulties to smaller learned society publishers if changes are required on a timescale faster than they are able to manage effectively. We are concerned that these

challenges, particularly with regard to timing, do not appear to have been fully considered and addressed by government. More communication and greater clarity from funders and government would be welcome.

### Socio-Legal Studies Association (SLSA) - Written evidence

- I. The Socio-Legal Studies Association (SLSA) is a learned society, the aims of which are to advance education and learning and in particular to advance research, teaching and the dissemination of knowledge in the field of socio-legal studies.
- 2. The SLSA fully supports the objective that the results of publicly funded research should be made freely available to potential research users.
- 3. The SLSA does not believe, however, that 'Gold' OA is the most appropriate or sustainable model of open access for the entire higher education sector.
- 4. The SLSA does not publish its own journal or journals, but it does receive substantial sponsorship to support its activities and provide benefits to members from commercially-published socio-legal journals, and hence is concerned about the ongoing viability of those journals and their revenues.
- 5. With regard to the development of RCUK's policies on open access, the SLSA would make the following submissions:
  - 5.1 We believe that each Research Council should be consulting with the disciplinary groupings it covers to determine which open access model/s represent the most appropriate and sustainable means of achieving the objective of making the results of publicly funded research freely available within those disciplines (including appropriate embargo periods), having regard to the varying publication norms, practices and models that currently exist at disciplinary level.
  - 5.2 Given the announcement that RCUK will provide funding to cover only up to half of the anticipated costs of APCs under the 'Gold' model in the short to medium term, we are concerned that existing problems of access for potential readers of research will simply be shifted to problems of access for authors. That is, academics in less well funded institutions will have more restricted opportunities to pay APCs than those in better funded institutions. Current inequalities will be exacerbated rather than erased.
  - 5.3 We are concerned that the RCUK mandate with regard to peer reviewed journal publications clashes with both quality and impact agendas, as it is likely to prevent researchers from publishing in venues (including both UK-based and international journals) that reach the optimal audience for their work but are non-compliant with the mandate. The statement in the RCUK Guidance that authors will simply be "expected to select from among [compliant] journals when choosing where to publish their research" is far too simplistic and ignores realities.
  - 5.4 RCUK need to clarify whether the publication mandate applies only to research grants or also to PhD studentships awarded through DTCs. We are concerned that PhD students (and early career researchers) may find it very difficult to access scarce institutional publication funds, producing further inequalities.

## SPARC Europe (Scholarly Publishing and Academic Resources Coalition) – Written evidence

- I. SPARC Europe (Scholarly Publishing and Academic Resources Coalition) is pleased to have the opportunity to comment on the issues listed below. SPARC Europe welcomes the UK Government's positive interest in Open Access (OA), the Finch report on expanding access to research publications and the Research Councils' active engagement in developing policy.
- 2. SPARC Europe's <u>response</u> to the Finch Report is a public document and details our reservations about the direction and conclusions of the report. We will not repeat those here but wish it to be noted that we have serious concerns in two areas there are factual inaccuracies in the report and there are a number of assumptions or conclusions that are not evidence-based. We point these out in order to flag up points that the Committee may wish to note in its own considerations and because these contribute to our analysis and response to the Finch study and its conclusions.

#### a) Factual errors. The report:

- o Implies that 'Green' Open Access is always embargoed (delayed by publisher embargoes on permission to put papers into repositories). This is incorrect: 60% of journals allow immediate opening-up of the peer-reviewed version of the article and a further 27% permit the opening-up of the submitted version. 16% even allow the published version (the Version of Record) to be placed in a repository immediately upon publication.
- o Reports that the impact of repositories (Green OA) is limited except in those disciplines that support large-scale subject repositories. In fact, repositories are providing seven-eighths of the 40% of the UK's research outputs that are Open Access, and the amount of Green OA is greater than Gold OA (openly-published in journals) in every field except the life sciences.
- Reports that Green OA cannot be given a liberal licence to allow text- and datamining. This is incorrect: there are many examples of liberally-licensed Green OA material and these are growing.
- o States that most Open Access journals charge article-processing fees. This is incorrect: the majority of OA journals (70%) do not charge a publication fee.
- States that publication fees are paid by authors. This is misleading, since most publication fees are paid by the institution (24%), by the funder (59%) and only in 12% of cases by the author. There are implications here for the public purse.

### b) The lack of an evidence base for some of the important assumptions made, and some analytical errors:

- Concludes that Green OA with short embargo periods may damage publishers.
   This ignores the complete lack of evidence for this and the substantial body of evidence against it, which we detail below in this response.
- O Concludes that repositories have a role merely in preserving the literature and for archiving theses and grey literature. This is a strange conclusion given that virtually all repositories were built specifically to provide Open Access to the journal literature and in the UK have succeeded in providing this at way above global average levels.

- O Uses an above-average value for publication fees in the calculations of the cost to the UK of Gold Open Access. The value used in the study was £1500-2000 (based on the publication fees being paid by the Wellcome Trust for authors to publish in Gold OA journals in the life sciences). The global average is USD 907 (c£570)<sup>143</sup>. This is important because the overall Finch recommendations are for the UK to move to all-Gold Open Access (i.e. pay for every article published) and Government-level acceptance of such a high value for publication charges may lead to publishers putting their charges up to this level if they feel the money is there.
- O Does not take into proper account the existing policies from governments and research funders. There are over 50 funder policies 144 on Open Access, all of which align except for detail and all of which focus on Green Open Access using repositories. The Finch conclusion to focus on Gold Open Access is an outlier (though the aim is, apparently, to 'lead the world').
- o Assumes that potential users will want the Version of Record (VoR). Potential users may prefer the VoR but this requires Gold OA for all articles an expensive option for the UK. For most potential users, the Green version is perfectly adequate.
- Assumes that innovative SMEs all need liberally-licensed research outputs so that they can carry out text-mining. While this is the case in some sectors (e.g. biotechnology), for the majority of sectors the need is simply for humans to have access to articles to read them.
- 3. Given these inaccuracies, SPARC Europe cannot fully endorse the conclusions of the Finch report, nor support the specific shape of the subsequent RCUK policy based upon the report. No national policy should be based on flawed or missing evidence and we exhort the Committee to pay attention to the facts when considering what its own recommendations might be.
- 4. From another perspective we question the over-weighted 'Gold' thrust of the Finch report and the RCUK policy. Economic modelling 145 has indicated that the cheapest way for the UK to become an 'Open Access nation is to transition through 'Green' OA to a final 'Gold' OA world. The benefits of OA accrue throughout the transition, but the costs of transitioning are much less. This delivers value back to taxpayers at the same time as achieving the goal. We do not understand the thinking behind spending precious research funds on publishing activities when OA can be delivered more cheaply and as effectively in other ways. There is a policy opportunity with respect to Gold OA, especially with respect to the opportunity to help create a better market for publishing services, but we do not agree that the RCUK policy approaches it in the best way.

Now we turn to the issues highlighted by the S&T Committee for specific consideration.

5. Support for universities through funds to cover article processing charges
Even before the Web made the case for Open Access compelling, there was a market
problem in academic publishing. The market is far from perfect because there is no proper
competition between products; users of the products (researchers) are not the purchasers

<sup>&</sup>lt;sup>143</sup> Solomon DJ and Björk B-C (2012) A study of open access journals using article processing charges, Journal of the American Society for Information Science & Technology 63 1485-95 DOI: 10.1002/asi.22673 <a href="http://www.openaccesspublishing.org/apc2/preprint.pdf">http://www.openaccesspublishing.org/apc2/preprint.pdf</a>

 <sup>144</sup> Registry of Open Access Repository Mandatory Archiving Policies (ROARMAP): <a href="http://roarmap.eprints.org/">http://roarmap.eprints.org/</a>
 145 Houghton J and Swan A (2013) Planting the Green seeds for a Golden harvest: clarifications on 'Going for Gold'. D-Lib Magazine, Jan/Feb 2013 19(1/2) <a href="http://www.dlib.org/review/dlib/january13/houghton/01houghton.html">http://www.dlib.org/review/dlib/january13/houghton/01houghton.html</a>
 doi:10.1045/january2013-houghton

(libraries are) so pressure on prices is reduced and price elasticity of demand has been low. As a consequence, journal prices have risen inexorably over the decades.

- 6. Open Access provides the opportunity for publishers to change their business models to provide free access to readers and to cover their costs by making a charge for their services rather than for their products. Such as system should naturally adjust the market by putting researchers who are as authors the customers for publishing services into the position of purchaser. This will create a more competitive market as publishers will need to compete on service quality and price.
- 7. Unfortunately, the proposed system of block grants to institutions will hinder the development of a more competitive market. Authors will be one step removed from the purchase decision by dint of an inevitable allocation system within each institution. Already one very large publisher is attempting to do a national-level deal with libraries to make all the RCUK-funded articles that this publisher published in 2012 Open Access. The proposed block grant approach will simply turn the current 'Big Deal' system for subscriptions into a Big Deal system for article processing charges. There will be many losers, as there are from the Big deal subscription system, not least small publishers that cannot compete with the might of the publishing giants.

#### 8. Embargo periods for articles published under open access

The term 'articles published under Open Access' implies those published as 'Gold' articles in journals and as such there should never be any embargo at all. Gold OA is, by definition, immediate online access upon publication in the journal.

- 9. If what is meant here is rather about the issue of embargoes applied to Green Open Access (work deposited in OA repositories), the policy position on 'Green' Open Access should be that:
- all articles must be deposited in an OA repository at the time of publication or before (preferably once the article has been accepted after peer review)
- if the publisher requires an embargo, this will be honoured, though maximum embargoes should be 6 months for science, technology, engineering and medicine (STEM) disciplines and 12 months for humanities and social sciences (HSS) in the interests of the public which ahs funded the research
- 10. The upshot is that provided <u>deposit</u> of the paper in the repository takes place at or before the time of publication, then during the course of the embargo period the metadata describing the paper and heralding its existence will be visible (metadata are not copyrighted and cannot be embargoed) even though the full text of the article is not openly visible. Authors can fulfil requests to supply a copy of their work to individuals who learn of its existence (because Web search engines index the metadata) and ask for the article by email. This is not Open Access, and it is a temporary measure for the duration of the embargo period, but it fulfils the requirements of would-be readers who have an urgent need to access the article while honouring publisher embargoes on generalised access
- II. It is worth noting that the Finch report states that embargoes of less than I2 months are 'unreasonable'. It bases this on the claim by subscription publishers that immediate Green OA threatens their businesses, yet no evidence to support this claim has ever been produced. There is no evidence at all that short embargoes or even no embargo at all damage publisher subscription businesses (what has caused relentless attrition in journal

subscriptions over 30 years is the equally relentless above-inflation increase in subscription prices).

- 12. On the contrary, the two main society publishers in high-energy physics have publicly stated that they have seen no damage to their businesses from 20 years of Green OA (where there is no embargo at all) in this discipline. The National Institutes of Health (US) policy, a 'Green' Open Access policy that has been in place since 2007, requires authors to deposit their articles in the OA repository called PubMed Central and the publishers of thousands of journals also *voluntarily* submit their own articles to PubMed Central, not something they would do if it damaged their businesses <sup>146</sup>. And *Nature*, the most prestigious scientific journal of all, says, "We have, to date, found author self-archiving [Open Access] compatible with subscription business models, and so we have been actively encouraging self-archiving since 2005."
- 13. It would seem not unreasonable then to conclude that Green Open Access does not (yet) harm subscription publishers: and the recently-completed PEER project, a publisher-led, EU-funded study to gather evidence of the effects of Green Open Access, concluded exactly that <sup>147</sup>.

### 14. Engagement with publishers, universities, learned societies and other stakeholders in developing the new open access policies

SPARC Europe can only speak for itself here. The Finch group was composed of a number of representatives from publishers, research libraries and universities, and research funders. As far as is apparent, there was no consultation more widely with any other stakeholders, including expert advocacy organisations such as SPARC Europe: this contrasts markedly from practice in other countries, notably the US where open consultations take place to gather views and evidence from all interested parties before conclusions are drawn.

- 15. RCUK revised its original Open Access policy in 2012.RCUK did offer the opportunity for stakeholders to respond: issued its draft (revised) policy early in that year presumably took responses into account in its own deliberations. This was not a formal consultation where responses were published, but it was at least an opportunity for interested parties to provide their views.
- 16. There is a considerable body of opinion that feels that the Finch study gave overmuch weight to publisher fears (evidence-free) about their businesses and sought to promote a route to Open Access that put publisher interests above those of the research community and the public that funds research. SPARC Europe concurs with this in general, though our view is nuanced: we believe that it is possible to develop a policy position that achieves Open Access within a reasonable period, supports innovative publishing services and new business models, delivers a competitive market and returns value to the taxpayer. What the Finch report concluded and recommended does none of these well.

### 17. How the Government should address the concerns raised by the scientific and publishing communities about the policy

The Government should take steps quickly to consult widely with the research community and allied groups of stakeholders. At the time of writing a BIS consultation on the topic of

http://publicaccess.nih.gov/public access policy implications 2012.pdf

<sup>&</sup>lt;sup>146</sup> The NIH Public Access Policy. Director's report, February 2012:

<sup>147</sup> http://www.peerproject.eu/fileadmin/media/reports/20120618\_PEER\_Final\_public\_report\_D9-13.pdf

SPARC Europe (Scholarly Publishing and Academic Resources Coalition) – Written evidence

Open Access has been announced, which is welcome. SPARC Europe will be responding to that inquiry with evidence on the issues outlined.

#### Dr Michael P. Taylor, University of Bristol - Written evidence

Note that in this submission I represent only myself, not the University

#### **Background**

- I. The Finch Report on open access to publicly funded research in the UK was an important step towards ubiquitous availability of publications to the citizens who paid for them. I and my colleagues welcome the emphasis on open access: a model in which publications are free at the point of access unquestionably achieves far greater exposure for, and exploitation of, research. There are many positive consequences for academia, industry and medicine in the UK and worldwide.
- 2. The new open-access policy of Research Councils UK (RCUK) interprets and implements the recommendations of the Finch Report in mostly very satisfactory ways. In particular, we welcome its insistence on the Creative Commons CC-BY license when the "Gold" route to open access is used. This licence ensures that the published works can be used by the widest spectrum of organisations not only to facilitate further pure research, but also to be used in education and to catalyse innovation in industry. This licence is compatible with the original definition of the term "open access" by the Budapest Open Access Initiative (BOAI), and has been widely adopted as the open-access licence of choice by respected OA publishers such as BioMed Central (BMC) and the Public Library of Science (PLOS).

#### **Principles**

- 3. The Finch report was co-authored by a committee consisting of stake-holders from various roles in the academic publishing process: funders, researchers, university administrators, librarians and publishers although with no representatives from industry or the health sector. As a result, and by design, its conclusions were compromises, balancing the interests of the various invited stake-holders though perhaps not fully taking into account those not at the table.
- 4. With one exception, the interests of all these groups are aligned. Funders, researchers, university administrators and librarians and indeed industrialists and health-care professionals all want the results of research to be available as quickly as possible, as widely as possible, and under terms that allow as much use as possible. Alone among the stake-holders, publishers wish to *prevent* access to research. This is because historical accidents in the evolution of scholarly publishing have given rise to a business model in which they must raise barriers in order to sell access to a privileged few.
- 5. I hold it as a key principle that the interests of one small group publishers must not be allowed to compromise decisions made on behalf of all other stake-holders. In particular, the government of the UK is beholden to its citizens, not to the publishing industry. **The government must make decisions that promote the welfare of citizens** rather than decisions that suit any one industry.
- 6. In some situations, of course, there is no conflict: when the "Gold" route is taken to open access, publishing becomes a service industry rather than a product industry: publishers are paid by authors or their institutions for the service of publication. The resulting materials are then freely available to the world under a permissive licence. The problem arises when the

"Green" route is taken: publishers assume ownership of published works as under the legacy model, but authors place copies of their manuscripts in publicly accessible repositories. Some publishers would prefer that this option not be available, for fear that subscription revenue will decrease if draft manuscripts are freely available.

#### **Specific issues**

Support for universities in the form of funds to cover article processing charges, and the response of universities and HEIs to these efforts

- 7. I support the redistribution of university funds to pay publication charges for Gold open access. Simple calculations suggest that the overall cost to the worldwide academic community of an average paywalled article is £3307 (£4.96 billion total paywall revenue each year for 1.5 million articles). Compared with this, the average Gold OA fee of £562 found by the broad survey of Solomon and Björk (2012) represents a saving of 83%. Even accepting the Finch Report's inflated estimate of Gold OA fees in the range £1500–£2000, this would still be a saving of 40–55%. Evidently, a switch to open access will be financially beneficial for universities as well as opening up research outputs for many other purposes.
- 8. However, if universities blindly cover all Gold OA publication fees as many researchers understandably wish there will be no downward pressure on prices, and a true market in Gold OA publication will not emerge. The result will be over-spending. To prevent this, I recommend some form of fee-capping: for example, universities might pay the first £1000 of each Gold OA fee, and require authors who wish to use a more expensive venue to find the balance from departmental funds. Such a measure would undoubtedly be unpopular in the short term, but would yield long-term benefits.

Embargo periods for articles published under the Green model

9. This is the area in which the influence of publishers on the Finch committee, and indeed on the RCUK policy, has been most deleterious. The Finch Report barely mentions the Green route, being couched almost entirely in terms of Gold. And the otherwise excellent RCUK policy contains not one but two concessions that very significantly undermine the value of Green OA. From page 2:

Where a publisher does not offer [Gold OA], the journal must allow deposit of Accepted Manuscripts that include all changes resulting from peer review (but not necessarily incorporating the publisher's formatting) in other repositories, without restrictions on non-commercial re-use and within a defined period. In this option no 'Article Processing Charge' will be payable to the publisher. Research Councils will accept a delay of no more than six months between on-line publication and a research paper becoming Open Access, except in the case of research papers arising from research funded by the AHRC and the ESRC where the maximum embargo period is 12 months.

10. Note that articles posted in this way must be "without restrictions on *non-commercial* reuse". But this means that publishers are at liberty to (and certainly will) impose restriction on commercial re-use. This will prohibit many important uses of research that citizens have paid for. **There is no justification for a ban on commercial use of research publications.** This restriction benefits publishers at the expense of all the other stakeholder groups mentioned above, and should not be allowed to stand. Instead, the RCUK

policy should be revised to require use of the permissive CC-BY licence for Green OA as it does for Gold OA.

Similarly, RCUK has accepted publishers' desire for a six- or twelve-month embargo on publicly funded articles between their initial publication behind paywalls and their becoming available to the public in repositories. **There is no justification for any embargo on Green-OA access to research publications.** This clause should be removed from the RCUK policy and not adopted in any subsequent policies.

- II. The net result of allowing both non-commercial licences and delays before Green-OA articles become available is that the Green route to open access is rightly seen as intrinsically inferior to the Gold route as mandated by the RCUK. This asymmetry has caused dissent: open-access activists who find that the Green route is more appropriate in their field have expressed opposition to the RCUK policy because of its perceived downgrading of Green OA. To avoid this and to deliver the best value to the country as whole, the policy should be revised to prohibit non-commercial clauses and embargoes when the Green route is taken.
- 12. It is true that some publishers will not like the changes proposed here. I refer back to the principle stated earlier: that the government must make decisions that promote the welfare of citizens in general rather than any one industry. Note that publishers who find the revised Green-OA terms unacceptable will be at liberty to decline offers of manuscripts resulting from Government-funded research if they find these terms are too onerous. (In practice, this is unlikely to happen: rather than forego the opportunity to publish publicly funded research, publishers will simply accept the loss of their government-granted monopoly on the commercial exploitation of this research.)

Engagement with publishers, universities, learned societies and other stakeholders in the development of research council Open Access policies and guidance

13. Publishers must not be allowed to dictate policy that prioritises their own interests above those of universities, learned societies and citizens. Publishers are properly considered as service-providers, analogous to the vendors who provide the computers that researchers use for word-processing as they write their papers. They are important to the process but do not merit a place at the table when deciding on policy.

Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

14. The principle concern raised by the scientific community has been the difficulty of finding money for Gold-OA publication charges. This is a legitimate concern, though RCUK has gone some way towards meeting it with the provision of block grants. The perception of high publication charges is due in part to researchers' assumption that they must continue to publish in the journals they have previously used, many of which are now levying exploitative charges. The solution to this is a re-education programme: new open-access journals offer better services than those produced by legacy publishers, and at lower costs. Researchers should be encouraged to invest some time in finding the best value and most appropriate Gold-OA venues for their work. In the long term, as libraries are able to cancel subscriptions and route the saved money into publication charges, universities will be better off.

Dr Michael P. Taylor, University of Bristol – Written evidence

15. It is not the job of government to concern itself with challenges faced by the publishing community. This assertion does not arise from hostility to publishers, but from a simple recognition of who the government serves.

#### Dr Daniel Turner, Sheffield Hallam University - Written evidence

Note: Responding in an individual capacity

- I write to express some potential concerns about the way that open-access articles are proposed to be supported through the provision of Article Processing Charges (APCs), and to provide some hopefully useful proposals based on existing alternative systems, and evidence from the Finch report.
- 2. Improving open-access for articles based on research funded by the UK government is an important and necessary step to improve impact and access. This would bring research institutions in-line with other publicly-funded institutions who have a duty to provide access to their data to the public, such as the Ordinance Survey, and the data.gov.uk initiative. These endeavours will lead to tangible benefits to the citizens and economy of the UK, through better informed decisions that would affect businesses and public services. The same must be done for scientific research, so that academics and those outside of academia can quickly and efficiently benefit from knowledge funded by the government.
- 3. In my research I do considerable work with the public sector including the NHS and Local Authorities, many of which cannot afford subscriptions to journals containing articles that would provide critical research evidence for making decisions on public services. An open-access model for research cannot come too soon.
- 4. The recommendation in the Finch report to fund the 'gold' publication model in existing journal platforms through APCs seems unnecessarily expensive, and complicated. As I understand, this could cost up to £60 million a year, with £10 million to be allocated this year to the universities receiving the most research funding <sup>148</sup>. This additional cost is reported to come from existing research budgets, and so will reduce the amount of money available for research, leading to fewer projects funded.
- 5. The committee should consider a variation of the 'green' option referred to in the Finch report, in which a centrally funded repository for e-print articles could be the preferred method for providing open access. The report did not include a cost analysis of this scenario as was provided for the 'gold' option. However, this model has proved successful in other countries, and in certain disciplines has become an easy, well used and prompt way to share findings from research. There are two models that the committee could consider as part of their recommendations: a central repository for all open access articles similar to the PubMed model used in medicine; and the arXiv model of pre-print articles.
- 6. First, it is worth noting that the public purse already bears most of the cost of the peer-review process, as academics are not usually paid for reviewing articles, and even journal editors are rarely paid more than a basic allowance to cover their time. The additional costs of administering the process, identifying reviewers, typesetting and hosting a database to allow access and searching of articles are fairly minimal, and are already being done by several government funded bodies. For example the National Institute of

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<sup>148</sup> http://www.timeshighereducation.co.uk/story.asp?storycode=421081

Health Research already follows this complete process for publishing the final report of studies they have funded.

- 7. Currently, the government pays for research articles three times: it funds the research they are based on, it funds the time of those employed in academic institutions that write and review the articles, and then it pays for institutions to have subscriptions to access these articles once they are in 'print'. On several occasions in my career I have been unable to access published articles I have written because my institution did not have a subscription, or it was embargoed, often for as much as a year. This is inefficient and frustrating for all involved, and I hope the committee will ensure the same is not true for open-access articles.
- 8. If APC rates are not set, there is potential for them to rise as high as the market will bear, beyond a cost-recovery level, especially for first-tier journals. This would not be cost effective for the research councils, however a free open-access government publisher would provide competition in the market, while still allowing researchers the option to publish in existing journals if they choose. The Finch report details the high cost of APCs<sup>149</sup>, but is hopeful that costs will come down. In my opinion, the committee should quickly set a low APC rate, considering that as significant research money is already being redirected to this end.
- 9. It would seem a minimal extra cost to have a government publisher of research council funded research, bypassing the need for APCs to fund journal publishers. This could be an option for researchers which would reduce the direct costs of open-access publication, but still allow for academics to publish in traditional acadmic journals if they wish.
- 10. The UK government and Wellcome Trust already fund Europe PubMed Central (formally UKPMC), a central on-line repository of full text articles on medicine, including many of which are open-access. This infrastructure and model could easily be adapted to cover all the areas of science covered by the UK research councils. Medicine and health are currently ahead of many other areas of research in publishing and using open-access articles, in part due to resources and initiatives such as PubMed, and there are obvious benefits to researchers and society for expanding this model to other areas, such as social science.
- 11. Repositories for e-prints are another important consideration, described in detail in the Finch report. The report notes how successful they have been in some fields, but also that the current landscape is 'patchy' with a large number of repositories for individual institutions, and low usage in certain fields. In physics, mathematics, computer science, quantitative biology, quantitative finance, and statistics, the arXiv service has provided a repository for the last 20 years that is extremely well used, with more than 7000 articles submitted a month, and hundreds of thousands of pre-print article downloads provided every day<sup>150</sup>.
- 12. Could the committee not consider a unified repository for UK universities? Every university seems to currently have their own repository, creating a great duplication of

<sup>&</sup>lt;sup>149</sup> See sections 7.2, 7.3, 7.4

<sup>150</sup> http://arxiv.org/help/stats

effort, and making finding relevant articles difficult. A centrally funded repository for e-prints from UK universities and research council funded research would be a cost effective way to ensure open-access to all UK research. Under this model, it would be mandatory that pre-prints of research-council funded research are lodged in this repository, and academics would be able to publish where they wished, and access would remain open to all. The costs of such a service would be minimal, (it would be unlikely to be as widely used as arXiv which currently gets around 2 million hits a day and has total annual operating costs of £500k a year<sup>151</sup>).

- 13. Finally, the committee is charged with considering the issue of embargos. Personally I would consider any length of embargo to be damaging to the impact of research. Researchers, universities and the government want to have findings published to maximum effect, and publicity for research findings is maximised when, with a pressrelease, copy-editors and peers can immediately access the full text of the research, to critique it and use it to inform their own work. It is frustrating to read about new research in my field that I am unable to read for several months due to an embargo it is unlikely that I will remember to re-visit this work once it is available to my institution's subscription! It could also be argued that newspaper editors would have less defence in misrepresenting research in the mainstream media when they have access to the full text of the article, rather than just the paragraph summary produced by a university press office. While removing embargos for open-access research would undoubtedly not be good for the income of journal publishers, the wider benefits to society must be given precedence.
- 14. It has already been common practice for some years for researchers to request APCs in the budget for their research. Our team has done that with our current NIHR funded project, however, this only allows us to publish a small number of open-access articles (two in this case) when we expect to publish a lot more, and would like those to be freely available as well.
- 15. Rather than open-access necessitating an increased cost of conducting research, could the committee not ensure that any new system will save money by bypassing the antiquated system based on printing journals and institutional subscriptions, and be bold enough to move to a new model that fully utilises the amazing possibilities that the free on-line sharing of information provides? Even yesterday, an article announced that a group of mathematicians aim to use the arXiv model to launch a community-run open access journal, bypassing the traditional publishing model. This is the future, let's not fall behind.

<sup>151</sup> http://arxiv.org/help/support/faq

<sup>152</sup> http://www.nature.com/news/mathematicians-aim-to-take-publishers-out-of-publishing-1.12243

### United Kingdom Council of Research Repositories (UKCoRR) – Written evidence

#### About UKCoRR

- I The United Kingdom Council of Research Repositories (hereafter UKCoRR) is an independent membership organisation of repository managers, administrators and staff in the UK. UKCoRR's mission is to:
  - Promote repository management as a recognised and respected profession
  - Provide a forum for discussion and exchange of experience
  - Represent the views and concerns of those who work with repositories in organisational, policy and strategic development.
- 2 UKCoRR currently has 251 members (14th Jan 2013) which includes representatives from the majority of the UK's Higher Education institutions.

#### UKCoRR's credentials for commenting on these issues

- It is our view that the repositories staffed by our members are a vital part of the UK's research infrastructure and have a unique open access (OA) focus. Research repositories collect, curate, preserve and make available open access material using both 'green' and 'gold' models. Furthermore our members have experience and expertise, solidly grounded in practice, in:
  - the current scholarly publishing environment,
  - making publications open access,
  - copyright and licensing in scholarly publications,
  - advocating for open access, and
  - the cultural change needed in academia for open access to research to become the norm.
- 4 Many repository staff are currently playing a leading role in shaping their institutions' open access policies and practices. In particular, repository staff are at the forefront in implementing RCUK's new open access policy.

### Overview of UKCoRR 'views on the actions taken by Government and RCUK following publication of the Finch report'

- 5 UKCoRR and its members strongly support OA but are concerned that, by emphasising the 'gold' route to OA, the Finch report and RCUK's new open access policy are not as effective as they could be in furthering the ideal of full open access to all research outputs. We feel that the Finch report failed to consider a number of factors in its consideration of the 'green' route to open access, including the fact that many institutions and funders with mandates did not follow up on these with any action to ensure compliance, thus reducing their effectiveness. The recommended 'gold' route will have this support and more.
- We are committed, as experts in the field, to assisting our institutions make any period of transition go as smoothly as possible but the role that institutional repositories

(IRs) might play in the process has been overlooked, with a very tight time frame for institutions to implement mechanisms to support the administration of the block grants which is at odds with RCUK's assertion that they support both the 'green' and 'gold' models of Open Access.

We consider the move to a 'gold' centric model will only bring maximum benefit as part of a coordinated international move; implemented unilaterally it will lead to a disproportionately high cost for the UK in a time of austerity and correspondingly scarce research budgets. The need to effectively disseminate research should not be allowed to impact the process of conducting that research and studies have shown<sup>153</sup> that the "most affordable and cost-effective means of moving towards OA is through Green OA, which can be adopted unilaterally at the funder, institutional, sectoral and national levels at relatively little cost." An additional threat is the pace of change in the transition period could impact on the pace of research in the country damaging the reputation of the sector.

In the following, we address the four issues highlighted by the House of Lords Science & Technology Committee in turn.

Issue I: support for universities in the form of funds to cover article processing charges, and the response of universities and HEIs to these efforts

- 8 Funds from RCUK will be allocated on the basis of covering 80% of anticipated APCs for RCUK funded researchers, universities must find the remaining 20% and make up any shortfall. This will divert scarce funds from other activities both within institutions as well as from research funders.
- 9 Universities wishing to support gold OA for researchers that are not funded by RCUK will need to find even more money and it will be essential that Universities do so to avoid creating a group of 'second-class' researchers who do not have the advantages of those funded by RCUK, further damaging the research reputation of the UK. We have already seen this kind of division in another way where publishers are charging RCUK funded researchers more for open access under compliant licensing agreements<sup>154</sup>.
- The costs associated with implementing the RCUK policy go beyond APCs per se, there is also cost associated with establishing and administering university funds. Given the complexity of the current landscape (variety of APCs, publisher membership models, need to allocate fund fairly, which institution pays for collaborative publications etc) these are significant and will potentially increase over time. In addition there is the level of compliance monitoring and reporting that will be required by the RCUK.
- I I These extra costs were recognised by BIS grants, but were allocated to only 30 universities. Other institutions are facing the same costs and challenges but have not received funding to address them.
- The current policy will require more staffing to be provided; in response to the Finch Report UKCoRR called on organisations with repositories to "reflect whether their current"

154 Nature Publishing Group (<a href="http://www.nature.com/press\_releases/cc-licenses.html">http://www.nature.com/press\_releases/cc-licenses.html</a>) will be charging between £100 and £400 per article more for the CC-BY license than their more standard CC-BY-NC-ND or CC-BY-NC-SA licenses.

 $<sup>^{153}</sup>$  Houghton, J. and Swan, A. (2013) Planting the Green Seeds for a Golden Harvest: Comments and Clarifications on "Going for Gold" DLib, 19(1/2).

resourcing arrangements in terms of staffing and support are sufficient to meet the needs and aspirations of the institution and funders in achieving open access for all their work"155.

Open Access began as a community driven movement with the passionate support of sections of the research community, forcing this change on researchers too rapidly could lead to the policy becoming just another burden on already scarce research resources.

#### Issue 2: embargo periods for articles published under the Green model

We are concerned that publishers may choose to extend their embargo periods for Green Open Access in excess of those permitted by RCUK to force RCUK funded authors to pay for gold OA. It is too early to see whether this is happening but the open letter from the editors of 21 prominent History journals published by the Institute of Historical Research which recommends instituting an embargo period 3 times the length required by RCUK (36 months) sets an unwelcome precedent.

# Issue 3: engagement with publishers, universities, learned societies and other stakeholders in the development of research council Open Access policies and guidance

- There is a general feeling that protection of publishers' revenue has been prioritised over achieving cost effective Open Access. UKCoRR would have welcomed more engagement with repositories in development of policy.
- 16 RCUK have issued a demand for compliance monitoring and yet not issued detailed guidance on how this process will work making it hard for universities to set up procedures for compliance.
- 17 Currently the majority of publisher policies for both gold and green Open Access do not meet the criteria defined by RCUK<sup>157</sup>. We hope that publishers will amend their policies to meet these high standards but in the meantime academics may find that although their preferred journal does offer some form of OA, it is not fully compliant with RCUK policy leaving them with the unenviable task of choosing between the preferred journal for their field of research and compliance with their funding agreement; a difficult position as many institutions and HEFCE continue to emphasise the importance of where you publish.
- The discussions about Open Access, via both routes, have focussed almost entirely on journal articles in STM subjects. The different publishing cultures and research climates of the social sciences, arts and humanities have been left out of the debate. Mandates such as the RCUK's treat non-journal outputs as 'grey literature', which is an error a published book is an important and valid way to disseminate research results, especially in fields where the relevance of outputs persists, and indeed can increase over time. It is particularly important that the continued dominance of scholarly monographs in these fields is recognised and provision of Open Access to this type of publication is encouraged.
- 19 Additionally the AHRC regularly funds practice-based research in the arts where the output may be a performance, the creation of an artefact, or an exhibition. No attention at

<sup>155</sup> http://ukcorr.org/2012/06/21/the-finch-report-optimism-hope-and-frustration-for-repository-staff-in-equal-measures/

<sup>156</sup> http://www.history.ac.uk/news/2012-12-10/statement-position-relation-open-access

 $<sup>^{157}</sup>$  l.e. CC-BY for gold, CC-BY-NC for green with appropriate embargo periods.

all has been given to the policy, social, economic and technological requirements for providing Open Access to non-textual outputs.

Given that their policy is based on recommendations similar to those of the Finch report, a lot of focus has been placed on RCUK. Nevertheless, RCUK funding represents a proportion of total Government R&D funding, and Finch applies to *all* publicly funded research. It will be valuable for other Government agencies and Departments to express their own views and policies on this to help inform the rollout of Open Access more widely.

### Issue 4: challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

UKCoRR have the following concerns:

- The Finch report has a strong preference for Gold OA which has the discussed need to find extra funds when repositories are already able to make material OA at much lower cost<sup>158</sup>. Over the past decade the investment of public money into the national repository infrastructure by JISC can be said to be tens of millions of pounds and this investment should be built upon.
- 22 UKCoRR is also concerned that this may see funding streams moved away from more niche, but nevertheless valuable, research in order to ensure the publication of a more limited selection of key research<sup>159</sup>.
- In effect this move could lock out or significantly reduce the published contribution of independent scholars whom are not attached to an institution as well as impacting on Early Career Researchers who may find it more difficult to secure funding.
- APCs may be set artificially high, resulting in more tax payer's money being diverted to the publishing industry. Will this result in a reduction in the journal subscription charges? Evidence seems to be growing that they will but only in proportion to the number of article processing charges (APCs) they receive. So the maximum discounts we could receive under current plans would be equivalent to the proportion of the world's research funded by the RCUK, or put another way, a fraction of 6%. These discounts for most HEIs would also take a number of years to be realised in Library budgets given publishers' continued reliance on 'big deals' as the primary route to journal subscriptions.

#### Concluding remarks/recommendations.

- 25 UKCoRR welcomes moves towards OA and recognises that recent action taken by Government and RCUK has done a lot to establish OA as a priority for UK research.
- 26 Encouraging academic authors to retain more rights (e.g. licence rather than transfer copyright) and promoting green OA would be more cost effective at this stage.
- We recommend that the Government and RCUK, particularly, demand demonstrable value for money from publishers charging APCs.

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<sup>158</sup> http://ukcorr.org/2012/06/21/the-finch-report-optimism-hope-and-frustration-for-repository-staff-in-equal-measures/

<sup>&</sup>lt;sup>160</sup> See Elsevier's '<u>Double Dipping Policy</u>' for an example.

- We advocate moves towards IRs and publishers cooperating towards achieving the RCUK/Government's aims. This interface could be used to build trust and encourage the development new models of dissemination, which could be used to alleviate the concerns of the Learned Societies by re-positioning them in the scholarly lifecycle.
- 29 Further research should be carried out to inform the debate around embargo periods and their impact on journal sales, to better inform Publishers/Learned Societies on addressing their concerns. Responses on this matter so far seem somewhat arbitrary, which suggests a lack of hard facts on what impact there will be in the longer term.
- 30 UKCoRR strongly encourages some leniency and flexibility from the RCUK and the government as a whole, in implementing a change of this nature and scale. Regular reviews and updates will be needed to both policies and practice in response to the reactions of other stakeholders and countries.

#### Universities UK - Written evidence

#### Introduction

- I. Universities UK is broadly supportive of the direction of travel on open access following the publication of the Finch report and the response from the UK government, Research Councils UK (RCUK), the Higher Education Funding Council for England and others in 2012. Open access in research is important for a number of reasons, including realising the significant potential benefits for the profile and impact of UK research and ensuring an efficient and effective publication system. Open access also has great potential to drive innovation in academic publishing, which in turn will drive efficiency. While early open access experiments simply replicated operational and revenue models from subscription journals, more recent innovations in peer review, web and search technologies, text-mining and workflow tools promise to reduce publishing and associated library costs in these areas. For example, the co-founder of the Public Library of Science PLoS ONE open access journal, now the biggest journal in the world, has set up Peer-J where, for a lifetime membership of \$99, academics can use a journal infrastructure wherein they both contribute to and benefit from peer review activity.
- 2. Given the complexity in the system, the transition to open access as envisaged by Finch might take some years, and will be characterised by a mixed economy. We recognise the concerns that have been raised over the costs of transition to the 'gold' model. We would therefore emphasise the need to monitor very closely the impact on journal pricing and on institutional costs across the sector, and to understand the impact of the Finch proposals more generally. This will need an agreed and consistent approach across all stakeholders and interests. The Open Access Implementation Group, Chaired by Professor Martin Hall, is considering this question and additional evidence requirements to support the open access transition. Additional government support for the transition has been welcome and we would urge that the funding requirements to support this transition period, across the higher education sector, be kept under close review.
- 3. Please see below Universities UK's response to the issues raised by the committee.

### Support for universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

4. Although open access publishing and institutional repositories have been evolving as an alternative publishing model for a number of years, the Finch report set out a road map for how a more fundamental transition to open access can be achieved. The government's support for Finch and associated changes to funders' policies will lead to significant change. However, given the complexity of the academic publishing market any transition to open access will inevitably take some years, and will be characterised by a mixed economy. Universities will need to maintain subscriptions to journals (to enable their researchers and students to access the world's literature), put in place arrangements to fund article processing charges (APCs) to support open access publishing (in part covered by block grants from funders such as RCUK and the Wellcome Trust), and support their repository (to ensure their research has maximum impact).

- 5. While consensus supports open access, there are costs to all scholarly communication, which have to be borne somewhere in the system. The Finch report estimated, based on certain assumptions, that the additional costs during a transition could amount to around £50 million per year 161, of which £38 million were APCs, although thereafter it would be cheaper and more effective. Given the diversity of the sector, the way in which institutions will respond and the costs of transition would vary. In a welcome move, the UK government has allocated £10 million this year to universities to cover part of this cost. As noted above, we recognise the concerns that have been raised over the costs of transition, and would emphasise the need to monitor the impact on institutional costs across the whole sector, and on subscription journal pricing, very closely and to understand the impact of the Finch proposals more generally. Universities may have an interest in working with funders to define a set of metrics that they would wish to have monitored to ensure the transition is both making progress and is cost-effective in the medium to long term. Data from these metrics would ensure that there was a clear and shared understanding of any ongoing requirements to support transition, but any monitoring will need to be based on a clear consensus on the approach and metrics used. lisc, RCUK and the Wellcome Trust are collaborating to collect data on APCs to ensure that the national agreements with publishers, brokered by lisc, are informed by accurate data on costs incurred by universities.
- 6. Because the UK produces more high quality journal articles per capita than many other countries, it may pay higher aggregate APCs, though the overall cost-benefit for the UK is likely to remain positive when compared with the current position. A number of other countries are moving towards an open access model, for example there are strong moves in both USA and Germany. It will be important to monitor open access developments and costs worldwide and his UNESCO has already developed a tool to support this <sup>162</sup>.

#### Embargo periods for articles published under the green model

- 7. Green open access will continue to be an important part of any future scholarly communication system and will need a supportive policy environment. Indeed, most institutions have a repository that can be used to showcase and share all of its open access publications, as well as doctoral theses and other material. Increasingly, such repositories are also used to support research management and reporting.
- 8. Currently, most research papers that are open access go through this route. <sup>163</sup> For universities, it is a very cost-effective approach, although some publishers are concerned that, if taken too far, it might threaten their revenues. To manage this risk, many publishers impose 'embargoes', so that the deposit of an open access repository version is time restricted. Embargo periods will vary between publishers and disciplines. Embargoes are sometimes conceptualised in terms of the 'half life' of a journal article the period during which half of all potential readers can be

 $<sup>^{161}</sup>$  This was based on a projected average APC of £1,750, which is much higher than the global average of £571 and an order of magnitude higher than the \$188 first copy article publishing costs reported by a survey of smaller journals using open source software. On the other hand, the Finch report anticipates a major role for hybrid journals, whose APCs are significantly higher.

<sup>&</sup>lt;sup>162</sup> UNESCO Global OA Portal: <a href="http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/">http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/</a>

Poynder R (2011) Open Access by Numbers http://poynder.blogspot.co.uk/2011/06/open-access-by-numbers.html

expected to access a given article. <sup>164</sup> The version information and licence conditions on manuscripts published in this way are often unclear. The Finch report was sensitive to the balance between the aims of, on the one hand, increasing access, and on the other of avoiding undue risks to the sustainability of subscription-based journals. Therefore it proposed that where an appropriate level of dedicated funding is not provided to meet the costs of open access publishing, it would be unreasonable to require embargo periods of less than 12 months. We recognise the concerns raised by Finch but, as part of the transition, and informed by any impact monitoring, we would encourage a move ultimately to a standard minimum sixmonth embargo period without restrictions on non-commercial reuse. This would be in line with funders' policies and would put the UK in line with policies elsewhere, such as in Europe.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

9. The research councils have supported open access for a number of years and in July 2012 announced a new policy informed by the Finch report. We are reassured that RCUK policies have been informed not only by extensive discussion and consultation undertaken as part of the Finch review, but also by consultation within the research councils, their communities, institutions and with the publishing community. Our understanding is that the flexibility in the research councils' policy and guidance reflects those discussions and addresses concerns raised during them. It will be important that the research councils and other funders of research continue to consult a wide range of stakeholders, including publishers, and include them in the development of open access transition monitoring and oversight.

### Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

- 10. One of the main concerns has been the potential impact of open access on learned and professional societies, particularly where the proceeds of their subscription publishing operations contributes to the work of their communities. This was a concern recognised by Universities UK in our 2006 position statement on open access. It will be important for the position of learned and professional societies to be monitored closely, but as with any changing business environment, the open access landscape also provides these publishers with opportunities to innovate and develop new business models.
- 11. Another issue relates to the management of APCs and ensuring that there is a consistent and transparent approach in institutions that can ensure that academics wanting to publish are able to do so. All universities in receipt of research council or Wellcome Trust funds to cover APCs will need to put in place appropriate arrangements for their management. Research funders will have specific requirements for accountability and monitoring the spend associated with these funds, partly to keep track of compliance with their open access mandates. From <sup>t</sup> April 2013, universities in receipt of research council grants will be expected to have a publication fund, through which the money can be managed and on which reports can

<sup>&</sup>lt;sup>164</sup> It should be noted, however, that there are currently no substantial or systematic studies that have demonstrated that journal subscribers actually do behave in this way, or that green open access with short, or no, embargo periods does actually result in the cancellation of subscriptions.

be made to funders. Support and guidance in this area has been developed and services are emerging that enable universities collectively to manage APC transactions. Jisc will pilot a service during 2013. Again, as part of the monitoring of the implementation of the Finch proposals, it will be important to consider the management and payment of APCs.

#### **About Universities UK**

12. Universities UK is the representative organisation for the UK's universities. Founded in 1918, its mission is to be the definitive voice for all universities in the UK, providing high quality leadership and support to its members to promote a successful and diverse higher education sector. With 133 members and offices in London, Cardiff and Edinburgh, it promotes the strength and success of UK universities nationally and internationally.

#### University College London (UCL) - Written evidence

#### Introduction

- 1.1 UCL is a leading research-intensive UK university, with c4,500 researchers across the spectrum of academic disciplines producing more than 9,000 research publications annually.
- 1.2 We are committed to sharing our expertise, knowledge, discovery, insight and analysis in order to improve the UK's economic, social, intellectual and cultural circumstances, and do so primarily through scholarly outputs, education, public engagement, translational research, commercial and social enterprise activity, and engagement with public policy and professional practice.
- I.3 UCL has been a leader in advocating and implementing open access (OA), which it holds to be both right in principle and also a key mechanism for the effective dissemination of research outputs critical to achieving public benefit. Improved access to leading-edge research will stimulate business innovation and economic growth, as well as academic research productivity itself. It will also greatly benefit the NHS and the health of the nation, by facilitating the rapid translation of research findings into clinical practice and outcomes.
- 1.4 UCL has been a pioneer in UK higher education in terms of developing institutional OA policy and establishing an institutional OA repository, UCL Discovery 165. We continue to engage with Research Councils UK (RCUK) in order to develop a sustainable model of OA sustainable, that is, for the producers, distributors and consumers of knowledge.
- 1.5 However, we are concerned that the model proposed by the Finch Report and the Government's OA policy, and its implementation as described by RCUK, falls well short of being sustainable. We are, therefore, most grateful for the attention being paid to this issue by the Committee and for the opportunity to contribute to its deliberations.

#### **Russell Group evidence**

- 2.1 Along with other research-intensive universities, UCL's general position on OA is well represented by the Russell Group's submission to this Committee. We endorse the Russell Group's evidence, including that:
  - I. the 'new' money available to fund the implementation of OA according to RCUK's own calculations is insufficient to fund the mandated level of OA compliance, and that the consequence will be a reduction in funding available for research activity
  - 2. greater flexibility is necessary in the mechanisms available to universities in how they fund the additional administrative and managerial costs

<sup>&</sup>lt;sup>165</sup> UCL Discovery (<u>www.ucl.ac.uk/discovery</u>) is the largest institutional repository in the UK. With, as yet, only a small fraction of our outputs available, we have recorded over 500,000 (and growing) downloads a year.

- 3. the prospects of and contribution by early career researchers will be disadvantaged if PhD student outputs are not included in (and funded through) OA policy
- 4. consideration should be given to a phased approach to implementing shorter allowable embargo periods for Green OA
- 5. consideration should be given to a phased approach to implementing the requirement for CC-BY licences
- 6. insufficient consideration has been given to how an OA model could ensure the wider dissemination and accessibility of outputs from the arts, humanities and social sciences.

#### Particular issues

- 3.1 It is unclear that any mechanisms or market pressure will be brought to bear on article processing charges (APCs) journals. It seems that universities will either be required to pay APCs at whatever rate high-prestige journals choose (and regardless of the actual cost to publishers) or have to decide not to publish in those key journals. If the former, the limited additional funding for APCs will run out well before compliance levels have been met; if the latter, the standing of UK research will suffer relative to its international competitors.
- 3.2 Green OA has a critical role to play, particularly during the five-year transition period, and should be supported as a valid option. Extensive economic modelling in a IISCfunded report 166 shows that Green OA is the cheapest option for universities (in the absence of global Gold OA) and that the best way to transition from a subscription model to OA is via Green, not Gold. Green OA is also the standard route chosen or mandated by: the EU in its current funding programmes 167; the Australian Research Council 168; and the US National Institutes of Health 169
- The Government's OA policy is intended to open up research findings and thus "foster 3.3 innovation, drive growth and open up new area of academic discovery" 170. UCL doubts that the model as proposed – effective unilateral implementation of Gold OA – would really enhance the UK's competitiveness. Not only will the costs largely be met from existing RCUK and university budgets, which are already under significant pressure, but such unilateral implementation would make all UK-funded research globally available, with no requirement for the rest of the world to reciprocate. Unilateral Gold OA will increase access outside the UK to the 6% of articles written by UK academics, while UK researchers and research-users would still have to pay to access the rest of the world's outputs.
- National licensing, however, would increase access inside the UK to 100% of research articles from around the world. National licensing is clearly the more beneficial option for the UK; it offers a more effective use of the public purse, greater potential influence in negotiation with publishers, increased access to and dissemination of

<sup>166</sup> Going for Gold? The costs and benefits of Gold Open Access for UK research institutions: further economic modelling. Report to the UK Open Access Implementation Group - http://repository.jisc.ac.uk/610/

<sup>167</sup> http://ec.europa.eu/research/science-society/document\_library/pdf\_06/background-paper-open-access-october-2012\_en.pdf

<sup>168</sup> http://www.arc.gov.au/applicants/open\_access.htm

<sup>169</sup> http://publicaccess.nih.gov/

<sup>170</sup> http://news.bis.gov.uk/Press-Releases/David-Willetts-comments-on-the-Finch-Group-report-on-expanding-access-topublished-research-findings-67b77.aspx

University College London (UCL) - Written evidence

research outputs, and greater access to a wealth of additional knowledge for research users in all UK sectors.

We are grateful for the opportunity to provide a submission the Committee's inquiry, hope that our comments are both informative and useful for the Committee's discussion, and would be pleased to address any queries that its members may have.

University of Bournemouth, Imperial College London and University of Oxford – Oral evidence (QQ 17-37)

# University of Bournemouth, Imperial College London and University of Oxford - Oral evidence (QQ 17-37)

Transcript to be found under University of Oxford

#### **University of Bristol - Written evidence**

- I. We welcome the general direction of Open Access (OA) for research publications as this will expand the access to, and the influence of, the output of UK research. The responses given by the Russell Group and by Universities UK will provide the inquiry with valuable information and the University of Bristol supports these responses. Our views on the four areas you asked about specifically are outlined below.
- 2. Support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts; All research funders that require the move to OA should allocate sufficient funds to cover the full cost incurred by Universities. The money to be provided by RCUK will not be sufficient to meet their requirements for a combination of gold and green open access, and it should not be reduced to 80% of the full economic cost. The guidance from RCUK should be amended to allow their funds to support all of the additional costs including those associated with institutional repositories. The UK should not be disadvantaged by the move to open access as will happen if the total funding available to carry out research is reduced by using some of the funding for OA.
- 3. Embargo periods for articles published under the green model; Some disciplines will require green OA embargos to be greater than 12 months and equal weight should be given to publications that are made open access through both gold and green models to ensure that the arts and humanities are not disadvantaged by the move to OA.
- 4. Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance;

It will be vital that the RCUK engagement with universities continues during the transition period and that guidance is revised in light of experience, especially during the first 12 months. Clear guidance from RCUK about their compliance requirements during the transition is needed to ensure that the funds allocated can be spent to best effect.

5. Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed.

The CC-BY licence may be seen as a potential threat by publishers and they may increase their article processing charges as a result. The higher education community will need to work together to ensure that publishers reflect the additional income they receive, through article processing charges, in the journal subscription prices for the UK; only by doing this will the UK government obtain good value for money from the investment in OA.

#### University of East Anglia - Written evidence

As requested, we address the targeted areas identified in the call.

- 1.0 "support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts;"
- 1.1 There may be insufficient money available to fund the Gold route. RCUK's removal of the ability for researchers to include Article Processing Charges (APCs) in grant applications will make it difficult for HEIs to fund the deposit of papers via the Gold route. This is because the amount allocated by RCUK to individual HEIs for the institutional publication funds is unlikely be adequate to cover the estimated number of papers. The anticipated shortfall is further exacerbated as the allocation has been determined under the "Full economic cost" model, which effectively removes 20% of the funding at the outset.
- 1.2 Other publication charges. A funding shortfall is further affected by the fact that RCUK is also intimating it will no longer allow ANY other publication charges, such as page and colour charges in traditional publications, to be included in grant applications. These can amount to significant additional costs. If this is to become policy, RCUK would have to provide an additional allocation to make up for the significant shortfall but there is as yet no word on this.
- 1.3 Possible solutions to the above issues are for RCUK to provide additional funding or to continue to allow all publication charges (APCs and page & colour charges, etc.) to be included in RCUK research grant proposals.
- 2.0 "embargo periods for articles published under the green model";
- 2.1 **Embargo periods.** There are clear benefits to be derived from immediate publication, especially in terms of social and economic impact. However there will always be legitimate reasons for some research to be released *after* appropriate embargo periods, depending on the disciplines concerned. For example there can be commercial reasons, future publication potential, and sensitivity of case study data, which make immediate open access publication inappropriate. Whilst every effort should be made to manage down embargo periods that are clearly unnecessary, the RCUK policy may be making a mistake by treating all research outputs as the same, regardless of discipline or subject matter.
- 2.2 A possible solution is to ensure the RCUK policy on embargo periods takes into account these discipline sensitivities and continues to allow embargo periods in such circumstances.
- 3.0 engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance;

- 3.1 In the consultation with publishers, universities, learned societies and other stakeholders, we are concerned that the following points may have been overlooked:
- 3.2 The economic underpinning to the Finch report and the RCUK policy is potentially flawed. The Committee is urged to consider: Houghton, J and Swan, A. (2013) "Planting the Green Seeds for a Golden Harvest: Comments and Clarifications on 'Going for Gold'". D-Lib Magazine, January/February 2013 <a href="http://www.dlib.org/dlib/january13/houghton/01houghton.html">http://www.dlib.org/dlib/january13/houghton/01houghton.html</a> which concludes: "that the most affordable and cost-effective means of moving towards OA is through Green OA, which can be adopted unilaterally at the funder, institutional, sectoral and national levels at relatively little cost."
- 3.3 **Pay to say.** Despite the Guidance for the RCUK policy stating that it wishes to maintain academic freedom, the actual policy itself may inadvertently disadvantage UK research in comparison with the rest of the world by restricting academic choice of where to publish:
  - a. confining publication to journals that are Gold and Green compliant before such options are offered by all journals (potentially affecting an academic's future research profile and impact)
  - b. introducing payment into a process that was previously solely determined by merit (i.e. "pay to say")
  - c. preferring the Gold route which requires payment of Article Processing charges (APCs) and then potentially providing insufficient funding for those APCs to be met
  - d. where Gold cannot be afforded, academic choice is further limited as they will then have to choose from an even narrower subset of journals, i.e. just those which permit Green post-peer reviewed deposit.
- 3.4 A stronger RCUK policy preferring *Green* Open Access, requiring ALL publishers to permit Green full-text deposit in addition to traditional publication, would have been more affordable for the Government and the HEI community and achieved the outcome desired whilst retaining academic choice. Such open access deposits could be in institutional OR wider subject/discipline repositories.
- 3.5 License requirements and researchers' intellectual property rights. The RCUK insistence on a particular type of Creative Commons license 171 the CC BY license will affect academics' intellectual property rights and freedom to choose a level of copyright appropriate to the content. The Creative Commons licenses are supposed to be a tool for authors to choose from a range of options, not a tool to require authors to behave in a certain way.
- 3.6 The author is best placed to make judgements about how their work may be reused and may prefer to use the <u>CC BY-NC</u> (+Non commercial) or <u>CC BY-ND</u> (+No Derivatives) licenses instead and the RCUK policy should allow for this.

<sup>&</sup>lt;sup>171</sup> A Creative Commons license is one of several public copyright licenses that allow the distribution of copyrighted works. Creative Commons licenses have been "ported", i.e. the language adapted to suit, over 50 different jurisdictions worldwide. A Creative Commons license is supposed to provide flexibility beyond the default "all rights reserved". However a Creative Commons license does not modify the existing rights of fair use or fair dealing in any particular jurisdiction. Text adapted from: <a href="http://creativecommons.org/licenses/">http://creativecommons.org/licenses/</a>

- 3.7 Administrative overheads. At a time when the Government and RCUK are keen to see a reduction in administrative costs, the regime of record-keeping and auditing being proposed as part of the RCUK policy is likely to cost HEIs significantly. The Committee should urge RCUK to take responsibility for this and invest in shared services to cut out unnecessary and wasteful duplication of effort across HEIs.
- 4.0 "challenges and concerns raised by the scientific and publishing communities, and how these have been addressed."
- 4.1 **Society publishers / Learned Societies.** RCUK's new policy allows for a maximum of 6 months' delay for a paper to become Open Access for research outputs funded by all Research Councils, except AHRC and ESRC who will have 12 months (reducing to 6 months after 5 years). There is a major concern from Society publishers that this will affect their traditional subscription income which is needed to cover peer review administration, copy editing, printing, etc. This may affect their capacity to fund research activities, grants, conferences, outreach activities, scholarships, postdocs, etc.
- 4.2 By contrast, mainstream publishers are looking to benefit from the 'Gold' policy by double-dipping (accepting APC payments and continuing to charge subscriptions), which will more often than not be added to existing profits rather than used to support other research activities.
- 4.3 The impact of this issue could be minimised by addressing the embargo periods issue in 2.2 above, thereby accommodating discipline sensitivities. In addition, preferring Green to Gold would help to avoid "double-dipping" and a potential waste of public money.

## University of Oxford, University of Bournemouth and Imperial College London – Oral evidence (QQ 17-37)

Evidence Session No. 2

Heard in Public

Questions 17 - 37

#### TUESDAY 29 JANUARY 2013

Members present

Lord Krebs (Chairman)
Lord Broers
Lord Cunningham of Felling
Lord Dixon-Smith
Baroness Hilton of Eggardon
Lord O'Neill of Clackmannan
Baroness Perry of Southwark
Lord Rees of Ludlow
Earl of Selborne
Baroness Sharp of Guildford
Lord Wade of Chorlton
Lord Willis of Knaresborough
Lord Winston

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#### **Examination of Witnesses**

**Professor Ian Walmsley**, Pro-Vice-Chancellor (Research, ASUC), University of Oxford, **Professor Matthew Bennett**, Vice-Chancellor responsible for Research, Enterprise and Internationalisation, University of Bournemouth, and **Professor Maggie Dallman**, Principal, Faculty of Natural Sciences, Imperial College London.

Q17 The Chairman: I would like to welcome our first three witnesses for this all-day session on open access. In a moment, I am going to invite the three witnesses to introduce themselves for the record. I would like to just remind us that this is an inquiry that is very specifically focused on the implementation of the recommendations of the Finch review. We are not trying to ask the question of whether open access is a good or a bad thing. We accept that there is a trend towards open access and that that is desirable, but we are concerned with the specifics of how the Finch recommendations are being implemented.

For members of the audience, the declared interests of Members of the Select Committee should be on the sheet that you have found in front of you. I should remind everybody that the session is indeed being webcast. Without further ado, I would like to ask the witnesses to just briefly introduce themselves for the record, starting with Professor Walmsley.

**Professor Ian Walmsley**: Good morning. Thank you. I am Ian Walmsley, the Pro-Vice-Chancellor for Research, Academic Services and University Collections at the University of Oxford.

**Professor Matthew Bennett**: I am Matthew Bennett. I am the Pro-Vice-Chancellor for Research, Enterprise and Internationalisation at Bournemouth University.

**Professor Maggie Dallman**: I am Maggie Dallman. I am Principal of the Faculty of Natural Sciences at Imperial College, London.

**Q18** The Chairman: Thank you very much. Could we kick off by asking each of you in turn to express briefly—and because we are under time pressure, I would like to keep it as tight as possible—what you see as the main concerns that you have from your perspective about the current state of implementation of the Finch review? If you would just like to give me some brief headlines of what your concerns are, starting with Ian Walmsley.

**Professor Ian Walmsley**: Thank you. I will be definitive and say that open access is a great thing. We would add to that we support the idea of maintaining UK international visibility in research by saying that independent validation processes—in the case of journals, peer review—is absolutely critical. We think that there are a variety of methods that we would wish to support for achieving this, and indeed RCUK allows that. The question is really how we get to the end point from here in a way that is most effective, so that it lowers risk associated with the changes at the same time as quantifying what the benefits of those changes are, and provides best value for money in terms of public sector spending. That balance of risk versus benefit, which I do not think has yet been fully worked out, is something that gives us a bit of concern.

**Professor Matthew Bennett**: We are a university that would not be considered by many to be a research-intensive university, but one that has aspirations to be so. If you go back to the Research Assessment Exercise in 2008, we were the fourth most improved university in the UK, publishing outputs at about 14% per year, against a national growth of around 4%. Like my colleague, we fully endorse the principles of open access. The free access of information is very important, but we do have reservations about the application of the policy and the fact that—at the moment—the support that is provided for article publishing costs is a further driver to concentration of research. We believe very firmly that there is actually no correlation between research excellence and the concentration of research, as pointed out by the report conducted by the University Alliance that was released in July 2011. This policy, as currently applied, drives that concentration.

**Professor Maggie Dallman**: Imperial College also strongly supports the Government's desire for open access publications, and indeed open access to data much more generally. We do also believe that there is an opportunity to change the face of publishing, but we do believe that this opportunity could be lost if we transition too rapidly from one form of publishing—controlled largely, at the moment, by the commercial, for-profit publishers—to another which is different only in respect of access. We are firmly of the view that there are some opportunities for fantastically innovative new publishing methods, and we would like to see that embraced. The opportunity is with us.

A primary concern is that the move to gold open access could be too rapid and to the exclusion of green open access routes or other publishing vehicles of which we are very supportive. New publishing fora are developing rapidly; for example, we very much welcome the Wellcome Trust eLife initiative; journals like PLOS; and so on.

In thinking about all of this, it is important to remember that researchers are naturally reluctant to publish in journals that are not well-established and which do not have high impact factors. We are constrained by appointments processes, promotions and so on. It will take many decades to overcome this, so we are concerned about moving too quickly before we have the right solution in place. Obviously, we are concerned about the transition period, the costs involved and the impact that that could have on the amount of resource available for research.

**Q19** The Chairman: I will come back to the costs in a moment and ask Lord Cunningham to take that up. I wonder if I could just tease out a little bit more from you about the points that you have made. One specific area that many witnesses have referred to in their written evidence is the RCUK policy on green open access and what the embargo periods are. Do you think, from your perspective, that you have absolute clarity as to the position that RCUK is taking?

**Professor Maggie Dallman**: We are certainly very concerned about the embargo periods. We very much favour efficient green publishing approaches, certainly within any transition period. We are concerned that, unless there is absolute clarity about the length of embargo that publishers can involve, a green route will be ineffective.

**The Chairman:** Do you think that there is clarity at the moment?

**Professor Maggie Dallman**: No. There is not complete clarity.

The Chairman: Professor Walmsley, do you agree with that?

**Professor Ian Walmsley**: I would concur with that. There is not clarity on what the position would be, only a statement that things will be interpreted liberally. From our perspective, the choice of which journal to publish in should lie with the academic. That may, under current rules and specifications, rule out the use of some journals that we think are extremely important in maintaining the international standing of UK research. Clarity on that, and indeed a shift towards what the BIS statement was earlier in the summer, would be most welcome.

The Chairman: Professor Bennett, did you wish to add anything to that?

**Professor Matthew Bennett**: I think that the clarity is there, more or less. However, clarity within the academic discipline, knowledge of it and the move to interpret it is another matter.

**Q20** The Chairman: What about the point that Professor Walmsley raised regarding the international dimension of this? Perhaps you could say something about how you see the policy that will be implemented at the beginning of April impacting upon UK scientists, as well as people in the humanities and social sciences, who publish in journals that are of high impact internationally? Is it going to have an impact there? What is going to happen with collaborative research, where one author is from the UK and another author is from outside the UK? How is that going to play out, in your view? I would like to ask Professor Walmsley first, and then I will ask the others.

**Professor Ian Walmsley**: To take the first point: the key is that the work should be published in the journal that is most suited to the discipline. Indeed, as Professor Dallman has said, some of those high-impact factor journals do not currently comply with the way that we see RCUK rules being interpreted. The clear dangers there, of course, are that the

visibility of the research done in the UK goes down internationally and that the position in various league tables changes. As an example, one may take the Shanghai Jiao Tong index. One may not wish to endorse these or add too much credence to these, but the fact is they do have some currency. 30% of that weight is made up of what an institution has published in high-profile journals, so it is quite critical in that regard to the visibility of the UK internationally.

The second point on shared authorship is a real can of worms. We are still working through how we might manage that, but the obvious risk is that the UK partner ends up having to pay the full share of delivering a work that is compliant with RCUK policy, even though the work itself may have been undertaken with people outside the UK.

The Chairman: Would it be possible for you—either now, or in a follow-up note—to give us some examples of high-profile international journals that are non-compliant, just so we can give some examples if we are going to refer to this? If any of you could do that that would be helpful. Professor Bennett, did you wish to add anything about the international dimension?

**Professor Matthew Bennett**: We have to remember that, globally, 6% of published output in peer-reviewed journals is created within the UK. That is a phenomenal figure, considering our size. Nevertheless, we are a very small player in a very large research culture out there, and maintaining our position—which is pre-eminent and very competitive—is very important. It depends on our ability to be read internationally.

**Professor Maggie Dallman**: I have nothing to add.

**Q21** The Chairman: The Science Minister, in his evidence, speaks very positively of the impact of open access on our international profile. He is saying that the world at large will have free access to UK science—science, in this sense, including social sciences and the humanities. However, you are saying that it could actually inhibit a UK academic from publishing in the very top journals. Can you just respond to that a little bit?

**Professor Ian Walmsley**: Certainly. I think it is, perhaps, a question of the final aim versus the means. For example, a journal like *Science* is at the moment a subscription-based journal, and because of the way that their subscriptions work it is unlikely to change. Because it publishes only a very small number of papers, it is difficult to see how it could become open access at any reasonably open access fee. Perhaps I should declare an interest, since I am using this example: I am on the board of reviewing editors of that journal, and so have some sense of what they are doing. At the moment they will allow pre-print versions of the paper, but they do not allow publication of record in the sort of timeframes that are being discussed in RCUK rules. As a consequence, how does one make that work? It presumably means that a piece of work published in there cannot count towards compliance with RCUK. What is the consequence of that? I do not fully know what the consequence is, but if, for example, it turned out to be lower evaluation in research proposals and therefore changed the way that the funding profile worked that would be a bad thing to have happen.

The Chairman: Lord Willis, did you wish to ask a question?

**Lord Willis of Knaresborough:** I was asking for an example, Chair, so I am happy with that.

**Baroness Sharp of Guildford:** Can I ask the reverse of that question? Take *Nature*, for example. Do you think that, if foreign contributors have to pay a substantial up-front sum in

order to publish with *Nature*, this is going to deter high-quality foreign contributors from submitting journal articles to *Nature*?

**Professor Ian Walmsley**: There are two points to note. First of all, you already have to pay twice to publish in *Nature*, first through the subscription—and let us be clear, nobody is going to cancel their *Nature* subscription—and, secondly, you always end up paying some page charges for figures. There is already a cost. At the moment, they do not currently offer an open access option, although I understand that that is being discussed. That will be at a substantial price. In addition, CC BY licensing—which is also something that has been required—will come at an additional cost on top of that.

There are costs already and that clearly does not deter international participation in that journal. However, this will add an additional cost, which we will be required to pay but our international partners will not, should they even offer that option.

**Q22 Earl of Selborne:** I would like to pick up the point that Professor Dallman made when comparing gold to green. If we accept for the moment—as this Committee certainly does—that open access is here to stay and is something that should be promoted, I would ask you this: if we see ourselves as something of a global leader in the sense that the RCUK appears to see gold as the end game and green therefore having a limited shelf life, do you see other international players such as NIH in the United States phasing out green as well? As I understand it, NIH does not take a stand on green versus gold and supports both forms of access.

**Professor Maggie Dallman**: I believe that that is correct. I actually think that, handled properly, green access can be extremely good. In London, I think that there are now 25 institutional repositories for green open access. The primary concerns with green open access are that you cannot publish the final version of the paper, and if publishers impose crippling embargo periods, this makes a mockery out of the gold route. I am not fully in favour of only going gold. I think that that perhaps needs some rethinking.

**Earl of Selborne:** Do you think that we are likely to be isolated? I mean, we are 6% of the market. Is that a critical mass in these matters?

**Professor Maggie Dallman**: It is not a critical mass, although I think we are probably more influential than the 6% would suggest. However, if the whole of the rest of the world goes in a different direction, we could not carry that with the publishers.

**Q23 Lord Rees of Ludlow:** Professor Walmsley, you mentioned the cases of *Science* and *Nature*. *Nature*, of course, is a rather special journal, but there are a number of highly-regarded international journals in the UK. There is one in my subject in particular. They remain so only insofar as they get the majority of their papers from foreign authors. Do you think that journals like that, which might not quite have the profile of *Nature* but are important in their subjects, risk losing their international standing if foreign authors are less likely to submit to them?

**Professor Ian Walmsley**: I certainly do think that that is the case. Of course, there are examples within a department of the University of Oxford, because the university press also publishes a number of journals which may arguably fall into a similar category. There is clearly a danger that, if it is not possible to sustain that operation under current policy, then the consequence you allude to could happen.

**The Chairman:** I would like to return to the question that you have raised about the costs and benefits of this. I would ask Lord Cunningham to pick that point up.

**Q24** Lord Cunningham of Felling: There seems to be a view that, with regards to open access, we should take the Big Bang theory approach and just let it all happen. In some cases, and with some evidence, this would be done regardless of the consequences. For example, there does not seem to be any comprehensive cost-benefit analysis of this. To take an obvious question, I would like your thoughts about that.

Secondly, if we are in a race to be a world leader, some people seem to think that this is the right way forward, and argue for getting on with it regardless of the consequences of that. However, other people have suggested to us that there would be very, very serious consequences of this race to the top, in terms of the transfer of resources away from funding research and PhD students. What do you think about all of that?

Professor Ian Walmsley: The issue of cost-benefit is an absolutely critical one. It will add costs, both directly in terms of us needing to pay both subscription and APCs in some cases—which RCUK are recognising and providing some funds to address—and also in terms of adding a lot of internal costs, because we will have to apply green in order to be able to comply with the policy. That is fine: I think an institutional repository is a very good idea, independent of this policy. However, the current policy will also require quite a lot of internal management of how limited funds are allocated in order to ensure appropriate distribution between senior academics, young academics, and so on. That is one challenge. That may be worth it, if one can see a direct benefit from it. There are potential benefits, as the Chairman noted, such as potential higher visibility for UK science. What does that lead to? I do not think that we know yet, so our position would be to not make precipitous changes until one has been able to properly assess it.

In terms of the money itself, one could argue that the amount of money involved is only a small fraction of the total UK spending on research. That is certainly true. However, £30 million would, for instance, give you five programme grants at EPSRC, which would support four or five PIs over five years. That is a substantial amount of research, and it is a difficult question to assess whether the benefits accruing from gold open access through APCs offset the research that would come out of that. I do not know what the answer is.

**Professor Matthew Bennett**: I think that it is a very interesting issue. Particularly where research is combined with education, you are still paying your subscription fees to provide the latest research to one's students and one's researchers. There is no sign of these subscription fees going in any direction other than up. When you are providing the additional resource through your institutional repository and open access schemes—whether funded directly by Government or those, like our own, which are funded by institutions themselves—the resource pressures are really, really there. We need to see the whole issue of the freedom and provision of information in a wider context than just that of research. It is also about the integration of research and education, which institutions such as Bournemouth specialise in.

**Professor Maggie Dallman**: I think that the cost-benefit analysis is absolutely critical, but it is impossible to do at the moment, since we really do not have an idea of the realistic costs of what we are entering into. As Professor Walmsley indicated, we know something about

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<sup>&</sup>lt;sup>172</sup> Note from witness: Professor Walmsley clarified after the evidence session that £50 million (which is the putative 5 year cost for the RCUK agenda) would, for instance, give more than 7 programme grants at EPSR, each of which might support four or five PIs over the same period.

the charges that we might incur, but the administrative costs in higher education and other institutions—both for the UK and internally—are just inestimable at the moment.

**Lord Cunningham of Felling:** Are you saying that it is impossible to even make an estimate of what they might be?

**Professor Maggie Dallman**: There are many estimates of the numbers that are out there. They are very variable.

**The Chairman:** Am I right in thinking that at your institution you already have an APC fund?

Professor Maggie Dallman: Yes, we do.

**The Chairman:** You must have some idea of the cost of administering that within the university.

**Professor Maggie Dallman**: We are beginning to learn. Making decisions about the distribution of these funds is not a trivial exercise and requires one to think very carefully about fairness to the funders of research, to the public, who have funded the research, and to the people that we have working with us to ensure equitable distribution amongst younger and senior members. You can immediately see that quite a lot of academic time is taken, if we are to do this in a fair fashion.

**Professor Matthew Bennett**: I think there is a growth in demand there. Our own fund, which we resource ourselves, has grown by 32% in the last two years. It is set to double in the coming academic year. There is a real demand there; it does need resourcing.

**Q25** The Chairman: In terms of the benefits, one of the things the Science Minister says in his evidence is, "There is as yet limited empirical evidence of the quantifiable impact of open access on economic growth." He then goes on to say it could be significant, however, and refers to the Human Genome Project and some very large numbers: 310,000 jobs in 2010 and 3.8 million job-years of employment.

Do you think there is any evidence that this is actually linked to open access? If it is, is it about access to the actual data of the human genome sequence or would it be equally applicable to disciplines such as the humanities and social sciences, where papers are more about ideas than about data?

**Professor Ian Walmsley**: That is a very difficult question to answer. I am not sure I have any different evidence to what was suggested in that report, I am afraid.

**Professor Maggie Dallman**: It is a very difficult question to answer.

**Lord Cunningham of Felling:** Is it reasonable to conclude that what you are saying to the Committee in these answers is that you do not really know what the cost consequences of this change are going to be?

**Professor Maggie Dallman**: It is difficult to fully estimate it. That is what I would say.

Lord Cunningham of Felling: Just say yes or no.

**Professor Maggie Dallman**: Yes. It is difficult to estimate fully.

**Professor Matthew Bennett**: I am not sure that that is quite true. We can estimate the cost of this in terms of the resources that we, as institutions, are putting in. The benefits are harder to estimate.

**Professor Ian Walmsley**: I would concur. As Professor Dallman says, we not do know the magnitude. We do, however, know there is significant investment required in both direct funds to support the green model and indirect funds in terms of time to administer and time to select. We know that this is going to happen. As Professor Bennett says, we do not yet quite see the benefit, though one would like to understand that more clearly to know that the investment was worthwhile.

**Lord Cunningham of Felling:** Are you content that the existing timescale is the appropriate one in these circumstances?

**Professor Ian Walmsley**: For the RCUK implementation, I do not necessarily see a problem in the timescales if we can get clarity on the details: for example the embargo period and what have you. There are then ways in which it will be able to move forward in a reasonable manner.

The Chairman: Do others have concerns about the timetable for implementation?

**Professor Maggie Dallman**: I was going to go back and say that, as we all started off, we all agree that open access is a good thing. It is the implementation and understanding all of the costs and benefits. In terms of the timeframe, one does want to move. As I said at the outset, there are opportunities for some really innovative thinking here. What concerns me is that we might move to a different model too quickly without allowing those innovative processes a chance to develop.

The Chairman: What would be an example of an innovative process here?

**Professor Maggie Dallman**: Actually, this already happens in some science communities: there is a sort of peer review by the community. Rather than going through a narrow peer-review process with a journal, like you would with *Nature* or something, papers are actually published and then the community comments on the paper. The papers are actually refined by the community. The data is available for further analysis. Then, if you like, the community comes to a sort of consensus around the conclusions. This happens in the maths community and it happens to an extent in the computing community. That sort of approach in some other areas is extremely interesting. If we could lead in that sort of respect in a broad range of subjects—including the biological sciences—that really would be something the UK could be proud of.

**Q26 Lord Winston:** I have been rapped over the knuckles by my Lord Chairman for not declaring an interest. I am an academic at Imperial College and also a member of the Engineering and Physical Sciences Research Council. We have concentrated very much on the high-impact journals, but I would like to ask you a very brief question on the low-impact journals. This is particularly the case, for example, in clinical medicine: papers on dermatology, primary care or nursing. Many of these journals have really useful articles, which may change practice, some of which are research articles. Is there likely to be an impact on these journals and this kind of publishing, which, of course, is a very large area of publishing?

**Professor Maggie Dallman**: Perhaps I could make one comment on that. Part of the problem with some of the journals that are associated with the publishers of *Nature* is that

they come as package deals as subscriptions to libraries. If libraries look to reduce costs because they are having to spend more on open access or publishing, it is some of those smaller journals that do not come as part of the package that get cut because we do not have long arrangements and package deals with publishers. There is a continuing problem with those sorts of journals. If those sorts of journals can easily transition to an open access arrangement, perhaps that would help in that respect.

**Lord Winston:** That leads me, really, to the next question, which is this: how far have the HEIs gone in looking at their collective-bargaining capacity for subscriptions and other aspects of this—particularly these sorts of journals?

**Professor Ian Walmsley**: I understand that Jisc are taking a lead on a lot of that bargaining and discussion, as they do when bargaining for rates for us overall. There have been some steps, I understand: for example, Elsevier has offered a reduced charge for retrospective APCs for the past year, but they have not yet offered a change in subscription. That is still a question that needs work but ought to come.

**Q27** Lord Wade of Chorlton: Going back to your comments that you think the costs will rise, will the costs rise because of the Government's proposals, bringing them in the way they do, or would the costs rise anyway under the evolution of the system, which is taking place because of different technology?

**Professor Matthew Bennett**: That is a very interesting question. There is a gradual shift in terms of publishing strategies and models and an embracement of the principles of open access in the academic community in general. We have a general move, on top of which we also have the policy incentive as well. The two are very difficult to take apart.

**Professor Ian Walmsley**: I would broadly agree with that: in the long term one might imagine costs would go down. Arguments that have been made on that are sensible arguments. The first-mover situation that we are in will mean an increased cost overall for us.

**Lord Wade of Choriton:** I ask the question because, generally, if something evolves in the marketplace it remains competitive. If a new system is brought in, however, which is imposed, it is a wonderful way to put up your prices. I wondered which way you were looking at it.

**Professor Ian Walmsley**: There seems to be evidence at the moment that we will have to continue paying subscriptions without an immediate discount and APCs on top of it.

**Q28 Earl of Selborne:** Coming back to the cost of the APCs, we have had some quite interesting evidence from the Wellcome Trust, of course, who have promoted the whole concept of the gold route. They have said that if they were to pick up the total cost of the APCs, they would expect it to amount to between 1% and 1.5% of their total research spend. They think that, given the benefits of open access, this is a good bargain. Given that they have been doing this for five or six years or more, presumably that is a track record that has some relevance. Can this be rolled out to disciplines other than those the Wellcome Trust would be concerned about?

**Professor Maggie Dallman**: The advantage in the way that the Wellcome Trust went about it was that they did put extra resource into the system. What we have just been talking about is that we are now in a period where we are meeting the dual costs of the publishers and the APCs out of the same pot of money. The Wellcome Trust were able to resource it

by putting extra costs in, but if that is the estimate of the cost, that actually begins to address the point about the cost-benefit.

**Earl of Selborne:** That was their experience and they have done some research at Edinburgh, apparently, which substantiates this. However, one recognises that in a transition period—particularly if you are a global leader—you are going to have a period, inevitably, when the costs overlap. That is the price of being a prime mover. Nevertheless, if the gold route has these attributes that are going to be advantageous in the long run to the dissemination of research results in an accessible form, which would not otherwise be the case with other systems, presumably this is a price you are prepared to pay.

**Professor Ian Walmsley**: I agree. The question hinges on whether the same objective can be achieved by other or several routes. That is where we would probably argue that there is certainly room for gold and certainly room for green as well. We think that sort of mixed economy provides several advantages, not least of which is value for money.

**Baroness Sharp of Guildford:** There is inevitably this transition period. Do we have any notion as to how long that transition period might be? Allied to this is the fact that if you are going to have to pay both journal subscriptions as well as APC costs, I think I am right in saying the journal subscriptions come from the HEFCE block grant to universities. Are they, at the moment, proposing to reduce that block grant along with the push towards encouraging people to go open access?

**Professor Ian Walmsley**: The HEFCE grant now is essentially QR. There are various ways in which that and, for example, research-overhead income—from RCUK grants and other funder sources—will be used to pay for subscription. It is not solely from HEFCE. Of course, we are in the middle of the REF year now. We are not quite certain what the outcomes will be on where QR sits. Where that will go is uncertain.

**Professor Maggie Dallman**: The money is, however, not hypothecated for library subscription. It is essentially up to the institution to decide what they are going to have in those subscriptions.

**Q29** The Chairman: One theme that has cropped up several times this morning is whether gold is the end point or whether we will end up with a mixed economy of green and gold or whether, indeed, most other countries are thinking that green will be the end point. I just wondered if any of you are able to tell us what your understanding is of the current situation in Europe. There is some evidence that we have had that suggests there is an emerging Europe-wide agreement on open access. I am not clear on whether that is a Europe-wide agreement for a version of green open access or for gold. Do you have any insights into that?

**Professor Maggie Dallman**: Work funded under Horizon 2020 will be subject to similar publication requirements as RCUK are now asking.

The Chairman: Is this Europe-wide?

**Professor Maggie Dallman**: Yes, Europe-wide, for research that is funded by the Horizon 2020 programme.

The Chairman: Will that be green or gold or similar to RCUK?

**Professor Maggie Dallman**: It will be similar to RCUK, but whether that means that all research in Europe will be published via that route is unknown. That is just research that is funded via the Horizon 2020 programme.

The Chairman: Do you have any further information?

Professor Ian Walmsley: No.

Professor Matthew Bennett: No, I do not.

Q30 Lord Broers: I want to introduce a rather different subject, Chairman, just for my own information on this. I am wondering what the effect of all of this open access is having on the security of peer review. I imagine it is improving it overall, but I wanted to ask you whether you had any feelings about that. Is information getting out there for a while that is wrong and therefore, because it is out there, even for a short time, is damaging? Is that not an issue? Most of the issues we are considering here seem to be financial and procedural. Do you have any comment on the overall security of peer review as we go through all of these things?

**Professor Matthew Bennett**: The principle is that there is no question around peer review. In principle, there are an awful lot of online journals that are cropping up in various parts of the world that are trying to take this opportunity. One has to be very careful, as an academic, about where one chooses. One of the first things an academic asks about is the quality of the peer review. There is an awful lot of growth in online journals with open access philosophies at this moment. There is the potential for material to be published that perhaps would not do, but that is actually about the quality of the academic community and making sure that we maintain the importance and the pre-eminence of the peer-review process.

**Professor Ian Walmsley**: I would support that entirely. One should look very carefully at what publishers say about, for example, the number of reviews that one has per paper. To return to Lord Rees's point, this is a place where professional societies, for example, have a very important role to play because the editorial boards and the editors usually give confidence that those policies are robust.

Q31 Lord Willis of Knaresborough: I would really like to come back to the issue of funds. Can I ask a question that is directly relevant to my role as chair of the Association of Medical Research Charities? With the exception of the Wellcome Trust, who are an endowment organisation, the rest of the £1.2 billion that we have put into medical research comes, basically, from small donations from people. One of the problems when the Government moved to full economic cost was that the charities basically said, "We are not paying for the infrastructure costs." We have exactly the same situation arising here. The Government resolved that by putting in the Charity Research Support Fund. Do you think that a similar arrangement needs to be made to meet those additional costs to charities in order to make sure that we continue to get the additional donations coming through the doors to support their research?

**Professor Maggie Dallman**: That would be very welcomed by the community.

Professor Ian Walmsley: I would concur.

**Lord Wade of Choriton:** Do you expect any of these changes to have an impact at all on patenting and the commercialisation of ideas?

**Professor Ian Walmsley**: Our policies internally at Oxford are to try to capture that IP in a manner that is consistent with UK law—i.e. getting the IP protected before one comes out and publishes. Of course, things are different elsewhere. In the US you can publish up to a year before you file the patent. I think that unevenness may lead to something, but I do not see a direct impact from going towards open access on IP in general.

Professor Maggie Dallman: I agree.

Q32 The Chairman: If neither or you have anything else to add to that, can I ask a question that links slightly to that about the Creative Commons licensing arrangements? Some of the evidence we have had—for example from the British Academy, who argue this for their subject areas—argues that in the humanities a CC BY-ND Attribution-NoDerivs licence would be more appropriate than a CC BY licence. I wondered whether you, from your university perspectives, have any views about what the CC-licensing arrangements ought to be. Ought there to be flexibility, or is one model suitable for all?

**Professor Ian Walmsley**: Our position—though, again, we have no university policy on this yet—may essentially be that the academic should be in a position to decide what sort of licence he or she wishes the work to go out under. There may be cost differential associated with the different sorts of licences. We think that is a decision best made by the person who has produced the work.

The Chairman: Professor Bennett, do you have anything to add?

Professor Matthew Bennett: I have nothing to add.

The Chairman: Would you both agree with that?

Professor Maggie Dallman: Yes.
Professor Matthew Bennett: Yes.

The Chairman: Does the current RCUK position offer that flexibility, as far as you are

aware?

**Professor Ian Walmsley**: Not as far as I am aware.

The Chairman: That is something that one would want to look at again. Thank you.

Q33 Lord Rees of Ludlow: I wanted to go back to the APC funds, which are going to be given by RCUK to universities. The pressure on those would clearly depend on the proportion of authors who want to publish under gold open access but do not. I would like your comments on what your betting is on that proportion. Also, if there is oversubscription, in that far more want to publish under gold than can be covered, how do you foresee doing the prioritising among senior and junior faculty?

**Professor Matthew Bennett**: That is a very interesting question. As an institution that does not receive any support for APCs from Government under this scheme at the moment, largely because of the way the metrics are calculated, 20% of our research is RCUK funded. For us, it is directly out of our resources. We do prioritise, in our own open access funds, early-career research for some postgraduate students. That is stated policy and those, of course, contribute to our Research Excellence Framework submission. Those prioritisations are there and set out. The real issue is the provision of resources within an institution to pay both, as we said before, the subscription and the increasing contribution that we need to find for an open access fund.

**Professor Maggie Dallman**: If the funds are there, I cannot imagine that somebody would object to having their paper published under gold. I cannot imagine you would get dissent if the funds were available. The more difficult question is this: how do you then order who gets the funds?

**Lord Rees of Ludlow:** There is only going to be enough funding for a fraction of papers—even at Imperial.

**Professor Maggie Dallman**: Yes, indeed. One could see that there could be a ranking of journals: if you publish in *Nature*, your fees will be paid. There could be a ranking of people: junior staff getting more access to funds than senior ones. Certainly, as an institution, Imperial College has not thought through all of these options at the moment.

**Lord Rees of Ludlow:** Is this something that should be decided at a central level, or is it better to leave it to the individual group leader or head of department?

**Professor Maggie Dallman**: I think two things. One is that it would be very helpful if there were not great dissention amongst different universities or different treating of this amongst different universities, because that can be used as leverage between universities. That would be entirely unproductive. There need to be some institution-level agreements about how these funds will be administered. It will not be devolved to the group level, certainly, at Imperial College.

**Professor Matthew Bennett**: It is important that we empower the research leaders that bring in these grants. They have very clear dissemination plans and they will be publishing in a variety of different streams in order to make sure that their material is read by both the users and fellow academics and the general public—as well as broader engagement plans. There is a certain degree of trust in those principal investigators to have sensible dissemination plans that are compliant with RCUK policy, but also compliant with the broader academic aims of making sure that material is read by the most appropriate people.

**Professor Ian Walmsley**: I would only add one thing to that and note that together with the application of this block grant for APCs is the removal of funds for publication for grants themselves, which is the way in which you used to be able to pay page charges or APCs. That very much empowered the academic undertaking the research, as Professor Bennett says, to put the work in the place that was most appropriate for that work. That would also certainly allow compliance through that.

**Q34** Lord Rees of Ludlow: I have one further question, Chairman. There is also the threat that the next REF is going to be restricted to papers that have been published in approved ways. Is that something you think is going to be an issue that you have to start thinking about fairly soon?

**Professor Matthew Bennett**: If you look at the way in which the Research Assessment Exercise in its various guises has transformed the research of this country from being at the middle of the league table towards being at the top end of that table, REF is one of those things that universities pay attention to. It transforms attitudes. If it were to come to pass that subsequent Research Excellence Frameworks favoured open access it would certainly focus the minds of universities towards open access.

**Professor Ian Walmsley**: It is very clear that if one wishes REF or its follow-on to be an assessment of the UK relative to the rest of the world, as well as the UK within itself, one would wish the best papers to be able to be submitted to that. The details of how any HEFCE policy is implemented are quite important. On the one hand, if you only have four

publications to submit it is not a big deal. The problem is that if you have to anticipate which those will be eight years ahead of time, you have a bit of a challenge.

**Lord Rees of Ludlow:** That would be a slightly bigger issue for the humanities, with their longer timescales.

**Lord Broers:** It would also be an issue for the sciences. Would it not rule out publications in science?

**Professor Ian Walmsley**: It depends on how policies are implemented and how science changes. It could be that, in some future, Science decides that a 36-month embargo is fine, because the usage makes that a reasonable thing—in which case that is not a problem. That is, however, a speculation; I do not know what the outcome will actually be.

Q35 The Chairman: Can I clarify, in my own mind, a point that was raised earlier by Professor Dallman? In answer to Lord Rees's question, you said that it would be desirable if universities agreed on some process for allocating the limited funds for APCs available from RCUK. Is there any move of that kind that you are aware of at the moment? Are universities thinking collectively about it, or is each university going its own way?

**Professor Maggie Dallman**: There are a lot of discussion groups around open access, as you might know, in the community. That is one of the areas we would like to work towards with colleagues. I do not think we have come to any conclusions yet. We need to form our own views and discuss those with our colleagues in other universities. This has brought universities together in discussion groups and many other different formats; that is a very positive thing.

**The Chairman:** Insofar as you are already implementing an APC fund within Imperial College, what are your rules for allocating the money?

**Professor Maggie Dallman**: At the moment, because many of the journals we are publishing in do not comply with RCUK rules, we are not facing a crisis of not being able to spend the money.

The Chairman: You do not have to make hard choices.

**Professor Maggie Dallman**: At the moment we do not have to make hard choices because we have a substantial fund with a relative short period of time in which to spend it. That will not last, however, beyond this initial period

**The Chairman:** Do either of the other witnesses wish to add anything about universities agreeing on a way of allocating the APC, or will it be up to each institution to develop its own algorithm?

**Professor Ian Walmsley**: I would echo what Professor Dallman has said. We are still discussing internally how we might manage things. Until we have a clear view of that, it would be challenging to reach agreement outside. I think it is a conversation that needs to be had.

Q36 Earl of Selborne: I would like to go back to the issue of which licence would be appropriate. I think we heard that you felt the authors should decide which licence was appropriate, whether it was no-derivatives or non-commercial. However, of course, the issue we are faced with is that RCUK are saying the funder should decide, not the author. Indeed, the Wellcome Trust already determines this. They said, "If you are funded by the

Can we agree, at least, that if the author, quite frankly, is not going to outgun the Research Council UK—if it is publicly funded research or funded by another organisation—it should be the funder who should decide and not the publisher? Is it really reasonable for you to continue to maintain that the author should decide?

**Professor Maggie Dallman**: I would totally agree with you that it should be the funder, rather than the publisher. I do not know, lan, whether you wanted to comment on the author point there.

**Professor Ian Walmsley**: It varies from discipline to discipline, but it will be most pointed when one begins to discuss monographs and other forms of output in the humanities. It is less of a contentious issue in sciences and certainly less in medicine. One needs some flexibility there. Should it be the funder or not? If there is a rule we will need to follow it, of course. That will certainly preclude publications in some places that we might like to publish now or that authors may wish to publish in. Understanding what that cost-benefit trade-off will be is something that will take a little bit to work out.

Q37 Lord Rees of Ludlow: Are you clear about which academics these rules will apply to? They apply to those on RCUK grants and those supported by HEFCE. Some universities have one-year visitors supported by foreign money. Oxford has college fellows and so on. Are you going to include everyone, or is there going to be some sort of invidious distinction between those to whom the rules apply and those to whom they do not have to apply?

**Professor Matthew Bennett**: I can speak for my own institution: it applies to all our research and all the people who join us to do that research.

**Professor Ian Walmsley**: We do not yet have an open access policy that has been formally adopted by council. With respect to RCUK money, it will be to support compliance with RCUK terms and, therefore, it will be used to support outputs that arise from RCUK funding.

**Professor Maggie Dallman**: We are in a similar situation. We do not currently have an agreed open access policy, although we are supportive of the concept of open access. This goes to whether we would go the gold or the green route. If they do not have access or do not have a requirement to go through the gold route, we would encourage our academics to go through the green route. Ensuring that happens is, however, not trivial.

**The Chairman:** I would like to draw this session to a close. I would like to thank all three witnesses for their very helpful evidence. If there are points you wish to follow-up on in writing, please do so. We have asked you specifically if you could give us some examples of non-compliant journals—you mentioned *Science* already as one example—that might be high-impact and, under the new rules that come in on I April, UK academics might be discouraged from publishing in. We would be interested in getting some examples of that. Thank you very much indeed. You will, in due course, receive a draft of the evidence session for you to make minor corrections. Thank you very much.

# Dr Johannes J M Velterop - Written evidence

## Personal Background

I am submitting my comments in a personal capacity. Currently retired from academic publishing — the last ten years of which were spent in open access publishing — and engaged in the application of semantic analysis of scientific literature for science and industry in the context of my very small company, which is affected by the general lack of sufficient access and unaffordability of paying for access, I am making my comments both on the basis of the insights and experience gained in a 30-year long career as scientific publisher as well as on the basis of someone in need of open access.

#### **Open access**

- 1. Science, as a public, global collaborative pursuit, would work most optimally with all the knowledge gained in scientific inquiry and experiment freely and universally accessible and then extended, built-upon, improved, verified or falsified, discussed, applied, accepted or rejected, and so on, not only by 'career-scientists' but by anybody with the intellectual capability and interest to contribute. The efficiency and speed of research could potentially increase dramatically in such a true 'open knowledge' environment.
- 2. The results of research are published to be shared, indeed have to be in order for science to be able to assess the results and the efforts of the researcher ("publish or perish"), but the traditional method of sharing by means of publishing in journals financially sustained by subscriptions is not delivering indeed cannot deliver the open knowledge environment needed. Before the existence of the internet and internet browsers, there was no other realistic option than the subscription-model to sustain the wide dissemination of scientific research results, but the possibilities the internet offers for unlimited dissemination has fundamentally changed this.
- 3. In an internet environment, subscription-based financial sustainability models for scientific journals are inappropriate because subscription are inherently limiting dissemination. Open access is not possible in a subscription-based model.

#### The 'gold' model

- 4. But publishing costs money, and the alternative financial sustainability model that has been developed since the turn of the century has been the author-side payment model, later often referred to as the 'gold' model, which makes open access possible. The model was developed on the premises that:
  - Authors pay anyway. In the subscription model they pay by transferring their copyright to the publishers who need it to be able to restrict access to nonsubscribers in order to subsequently be able to sell access via subscriptions;
  - The 'system' is accustomed to paying for subscription access via libraries, which are largely funded from institutional overhead budgets, ultimately provided by public funding streams;
  - The money in the system that traditionally pays for subscriptions should easily be sufficient to pay for open access if the funds can be re-routed from providing limited access via libraries and subscriptions to open access via author-side payments for the service of peer-reviewed publishing.

- 5. Whilst the funds already in the system would suffice, there would need to be a redistribution of the financial burden between institutions, because the cost of subscriptions falls more on those institutions with a stronger teaching than research remit or those with a remit spanning a wide range of disciplines, than on institutions with a stronger research than teaching remit or spanning just a narrow range of disciplines (they need a large number of journals, yet publish relatively few articles). The cost of author-side funded open access, however, would fall disproportionally on research-intensive institutions, especially those with a narrow range of disciplines, as their subscription budgets have been comparatively small (they need fewer journals, yet they publish relatively many articles).
- 6. The difficulty of redistribution of the financial burden of scientific publishing between institutions is alleviated to a large degree, if the necessary budgets are regarded at a higher level, and possibly completely if viewed on a national level.
- 7. There is a widespread fear that if a 'gold' (author-side paid) open access model is supported by funding bodies, the so-called article processing fees might see unbridled increases. This fear is not unwarranted if not addressed properly. If funders agree to pay whatever publishers charge, they undermine the potential for competition among publishers and provide them with an incentive to maximize their income, while at the same time removing any price sensitivity on the part of the publishing researcher. However, it is not very difficult to address this problem.
- 8. In order to avoid untrammeled article processing fee increases, foster competition amongst publishers, and create price sensitivity to article processing charges in researchers publishing their results, the following could be done by funding bodies:
  - o Include in any grants a fixed amount for publishing results;
  - Allow researchers to spend either more or less than that amount on article processing charges, any surplus to be used for the research itself, or any shortfall to be paid from the research budget;
  - Require any excess paid over and above the fixed amount to be justified by the researcher to the funder;
  - Provide a fixed amount for more than one publication if the research project warrants that, but so that researchers have an incentive to limit the number of published articles instead of salami-slicing the results into as many articles as possible, again by giving them discretion over how the fixed amounts are spent.

#### **Embargoes and usage restrictions**

- 9. A scientific research article is not as useful as it could be to the scientific community and generally those interested or in need of the information it contains, if it is subject to access or usage constraints, or if it is old and potentially superseded by subsequent research. Open access was originally defined (in the <u>Budapest Open Access Initiative</u>, the first formal definition of open access) as having no restrictions other than those inherent in gaining access to the internet and the obligation to attribute publications to the original author(s). An article under embargo is not available with open access until the embargo expires. And it is potentially old and superseded by that time, which is particularly problematic in fast moving disciplines such as the biomedical ones.
- 10. The BOAI definition does, intentionally, not provide for restrictions to the commercial re-use of open access publications. Restricting re-use to non-commercial purposes only

(e.g. by attaching a <u>Creative Commons Attribution Non-Commercial licence</u> — CC-BY-NC — to an article) introduces such an amount of uncertainty as to which re-use is allowed and which not — indeed as to what 'non-commercial' actually means, given the ambiguity of the term — that re-use is unnecessarily held back. This matters, because the results of publicly funded scientific research are meant to be used in society at large, and specifically to help economic development. The ability of SMEs, for instance, to re-use scientific findings is of crucial importance in that regard.

II. Non-commercial clauses are anathema to the 'gold' model of open access, as the service of providing peer-reviewed publishing has been paid for by the article processing fee and there should be no reason for a publisher to restrict subsequent use in any way. There are no subsequent commercial benefits to be had by the 'gold' open access publisher from re-use restrictions and where such restrictions are applied they amount to 'profit spite'. Embargoes are also anathema to the 'gold' model of open access publishing, as there is no benefit or protection to be had for anyone, publisher or researcher, from embargoes of articles published under the open access model.

#### The 'green' model

- 12. Whereas the 'gold' model is a true open access publishing model, the 'green' model is merely a way to ameliorate the inherent access restrictions and other drawbacks of the subscription model. Articles are not 'published' under the 'green' model; they are 'liberated' from (some of) the restrictions that a subscription model necessarily imposes, by depositing in an open repository a freely accessible copy of an article published in a subscription journal. The strength of the 'green' model is that it doesn't require the subscription model to disappear, but that is also its weakness. It is not a fundamental change of the scientific publishing system, but a work-around.
- 13. The 'green' model to provide open access to the scientific literature can be very useful if:
  - The deposited copy is freely available immediately upon publication of the subscription (restricted) version;
  - o The deposited copy is free of any (including commercial) re-use restrictions;
  - The deposited copy is in a machine-readable format (which may include PDF, but not image-only [bitmap] PDF).
- 14. Because of the nature of the 'green' model as a work-around and not a fundamental reengineering of the scientific publishing system, it is likely to be temporary and to be seen as a compromise in a period of transition to a structural change.

13 January 2013

#### Wellcome Trust - Written evidence

#### **Key Points**

- We believe that making research publications that arise from public and charitable funding available in open access form is vital to maximising the societal and economic benefit that flows from this investment.
- We strongly support the leadership role adopted by the UK Government and Research Councils UK in setting a clear policy direction in support of open access. We also fully support the strengthened RCUK open access policy published in July 2012 including:
  - its support for gold (author-pays) open access as the preferred model as this
    route ensures papers are available immediately on publication and that the costs in
    the system are transparent;
  - the maximum six-month embargo period where a green (self-archiving) approach is used:
  - the requirement for a Creative Commons Attribution (CC-BY) Licence to be used where Research Council funds are used to meet a gold open access fee.
- We believe strongly that the cost of publication should be viewed as an integral part of the cost of funding research, and hence also strongly support the provision by RCUK of funding to cover open access fees via institutional block grants.
- We acknowledge that the transition to open access raises some challenges and uncertainties, and are committed to working with other key stakeholders including researchers, universities, funders, learned societies and publishers to address these issues. We argue however that the benefits will more than justify any short term costs.

#### Introduction

- 1. The Wellcome Trust is pleased to respond to the House of Lords Science and Technology Committee inquiry into open access. As a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health, we are committed to ensuring that the outputs of the research we fund – including both research publications and data – can be widely accessed and used in a manner that maximises the resulting benefits to society.
- 2. In support of this objective, the Wellcome Trust has had an open access policy since 2005 which requires all research papers that have been accepted for publication in a peer-reviewed journal, and are supported in whole or in part by Wellcome Trust funding, to be made freely available through the PubMed Central (PMC) and Europe PubMed Central (Europe PMC) repositories as soon as possible and in any event within six months of the journal publisher's official date of final publication.
- 3. The Trust also provides grant-holders with additional funding, through their institutions, to cover open access publication charges. In such cases, the publisher is required to deposit the published version of the articles directly into PMC, where it must be made available at the time of publication. In June 2012, we strengthened our open access policy and introduced specific sanctions for Trust-funded researchers who fail to comply. We also announced that from April 2013, we will require that, where our funds are used

to meet open access costs, the article must be licenced using the Creative Commons, Attribution licence (CC-BY), to allow full re-use (subject only to proper attribution). The Research Councils included an identical requirement for CC-BY in their revised open access policy, and we have been working in partnership with them on implementation as is discussed further below.

- 4. The Trust also manages the Europe PubMed Central open access repository (<a href="http://europepmc.org">http://europepmc.org</a>), working with 18 other partner funders including the Medical Research Council (MRC), the Biotechnology and Biological Sciences Research Council (BBSRC), the National Institute of Health Research (NIHR) and the European Research Council (ERC). Europe PubMed Central provides free access to over 2.5 million full-text peer-reviewed research papers and around 25 million abstracts.
- 5. More recently, the Trust has worked in partnership with the Howard Hughes Medical Institute (HHMI) and the Max Planck Society (MPS) to establish the new open access journal, eLife (<a href="http://elife.elifesciences.org">http://elife.elifesciences.org</a>). The eLife journal is a platform for extending the reach and influence of new discoveries and to showcase new approaches to the presentation, use, and assessment of research.

#### Support for open access publishing

- 6. We strongly support the commitment by the Government and the Research Councils to ensure open access to the published outputs of publicly-funded research. We were delighted that the Government accepted the key recommendations of the Finch review in setting a clear policy direction toward supporting open access via the gold (authorpays) mechanism, which we believe provides the only sustainable model in the long-term. A clear policy consensus is building both in Europe and around the world, that research publications that have been supported by the taxpayer should be openly and freely accessible at the point of use. The UK has adopted a strong leadership position in supporting this fundamental principle.
- 7. The Wellcome Trust has always recognised that the services provided by publishers (in terms of for example managing peer review, and ensuring the validity and editorial quality of published manuscripts) are critical to the research enterprise. Publication has a cost, and this cost needs to be met. The Trust considers that the cost of publication should be viewed as an integral part of the cost of funding research. From our perspective it makes no sense to fund research if the dissemination of that research remains unfunded.
- 8. Supporting open access article processing charges (APCs) obviously incurs additional costs for the funder. The analysis we have done estimates that if *all* research funded by the Trust was routed through an author-pays model and we picked up 100% of these costs (even though in reality most of the research we fund is part funded by another research funder), the annual cost to the Trust would be somewhere between 1% and 1.5% of our total research spend. Recent data on gold open access costs from the University of Edinburgh supports this analysis <sup>173</sup>.

with around 5000 research articles a year, this means that if every article was published under the author-pays model, the

<sup>&</sup>lt;sup>173</sup> See Andrew, T. Gold open access: counting the costs (*Ariadne* 2012; <a href="www.ariadne.ac.uk/issue70/andrew">www.ariadne.ac.uk/issue70/andrew</a>). This shows that the average APC levied for Trust-funded research at the University of Edinburgh is £1741. As the Trust is associated

- 9. We believe strongly that the benefits flowing from open access more than justify this level of additional cost. Moreover, as a greater volume of research is published under the author-pays model, we would expect subscription costs to fall. Indeed, all the major publishers have an explicit policy making it clear that subscription customers are not charged for open access articles (i.e. there is no so-called 'double dipping' 174').
- 10. We therefore support fully the new Research Councils UK (RCUK) open access policy in particular, the commitment to provide funding to universities via institutional block grants to meet the costs of gold open access APCs. The Wellcome Trust has provided open access funds to institutions using a similar model since our policy was introduced. We believe it provides the most effective and flexible mechanism to ensure that researchers and institutions can access the funds required for publication particularly given that many of the published outputs may not emerge until after the funding period for a particular grant has come to an end.
- II. In addition to the funding made available by the Department for Business, Innovation & Skills (BIS) and RCUK to cover APCs, the Trust also welcomes the statement from the Higher Education Funding Council for England (HEFCE) which makes it clear that institutions can use the funds provided through HEFCE to contribute towards the costs of more accessible forms of publication, alongside funding from other sources. 175

#### Embargo periods for articles published under the green model

- 12. For research outputs that have arisen through Trust funding, our preference is that these research papers should be made freely available at the time of publication via the gold route. However, the Trust accepts that some publishers are not ready to introduce an author-pays option <sup>176</sup> at this stage, and thus our open access policy allows articles published under the "green" model to be embargoed for a maximum of six months. The Research Councils have adopted an identical policy (though with a permissible embargo of 12 months for research funded by AHRC and ESRC for a "transitional" period).
- 13. Many publishers and societies argue that embargo periods of this length run the risk of damaging subscriptions and thus their viability. However, the results of the European Commission's PEER project (<a href="http://www.peerproject.eu/">http://www.peerproject.eu/</a>) which set out to measure whether "green" self-archiving is harmful to subscriptions, did not support these fears. Indeed, this large-scale project which involved publishers, repositories and researchers and the deposition of over 53,000 manuscripts concluded that "there is no evidence that self-archiving has harmful effects on journal viability" 177.
- 14. As a major funder of research in the medical humanities, we are aware that concerns over limiting embargo periods to a year or less are particularly acute in the humanities and social sciences. However, in the context of our own funding, six months is the

total cost to the Trust would be £8.7m. As the Trust annual research spend is around £746m, the cost of meeting all APC fees would equate to a spend of 1.17% of our research budget.

<sup>&</sup>lt;sup>174</sup> See, for example, http://cdn.elsevier.com/assets/pdf\_file/0005/105179/Sponsored\_Articles\_2011.pdf

<sup>&</sup>lt;sup>175</sup> See: http://www.hefce.ac.uk/news/newsarchive/2012/statementonimplementingopenaccess/

<sup>&</sup>lt;sup>176</sup> When an APC is paid, articles must be made freely available at the time of publication. No embargo is permissible when an APC is levied.

<sup>177</sup> See <a href="http://www.peerproject.eu/fileadmin/media/presentations/PEER-Executive\_Partners\_Statements\_29\_May\_2012.pdf">http://www.peerproject.eu/fileadmin/media/presentations/PEER-Executive\_Partners\_Statements\_29\_May\_2012.pdf</a> Slide I I

absolute maximum we are prepared to permit research findings to be locked behind subscription paywalls. Given that the Research Councils have set a clear preference for their research to be published under a gold author-pays model, (and are providing funding to meet these charges), the maximum permissible embargo period for RCUK-funded papers that go via the "green" model, seems to us to be fair and reasonable.

# Engagement with publishers, universities, learned societies and other stakeholders

- 15. The Trust has worked closely with RCUK to engage key stakeholders on our updated open access policies, and in particular the shared requirement for a CC-BY licence where our funds are used to meet gold open access charges, which will come into force in April 2013.
- 16. Specifically, the Trust and RCUK wrote jointly to 53 publishers, who are responsible for publishing around 80% of our funded research, and have held follow-up meetings with several to discuss implementation of the new policy. These discussions are progressing well and we are pleased that several publishers have already responded positively for example, see recent press releases from Nature Publishing Group 179 and Wiley 180.
- 17. In terms of maintaining an ongoing engagement with publishers, the Trust, with support from RCUK, has established a "Publishers Forum", which includes representatives from the four major publisher trade associations namely, the Publishers Association, Association of Learned and Professional Society Publishers (ALPSP), International Association of Scientific, Technical & Medical Publishers (STM) and the Open Access Scholarly Publishers Association (OASPA).
- 18. The Trust and RCUK also contribute actively to ongoing policy forums. For example, both are represented on the UK Open Access Implementation Group (OAIG), which is run by JISC and brings together representatives from the funder, library, university and open access publishing communities. Both organisations have also spoken at and contributed to a large number of meetings and events over the last year, at which all key major stakeholders including learned societies, researchers and university administrators have been represented.

# Challenges and concerns raised by the scientific and publishing communities and how these have been addressed

- 19. Following the publication of the Finch Report and the subsequent RCUK policy, key concerns raised by the research and publishing communities are that:
  - UK universities will face significant additional costs over the transition period
  - RCUK has not allocated sufficient funding to cover APCs
  - the CC-BY requirement will impede scholarly communication
  - learned societies will be damaged through the loss of publishing income

<sup>&</sup>lt;sup>178</sup> See: http://blogs.rcuk.ac.uk/2012/10/24/rcuk-open-access-policy-our-preference-for-gold/

<sup>179</sup> See <a href="http://www.nature.com/press">http://www.nature.com/press</a> releases/cc-licenses.html

<sup>180</sup> See http://eu.wiley.com/WileyCDA/PressRelease/pressReleaseld-104537.html

20. We briefly discuss each of these issues in turn below.

# Issue 1: Concerns that UK universities will face significant additional costs

- 21. The Finch Report estimated that the transition to open access may require additional funding of between £50 million and £60 million per year from the higher education sector. However, while it is important to acknowledge that there are likely to be additional costs, whether the costs will be this high in practice is far from certain. In order to minimise them as far as possible, it will be essential for institutions and funders to combine their negotiating power to ensure that as a greater volume of articles are published via the author-pays route, the amount paid in subscription fees by UK institutions is reduced. Given their combined purchasing power, UK institutions should be in a strong position to work with publishers to secure differential pricing models that achieve this objective.
- 22. There have been associated concerns that APCs charged by journals will rise in an unchecked manner. Evidence <sup>181</sup> to-date however, shows that the average APC charged to Trust funded researchers has remained steady over the past three years. Moreover, we believe that the continued emergence of innovative new players –such as eLife and PeerJ (who have set an APC of \$99), coupled with the rise of the PLOS ONE-type journals (e.g. *BMJ Open, mBio, Cell Reports, Scientific Reports, Open Biology* and so forth) will put real downward pressure on APCs.
- 23. It is also worth stressing that the move to gold open access should ensure a greater overall transparency on costs, which is lacking in the current subscription model. Indeed, in the case of eLife, this commitment to transparency is one of its core underpinning principles, as is the principle of keeping any author charges as low as possible based on the true cost of publication in an on-line only form.
- 24. The UK policy to support open access has also created concerns that universities, and indeed some publishers, are not adequately equipped to manage the administrative burden associated with increased volumes of gold open access payments. JISC and the Wellcome Trust commissioned research last year on behalf of the Open Access Implementation Group (OAIG) to examine these issues and the possible role of intermediary organisations in helping to address them.
- 25. The report <sup>182</sup> identified the key elements needed to create an efficient and sustainable market and the possible value-added services that intermediaries could provide. It also highlighted a clear view among stakeholders that work is required to develop and implement standards to facilitate more effective flows between authors, publishers, universities and funders of information relating to APCs. The OAIG will progress discussions with these key stakeholders as a key priority for 2013.

## <u>Issue 2: Concerns that RCUK has not allocated sufficient funding to cover APCs:</u>

<sup>&</sup>lt;sup>181</sup> See: <a href="http://www.ariadne.ac.uk/issue70/andrew">http://www.ariadne.ac.uk/issue70/andrew</a>

http://repository.jisc.ac.uk/4949/I/Gold\_OA\_intermediary\_final\_report\_(2).pdf

- 26. Although at this stage it is not possible to determine with certainty whether RCUK have allocated sufficient funding, the level of funding being made available (£17m in year one) would seem to us to be of the right order based on the underlying assumptions:
  - RCUK is assuming an average APC of £1,727, which is very close to the actual average APC changed to Trust-funded authors at the University of Edinburgh (see paragraph 8 above).
  - RCUK is assuming that 45% of the research they publish will, in Year I, be published via the gold model. The experience of the Trust shows that it does take time to achieve compliance with a funder's open access policy.
  - It must be remembered that other funders (e.g. Wellcome Trust, European Research Council, British Heart Foundation, Telethon, etc.) also provide funding to cover APC costs. As such it is highly unlikely that RCUK will be required to meet 100% of APC's for research they are associated with.
- 27. We recognise that the question of how universities meet these costs should the fund not prove sufficient and be depleted, is an important one. The Trust provides institutions that exceed their allocated block grant (to support the APCs for Trust-funded research) with additional funds, as required, and it will be important for the Research Councils to maintain similar flexibility. Universities are also required to return an annual report to the Trust on how they have used their block grant, which enables us to track levels of APCs and adjust the level of block grants appropriately.
- 28. In terms of encouraging compliance with the RCUK open access policy, we would urge RCUK to spell out the consequences to its funded researchers and institutions for non-compliance. As noted above, the Wellcome Trust strengthened its sanctions last year making it clear that funding would be withheld if research was not made available through Europe PMC in line with the policy. Although it is too soon to determine the impact that this policy change has had, the indications are that we are beginning to see an increase in compliance.

#### <u>Issue 3: Concerns that the CC-BY requirement will impede scholarly communication</u>

- 29. The Creative Commons Attribution Licence (CC-BY) allows re-use for both non-commercial and commercial purposes, subject only to proper attribution. Concern has been expressed that the CC-BY licence will impede scholarly communication in two ways. First, that authors will lose control over how their articles are re-used; and, second, that it will be more difficult to secure permission from third parties. We would reject both these assertions, and argue instead that the CC-BY licence facilitates scholarly communication.
- 30. Under the CC-BY licence it is true that research outputs can be re-used (e.g. to create a translation, be included in a new anthology etc.) without seeking the authors permission. However, at all times the new work must attribute the original article which the derivative is based on. Moreover, the CC-BY licence does protect authors against having, for example, poor translations done or against having their articles reprinted in anthologies where the context might be offensive, through the author's moral rights, which give authors the right to be correctly attributed and to object to derogatory treatment of the work.

- 31. With regard to the perceived difficulties of securing permission from third parties to include their material in a CC-BY article, we believe this is simply a red herring. Open access publishers like PLOS, Hindawi and BioMed Central have published over 200,000 CC-BY licensed articles, many of which contain third-party content. The issue can be readily managed by applying a different licence to third-party content. 183
- 32. We believe that the full research and economic benefit of published content will only be realised when there are no restrictions on access to, and reuse of, this information. For example, it enables such content to be used in the context of innovative value-added applications such as text mining which can uncover new associations and discoveries from across the body of published literature. From a funder perspective, CC-BY achieves this key aim, and has now emerged as the standard licence for open access publishing.

# <u>Issue 4: Concerns that learned societies will be damaged through the loss of publishing</u> income

- 33. Learned societies play an important role within the scientific community, and we acknowledge concerns that this could be threatened through the loss of current revenue streams from their publishing activities. As we have argued, our strong belief is that open access to research publications is critical to maximising the impact of research and its impact for society, and hence a change that learned societies as champions of science should embrace adapting their business models as required.
- 34. Existing open access publishers, such as PLOS, have demonstrated that it is possible to generate income from author-pays open access. And we believe strongly that open access will create other exciting opportunities for innovation. Rather than seek to hold back the rising tide, we hope that learned societies strive to act as champions and pioneers in harnessing innovative new approaches following the lead of the Royal Society which has launched a fully OA journal (Open Biology), and implemented the CC-BY licence for gold articles published in their hybrid titles.

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<sup>&</sup>lt;sup>183</sup> So, by way of example, the article available at <a href="http://www.ijbnpa.org/content/9/1/37">http://www.ijbnpa.org/content/9/1/37</a> is licenced under the CC-BY licence, whereas Figure I (<a href="http://www.ijbnpa.org/content/9/1/37/figure/FL">http://www.ijbnpa.org/content/9/1/37/figure/FL</a>) is Crown Copyright.

# Wiley - Written evidence

Wiley welcomes this opportunity to submit evidence to the Committee Inquiry on implementation of the Government Policy on Open Access. We publish 1550 journals, the majority with learned and professional societies. We are in complete support of the submission from the Publishers Association (PA) but would like to add some information based on our experience from consulting with our society partners, universities responding to the RCUK policies and funders developing Open Access policies.

# Support for Universities in the form of funds to cover article processing charges, and the response of Universities and other HEIs to these efforts

- I. The RCUK implementation of Open Access (OA) block grants is welcomed by Wiley as it will enable universities to establish central funds for paying Article Publication Charges (APCs) for authors funded by RCUK. These funds, however, are insufficient to cover all authors publishing articles resulting from RCUK-funded research and this will result in some authors being unable to choose the preferred gold OA publishing route. In addition, universities have expressed concern about the lack of guidance and infrastructure to set up and manage OA block grants. Together, these issues place great administrative and financial strain on universities and authors who are trying to comply with Government policy.
- 2. Research Information Network (RIN) in a 2009 report 'Paying for OA publication charges' <a href="http://rinarchive.jisc-collections.ac.uk/system/files/attachments/Paying-open-access-charges-guidance.pdf">http://rinarchive.jisc-collections.ac.uk/system/files/attachments/Paying-open-access-charges-guidance.pdf</a> recommends that universities set up central budgets for managing and paying for APCs (see page 10). The University of Nottingham established a central fund for the payment of APCs in 2007 (see Annex B) which works well to provide a smooth payment and administration process for authors. Publishers can set up access accounts that support universities and funders with regular and detailed reports on their block grant spend. Wide adoption of this central fund model will lead to high compliance with RCUK policies within the limits of the block grants.
- 3. Wiley's OA account arrangements with universities and funding organisations in the UK and across Europe show that where authors are fully funded by their organisations uptake of OA is greatly increased. For example, Telethon Italy and the Austrian Science Fund (FWF) which pay directly for funded authors to publish OA with Wiley through a Wiley Open Access Account have compliance rates of 48% and 35% respectively. There are currently no central fund arrangements to pay for RCUK-funded APCs and compliance with their OA polices according to our data is very low at 9% for MRC and 0.9% for ESRC.
- 4. Even though Wiley believes that RCUK providing OA block grant monies to universities is better than providing funds through individual author grants we feel that more funds, time and guidance are needed to ensure that all stakeholders can successfully implement and comply with the new OA policies.

#### Embargo periods for articles published under the green model:

5. Our view is given in the PA submission. All our partner societies whom we have consulted feel the proposed embargo periods are too short, putting high-quality publishing

at risk. The green model relies on revenues from sustainable subscription based publishing as it makes no contribution to costs.

# Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

6. We have met with a range of RCUK officers who are clear about their aim to shift the scholarly communication system to OA. They seem, however, reluctant to get involved in the complex issues of implementation facing universities, or to take on board the threats OA may pose to learned societies ( who play a key role in scholarly communication ) and to journals in adopting green OA based on short embargo periods. This risk was signalled by an international survey of librarians

(http://www.publishingresearch.net/documents/ALPSPPApotentialresultsofsixmonthembargof v.pdf) indicating the likely widespread cancellation of subscriptions especially in the arts, humanities and social sciences if journal content were freely available within six months of publication. Another issue is the lack of guidance on how part/multi-funded and /or multi-authored research (often with authors from different universities) should be treated. Perhaps the RCUK should organise a series of workshops to discuss best practice and, ultimately, generate a set of guidelines. Publishing staff, particularly on the sales side, are spending a lot of time in universities discussing implementation and could provide input if required.

# Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

- 7. Our view is given in the PA submission. Our society partners are concerned about the unintended consequences of adopting the CC-BY licence. To quote from a letter to the London Review of Books ("Universities under Attack", Colin Jones et al, London Review of Books, 24 January 2013) "This goes much further than the Finch Report proposal and would seriously undermine the integrity of the work scholars produce."
- 8. We believe that, for green OA, publishers should have complete flexibility over copyright terms for users this could be a CC licence, a standard © line or an industry licence. The International Association for Scientific, Technical, and Medical Publishers, for example, has created a licence based on the CC-NC-ND but with additional rights for text and data mining and translations.

#### Summary

9. The RCUK is taking on a huge challenge with little experience or evidence to guide it. As a stakeholder Wiley is keen to assist in maintaining the UK's leading position in scholarly communication. We hope our comments are taken as constructive criticism from a supporter.

Our concerns fall under three main headings:

a. more resources need to be committed to implementation to cover not just the cost of APCs but also of organising payment of APCs;

# Wiley - Written evidence

- b. more attention must be given to a viable green OA option since there will be insufficient funding for APCs; if embargo periods are too short, the subscription journals are at risk, as are the societies that rely on the revenue they generate; and,
- c. a review of Creative Commons based licensing policy is required to ensure licences provide enough flexibility; this should include considering other licencing options. In addition, we question the right to impose licensing policy on green OA articles.

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# Zoological Society of London (ZSL) – Written evidence

The Zoological Society of London welcomes the opportunity to submit evidence to the Science and Technology Committee Inquiry.

In order to improve public access to research the Government wishes to make all academic articles written by UK-funded researchers open access. As a publisher of STEM journals we in principle support this approach. However, for the future of learned and professional societies, such as ours, it is critical that a balance is struck between widening access and maintaining sustainable publishing businesses. A number of areas of concerns are given below:

#### I. Embargo periods

Given the long life of papers in our journals, a 12 month embargo on the submitted or accepted version is the minimum acceptable period if we are to avoid undue risk.

Legislation requiring that all articles written by UK funded researchers be made freely available six months after they have been published in a subscription journal would lead to a dramatic reduction in library subscriptions, which would threaten the viability of our journals and the wider activities that are funded by our publishing income, all of which contribute significantly to academic life in the UK.

# 2. Academic freedom

The introduction of mandatory 'author pays' systems has the potential to threaten academic freedom as institutions, due to limited APC funds, are pressured to judge work by standards other than peer review. Institutional Publication Committees will have to ration funds in line with pressures for Research Excellence Framework (REF) and impact, which means that a great deal of potentially valuable work will be unfunded. Furthermore, the requirement for APCs increases inequality both across and within institutions, by linking prestige in research and publishing to the capacity to pay APCs, rather than academic quality. In addition, many non-UK journals may not be open-access compliant, preventing UK academics from publishing in them. UK journals will also be under pressure to select research according to whether APCs can be paid, instead of simply taking the best quality research.

## 3. CC-BY copyright licence

Under Gold open access, it is intended that work is available under a 'CC-BY' copyright licence, which means that as long as it is attributed, work can be remixed, re-purposed and re-used by anybody, including for commercial purposes. CC-BY licence effectively removes many of the key rights of authors over their work and their ability to control the use of their intellectual property. Allowing for commercial uses without author consent has the potential to undermine investment in research projects, particularly where there is a business development interest, and obstruct commercial funding of UK science.

# 4. Further ambiguities

There are a number of important ambiguities that will have to be resolved, for example, which institutions will be responsible for APCs in the case of multi-funded research or multi-authored papers? And will institutions be able to reclaim APC costs if researchers change institutions before the completion of a REF cycle?

I hope that the Committee will engage with all stakeholders with regard to these important issues.

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