

Implementing Open Access in the United Kingdom

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Abstract. Since July 2012, the UK has been undergoing an organized transition to open access. As of 01 April 2013, revised open access policies are coming into effect. Open access implementation requires new infrastructures for funding publishing. Universities as institutions increasingly will be central to managing article-processing charges, monitoring compliance and organizing deposit. This article reviews the implementation praxis between July 2012 and April 2013, including ongoing controversy and review, which has mainly focussed on embargo length.

Keywords: Open Access, scholarly publishing, policy implementation

1. Building a national strategy

The key stakeholders of scholarly communication in the United Kingdom are implementing a transition to open access. Given the different interests among funders, publishers, universities, libraries and scholars – as outlined by Janet Finch – one should not assume that the transition management will be conflict free.¹ Nevertheless, there is broad consensus that open access is both desirable and achievable and, consequently, the key debates revolve around the appropriate mechanisms to achieve the objective. The Working Group on Expanding Access consensually agreed all its recommendations in the presence of all key stakeholders. Moreover, the UK government very rapidly accepted all of the recommendations and put forward additional funding to support the transition.

I was a member of the Working Group, representing – alongside Professor Martin Hall (Vice Chancellor at Salford University) – the university sector. Universities are key to implementing the transition to open access because universities must provide the infrastructure (e.g. repositories), win over the scholars (e.g. to submit to open access journals and repositories), and also manage the payment of article-processing charges on an increasing scale.

On the following pages I will, firstly, reflect on the national implementation of open access, on its direction and speed, its drivers and praxis. Secondly, I shall track policy developments among funders and universities. Thirdly, I review some of the ongoing controversy, for which the Houses of Parliament have become a key venue. Key issues include the sustainability of the scholarly publishing system, the pace of transition, and the length of embargoes as long as the mixed economy lasts. Finally, I seek to discern the contours of the transitional landscape that are becoming clearer as the national commitment to open access is increasingly irreversible.

¹Quick Link to key documents of the Working Group and the implementation process via the website of the Research Information Network – <http://www.researchinfonet.org/finch/quick-links/>.

2. Rapid implementation

The Department of Business Industry and Skills embraced the Working Group recommendations within a month, on 16 July 2012, indicating a clear preference for open access publishing, principally because the Government is committed to unrestricted access to scientific information for the public who fund it [2]. The Government has a policy preference for ‘Gold’ open access, because it believes that the associated Creative Commons Attribution license (CC-BY) adds value. Consequently, the department is investing additional resources (GBP 10 mln) to support universities in making the transition.

Research Councils UK, the umbrella body for the major funders of competitive research, initially announced that they would mandate a stronger form of open access than recommended by the Finch Group, requiring comprehensive open access from 01 April 2013 [8,9]. Henceforth, papers must be submitted to journals that provide open access or, at least, provide the option to post the author’s manuscript to a repository, subject only to a short embargo. RCUK envisions a transitory phase of five years before all papers will be published in fully compliant journals. During this time, when there are insufficient funds for article-processing charges, there is some flexibility with regard to the length of the embargo.

The Higher Education Funding Councils, the funding agencies for the four national territories in the UK, are following suit [5]. They have a strong moral preference for open access publishing and will also require institutional repositories.

All relevant stakeholders participated in the Working Group, which consensually developed its recommendation that the policy direction should be towards open access publishing, meaning that the mixed model of ‘gold’ and ‘green’ open access is transitional. Funders and universities must provide funds and develop mechanisms for paying article-processing charges.

3. Imperatives for open research

The UK consensus for a transition to open access has been enabled by key developments at the national, international and sectoral level.

Nationally, the major imperative has been a push by government for more transparency in the publicly funded sector.² The notion of transparency implies that in the public interest the results of research must be open for scrutiny and re-use – be they publications or datasets. ‘Transparency’ and ‘Open Access’ are highly complementary and mutually reinforcing concepts. Open access to publications and data creates transparency for research outcomes, while transparency implies a preference for open access publishing, because in this instance the authoritative and public version of record is the one that may be accessed immediately and for free.

Internationally, open access has been gathering momentum. The contributions by John Vaughn and Karl Ulrich Mayer have traced open access policy formulation and implementation in the United States and Germany. It is important to understand that co-ordinated moves are also occurring at the international level. For example, the European Research Council [4] and the European Commission [3] have strengthened their open access policies, which require scholars throughout the European Union (and often also beyond) to provide open access to their published research findings. Moreover, at the European level and elsewhere, research funders increasingly expect open access publication. For example, Science

²In 2010, the Prime Minister set up the Public Sector Transparency Board – <https://www.gov.uk/government/policy-advisory-groups/134>.

Europe, the umbrella body for research funders and organisations, has begun voicing a clear preference for replacing the subscription model with article-processing charges.

At the sectoral level, significant innovations have occurred in the scholarly communication system, particularly with regard to open access publishing. Scholars, societies, publishers and research funders have launched new journals, often with innovative service models. They demonstrate that open access publishing may support the rapid publishing of large numbers of articles (so-called megajournals) just as well as highly selective journals (flagship journals). Also, innovation may be realized bottom-up by scholars (collaborating to launch new journals) as well as by established players. Furthermore, open access publishing ventures may be traced across the sciences and humanities, demonstrating their principal viability.

In short, the time is right for an organized transition to open access.

4. Infrastructure for implementation

Open access has emerged through initiatives, bottom-up. However, transitioning the system of scholarly publishing brings a new quality. This in turn imposes new requirements on the stakeholders. The first and most important one is that a new infrastructure must be developed that supports converting the whole published output.

Open access policies and policy implementation are not new. Funders and universities have asked scholars to provide open access for many years. However, many digital repositories are near empty and most scholars have refused to take the issue seriously. This must change. Universities will be getting much more serious about implementation.

Given the diversity of stakeholders and interests, the Working Group report got a mixed reaction. On the one hand, there were legitimate concerns that universities would have to pay significant costs both to publish and to read research. On the other hand, some advocates of open access felt that the recommendations were timid and were uncomfortable with the Working Group's emphasis on maintaining as much stability in the research ecosystem as possible. However, since the Working Group recommendations were published, there has been growing support for the emphasis on a mixed model with embargo lengths that are subject-sensitive.

Universities in particular must invest in open access infrastructures. This, first, involves broadening and deepening our repositories in which all journal articles may be deposited, whether the author's final manuscript or the published version of record. Second, where funds exist, we must set up payment channels for meeting article-processing charges. The sector is working to develop common process and share best practice, including a national support service.

The major challenge for universities is to square excellence and sustainability. The mission of any university is to enable and support excellence in research and teaching. In this area, university administrators very much rely on publications and peer review. On the other hand, the publication system needs to be affordable for universities. The promise of open access is that universities will regain a greater measure of control over their spending, not least because article-processing charges are paid early and incrementally.

5. Implementation praxis

Research Libraries UK has estimated that, annually, about 40% of UK authored articles are already available in open access – in one form or another [6]. Hence, the UK begins its transition to open access



Fig. 1. The Publishers Association Decision Tree (endorsed by BIS and RCUK). (Colors are visible in the online version of the article; <http://dx.doi.org/10.3233/ISU-130688>.)

from a high base. Moreover, the transition is being accompanied by dialogue and co-ordinated among key stakeholders in a manner that seeks to contain and reduce the pains of transition.

The Department of Business Industry and Skills has stated its support for the UK Publishers Association ‘Decision Tree’ for open access, which provides for a nuanced approach and is a simple graphic representation of the approach taken by UK funders [1]; Fig. 1.

In essence, the Decision Tree encourages researchers to publish in journals with open access options and, where funds exist, to publish them in gold form. Where publication funds are not available, or where a journal does not support gold open access, the expectation is that the author will place their paper in an institutional repository. With a very small number of exceptions, where article processing charges are paid, whether in a pure open access journal or a so-called hybrid journal, publishers will not be permitted to put licence restrictions on re-use of the content of the paper in line with the wider push for transparency and innovation.

6. Policy statements from funders

Research Councils UK is the major funder of competitive research. RCUK is seven independent bodies that cover all disciplines in the sciences and humanities. RCUK has been working on a co-ordinated and coherent open access policy implementation [10]. Because of its importance the policy has been scrutinized intensely (see the section on controversy and review below). On 06 March 2013 the policy was announced. RCUK declared the following:

- “This policy applies only to the publication of peer-reviewed research articles (including review articles) and conference proceedings that acknowledge funding from the UK’s Research Councils;
- The Research Councils UK (RCUK) policy supports both ‘Gold’ and ‘Green’ routes to open access, though RCUK has a preference for immediate open access with the maximum opportunity for re-use;

- Funding for open access arising from Research Council-supported research will be available through a block grant awarded directly to research organisations;
- RCUK recognises that the journey to full open access is a process and not a single event and therefore it expects compliance to grow over a transition period anticipated to be five years;
- RCUK will undertake a comprehensive, evidence-based review of the effectiveness and impact of its open access policy in 2014 and periodically thereafter;
- RCUK is mindful that the impact of its policy on different disciplinary areas is likely to be varied and has therefore made allowance for a different pace of adjustment by permitting different embargo periods across the disciplines supported by the Research Councils”.

Important to note is that RCUK will be providing block grants to universities for article-processing charges – rather than allocating funds within a research grant. The institution is becoming more important, and universities will be committing their own funds [8]. Hence the overall affordability of scholarly publishing is important and a balance between subscription fees, article-processing charges and repository costs is vital.

Four national funding agencies exist for higher education for the four national territories – England, Wales, Scotland and Northern Ireland. The funding councils provide the large part of university funding in the form of block grants for teaching and research. The block grants are tied to competitive quality reviews. These reviews emphasize quality over quantity by allowing only four publications to be submitted per member of staff. The funding councils have indicated that they will follow RCUK in terms of embargo lengths and have said that they are formally neutral as to whether papers are published in gold or green open access form. At the time of writing, the funding councils are consulting on the appropriate mechanisms for their policy.

7. Paying for open access

The Working Group 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.

It would be wrong however to assume 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.

The Working Group also 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). Although some people fear that the policy will favour established researchers,

the mixed model of both green and gold open access and the need for universities to invest in their staff, means that this is unlikely to be true.

8. The special issue of embargo length

The Working Group was quite clear that its 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. The report anticipated that there would be different speeds of travel across the disciplines, and recommended that the implementation process should take account of this.

Embargo length has been a major issue of contention among stakeholders. Given the national commitment to open access, it has now become the single most controversial issue. In particular, the question is whether six months is a suitable embargo length for most of the sciences and twelve months for the social sciences and humanities. Particularly publishers are concerned that such short embargo periods undercut journal sustainability by facilitating cancellations. The Working Group on Expanding Access has emphasized that in moving forward the ecosystem of scholarly publishing should be protected. This implies that open access policy makers should show some flexibility with regard to the length of the embargo period during the five transition years, a fact now recognised in the policy adopted by the major research funders.

One has to concede that the evidence on whether short embargoes damage the subscription-based publishing model is not broad enough and inconclusive anyway. Looking at the half-life of usage and citations, it stands to reason that in some science and in the social sciences and humanities generally, this threshold is only reached after longer period, sometimes only after five years. Hence I could imagine that until 2018 a suitable embargo period for the biomedical sciences would be six months, for the sciences twelve months and for the social sciences and humanities 24 months. As the transition is completed, embargo periods could be reduced.

9. Controversy and review

Implementing open access is a challenge to all stakeholders and, potentially, a challenge to the sustainability of the ecosystem. Already for the summer of 2013 – just one year after publishing its policy recommendations – the Working Group on Expanding Access was scheduling a review of implementation. In the meantime, due to ongoing controversy, the House of Lords and the House of Commons scheduled additional reviews.

Under the chairmanship of Lord Krebs, the House of Lords Science and Technology Committee reviewed the implementation of open access policy [7]. During the review, the Committee heard concerns that the Research Councils were being insufficiently attentive to the needs of universities and scholars and could potentially damage the publishing industry. David Willetts, the Minister for Universities and Skills, gave evidence that the Government fully supported the Publishers' Decision Tree. The inquiry published its review on 22 February 2013 and concluded that the RCUK needed to have a policy with greater clarity. Arguably, this is reflected in their revised guidance of March 2013 referred to above.

Separately, the House of Commons Business, Innovation and Skills Committee has announced an inquiry into the principles of open access.³ This is still ongoing. It is important to note that Select Committees can only advise and have no legislative authority.

10. Key challenges ahead

As the transition progresses, the landscape continues to be somewhat uncertain. From the funders and universities point of view, and mine, the uncertainty is not about the direction, only about the speed and most effective way to proceed. There is much communicating among stakeholders, some of it brokered by the government. Some of it is public but some of it is ‘subterranean’, which often is essential to make progress. The major issues under consideration are the costs of the transition and future affordability; political quarrels around business models; the need to improve scholarly compliance levels; and the need for international coordination.

10.1. *The costs of transition and affordability*

The extra funding made available to universities, by the government, will cover about ten percent of the article-processing charges that will need to be paid. Authors holding grants are covered by their funders. But that leaves a large percentage that needs to be picked up by universities. One challenge is how to manage all the micropayments that need to be made. A larger challenge is the need for differential pricing, whereby the income generated from the UK through article-processing charges will have to be offset by reductions in subscriptions prices. Publishers are well advised to collaborate because otherwise the journals will lose access to some of the best research in the world.

10.2. *Political quarrels and the market*

Journal titles and journal impact factors are important proxies for quality. In my role as university manager this proxy function is essential for me to gauge the quality of research and researchers. At present, most high-quality journals are still subscription-based. In this context I view with serious concern the effort by some publishers to push back against open access by political means. The Research Works Act – as outlined by John Vaughn – has been met with incredulity by scholars and universities the world over. Fortunately, the proposed legislation was withdrawn. But more efforts in this direction could seriously damage publishers and their subscription-based journals, for example, if they are then boycotted out of existence. Publishers are needed, but not necessarily the same publishers. The market has seen major innovations around open access, with some publishers and new megajournals rapidly gaining traction and a very high reputation. I cannot imagine anything but that this will speed up the transition process.

10.3. *Compliance levels*

In some instances, open access policies have been in place for many years. However, compliance has often been risible. The National Institute of Health has stepped up efforts at monitoring compliance and

³<http://www.parliament.uk/business/committees/committees-a-z/commons-select/business-innovation-and-skills/inquiries/open-access/>.

developing effective deposit mechanisms – as reported by John Vaughn. In the UK, the RCUK and other funder like the Wellcome Trust have committed to effective monitoring to push compliance towards one hundred percent over the medium term.

As the policy direction has been set towards open access publishing, scholars are worried that it may be difficult to find the right journal and not certain that support for paying APCs will be available, particularly in disciplines hitherto not at the forefront of the shift to open access. These concerns are understandable, initially, but I think that there needs to be a purposeful and strong communication process demonstrating that the transition process is viable for all.

10.4. *International coordination*

A final issue is the need for ongoing international coordination. Indeed, other major countries, and their funders and universities, also need to set their policy towards open access publishing. If the UK remains alone in going for gold, or is only one of a small number of countries, then the investment in article-processing charges would become unsustainable over the long term. In this scenario, the UK would have to prioritize Green Open Access.

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