

*Accessibility, Sustainability, Excellence:
How to Expand Access to Research Publications*

**A Review of Progress in Implementing the
Recommendations of the Finch Report**

October 2013

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Executive Summary

The Report of the Working Group on Expanding Access to Published Research Findings (2012) – which has become known as the Finch Report - was based upon balancing the three criteria in its title: accessibility, sustainability and excellence. In this new report (2013), the same group reviews progress in implementing our recommendations one year after the publication of the 2012 Report. This report thus fulfils the Group's final responsibility.

It is not our intention to revisit our original analysis or recommendations; and our review has not caused us to question them in substance. On the basis of criteria derived from the objectives set for us, our 2012 Report recommended a balanced package, representing a best fit with the interests and aspirations of different players in the scholarly publishing system: researchers, universities, funders, learned societies and publishers. The central recommendation was to accelerate and manage a transition to open access (OA) over an extended period that would be characterised by a mixed economy providing:

- ❑ immediate free access to publications with the costs met by article processing or publishing charges (APCs), often referred to as Gold OA;
- ❑ subscription-based journals with immediate access under licence, or free access via repositories after appropriate embargo periods, often referred to as Green OA; and
- ❑ extensions to current licensing arrangements to provide access to a wide range of journals for the benefit of people and organisations beyond the HE sector.

Within that context we saw Gold OA primarily funded by APCs as ultimately delivering most successfully against our criteria, although we did not recommend a rapid transition.

The Government accepted our 2012 Report speedily; RCUK announced new policies; and the HE funding bodies have consulted on OA for the next REF. This has galvanised activity across the HE sector and the publishing community. The evidence we have gathered - including detailed statements from universities, learned societies, funders, publishers and other stakeholders – as well as a survey of practice in universities, from meetings and from detailed desk research - makes clear that significant progress has been made.

The response from universities has focused on meeting RCUK's requirements, with light touch policies and procedures that will require further development in the light of experience. Relatively few universities, however, have added funds from other sources to the block grants they now receive from RCUK; and uncertainties about costs have led some of them to seek to build on their earlier investment in repositories by adopting an explicit preference for Green rather than Gold OA. Indeed, a number of universities have achieved in the past year significant increases in the numbers of full-text articles deposited and accessible via their repositories.

Publishers and learned societies have also taken significant steps by increasing the range of OA options available through their fully-OA and hybrid journals. But it is important to note that learned societies in particular start from different positions in engaging with the transition to OA; and while some are relatively well-advanced, others have been slower to address this.

It is clear also that our 2012 Report and the subsequent policy developments have proved a catalyst for activity not only in the UK, but internationally. There have been significant policy developments in the EU, the US and other major research nations; and attempts to stimulate and co-ordinate activity through fora such as Science Europe, the Global Research Council, and the G8. While there are differences in emphasis between the UK and other nations, particularly in the extent of explicit support for Gold OA, we also note many similarities in policies that are seeking to promote the development of a mixed economy.

In many areas, as we anticipated, the progress in implementing our recommendations has been mixed, and has given rise to issues and problems that have not as yet been fully resolved. Thus there has been less visible progress than we would have liked in implementing our recommendations relating to extending licensed access for people and organisations beyond the HE community. The major initiative to provide free walk-in access to a wide range of journals via public libraries is, however, most welcome. We look forward to seeing the impact of that initiative once it is fully-launched in December.

Other areas too require further work. Thus while publishers, libraries, Jisc and others have co-operated in efforts to develop the necessary infrastructures for both Gold and Green OA, much remains to be done to improve interoperability and effective flows of data between different systems, and to build a co-ordinated infrastructure of repositories.

In many other areas, further development of policy and procedures is being hampered by lack of comprehensive and reliable data on issues including the numbers of articles to which RCUK policies may apply in individual universities, the impact on costs for individual institutions of collaborative publications involving other universities in the UK and overseas, and patterns of publication behaviour across different disciplines. Other controversial issues such as the RCUK requirement to use a CC-BY licence when an APC is paid also require careful monitoring.

Thus while there is momentum behind the moves to OA in nearly all parts of the scholarly communications system, there remains a need for close attention to key issues and to the varying impacts of OA policies on stakeholders with different perspectives and interests.

Much of the debate over the past year has revolved around 'Green vs Gold'. In the context of the mixed economy we recommended, we had hoped that debate could move on from such a binary opposition. Nonetheless, we hold to the view that a transition via a mixed economy to Gold OA, where publication costs are met mainly by the payment of APCs, is the most effective way of balancing our objectives of increased access, sustainability and excellence. We are pleased that both RCUK and the Funding Councils support this. Neither we nor they, however, recommend an immediate move to an exclusively Gold model, and we reiterate that we see its further development arising from organic growth towards a fuller OA world, internationally as well as in the UK. Since the overall effectiveness and impact of OA policies in the UK depends on developments in the rest of the world, it is also important that the Government and funders should remain active in seeking to influence and co-ordinate policy at an international level.

We are also clear that proper development of the mixed economy we advocate depends on funding being provided for the Gold model and the payment of APCs. This does not imply favouring Gold OA to the exclusion of Green. Rather, it is the essential means of creating balance within the mixed economy whose growth we wish to promote. For Green is already being funded by subscriptions and by support for repositories.

Length of embargoes has been debated widely over the past year. We cannot agree, however, with those who urge policies based solely on Green OA with short or zero embargoes, a position which derives from an exclusive preference for Green OA, rather than a mixed economy. There is a balance to be struck between embargo lengths that provide speedy access on the one hand, and sustainability for subscription-based journals and the business models that underpin them on the other. We believe that RCUK's and other UK funders' current positions on embargoes, together with their commitment to review, strike the right balance.

The process of transition clearly involves additional costs, but for the many reasons we set out in our 2012 Report, it remains uncertain how great those costs will be. The uncertainties bring difficulties for universities, and it will be important for them to consider, along with RCUK and the HE funding bodies, how to meet the costs of implementing their respective OA requirements. More broadly, many research-intensive universities' preference for Green OA has been influenced by concerns that they may otherwise face for the next few years large increases in expenditure on APCs, while their expenditure on journal subscriptions stays largely at current levels. It is therefore important that universities, Jisc, funders and publishers (including learned society publishers) should work together to consider whether, and how, expenditures and revenues for APCs and journal subscriptions might be offset against each other. All parties recognise both the significance and complexity of these issues.

Indeed, our key recommendation focuses on the need for a more formal structure to underpin the co-operation and co-ordination already evident in some areas. Our 2012 Report stressed that an ordered transition to OA depends on goodwill between stakeholders, as they co-operate with each other. None of them can deliver a sustainable system on their own. There is now an urgent need for a formal structure to ensure active co-ordination of efforts as stakeholders seek to avoid duplication of effort and divergent work-streams; to deal with problems as they arise; to develop an interoperable system of repositories and an infrastructure that supports both Gold and Green OA; to monitor the impact of OA policies on learned societies; to co-ordinate communications with the research community; and to oversee the collection and analysis of data from different parties in order to create the evidence base that is essential to the further development of policy in an effective fashion. Universities UK has agreed to take a lead role in helping to establish such a formal structure, and we urge all parties to play their part in developing an effective framework.

Recommendations

1. The pace of change should be maintained whilst setting greater clarity of direction, in line with the recommendations we set out below on the development of the mixed economy.
2. There needs to be a renewed emphasis on implementing our recommendations on improving access within the UK to the global outputs of research through licence extensions and similar initiatives (see also recommendations 10-12) alongside our recommendations on outputs produced by UK authors.
3. We reaffirm our support for a mixed economy in which Gold and Green OA - the latter with appropriate embargoes - both play important roles in a transition period that will last for the foreseeable future. In that context, we also reaffirm our recommendation for a clear policy direction set towards support for Gold OA.
4. Universities, funders and publishers (including learned society publishers) should keep under review, in a co-ordinated and transparent way, key elements that feed into current uncertainties about costs and funding, and undertake further cost-modelling.
5. Universities, Jisc, funders and publishers should work together, within the constraints of competition law, to consider whether and how, expenditures and revenues for APCs and journal subscriptions might be offset against each other. All parties recognise both the significance and complexity of these issues.
6. The Government and funders should remain active in seeking to influence and co-ordinate appropriate policy at an international level through bodies such as Science Europe, the EU, the Global Research Council, and the G8; and share the emerging evidence as to the impact of policies in the UK.

7. We believe that major funders' current positions on embargoes strike the right balance. The decision tree adopted by RCUK provides a useful summary and should be fully reflected in the advice and guidance provided by funders, universities and publishers to researchers.
8. As the implementation process develops further, we recommend that the co-ordinating structure we propose below should keep funders' rules relating to embargo periods under review, with active steps taken to gather evidence on their impact on different kinds of journals and in different disciplines; and to gather systematic data on trends in journals' policies with regard to embargoes via a service that is accessible to all stakeholders and is comprehensive, accurate and up-to-date.
9. The co-ordinating structure we recommend should monitor the impact of OA policies on learned societies, and co-ordinate moves to assist learned societies to develop their business models in order to achieve sustainable futures.
10. We look forward to the full launch of the public libraries initiative, and recommend that publishers and public librarians, with the help of their colleagues in universities, consider how to market it effectively, and to provide high-quality guidance material.
11. We welcome the work that Jisc is doing to investigate options for extensions to licensing, and recommend that further discussions should be initiated through the co-ordinating structure we recommend below to explore how to provide licensed access to more journals, and to people and organisations in sectors beyond universities and research institutes.
12. Government should give further consideration, in the light of the work of Jisc and other organisations, to allocating some pump-priming funding to facilitate the extension of licensed access to SMEs and third sector organisations which could benefit from it.
13. Through the co-ordinating structure we outline, universities, funders and publishers should continue and enhance their work with Jisc and others to develop the infrastructure of repositories for UK publications; and more generally to develop the technical infrastructure to support both Green and Gold OA, in order to promote greater interoperability and more efficient flows of information between different systems.
14. A formal co-ordinating structure should be established, convened by Universities UK, to secure dialogue and engagement across all the stakeholders in research communications; to co-ordinate their work and avoid duplication or divergence in areas including development of the infrastructure, evidence-gathering, monitoring, and communications; and to deal with issues and problems as they arise.

1. Introduction

The nature and scope of this review

- 1.1. At the final meeting in May 2012 of the Working Group that was responsible for what has become known as the Finch Report, it was agreed that the Group should reconvene after one year to assess progress in the implementation of its recommendations. The Group noted the importance of monitoring progress towards open access (OA), in order to ensure co-ordination and active engagement from all key parties, and to deal with issues as they arise in the process of implementation.
- 1.2. The purpose of this review is not to revisit the Report and its recommendations, or the analysis on which they were based. Rather, it aims to
 - a. assess what has been done by the various stakeholder groups in response to those recommendations;
 - b. gather and analyse evidence on issues or problems that have arisen, and any other issues that have achieved greater prominence since our Report; and
 - c. make recommendations that might help to address those issues or problems.
- 1.3. The review covers the whole range of the Report and its recommendations. It is thus wider in scope than RCUK's initial review of its policies which is planned for 2014. It is not intended to forestall that review; rather we hope that it will provide valuable initial evidence for it.

Methodology

- 1.4. The RIN circulated in April 2013 a request for statements from stakeholder organisations including research funders, publisher and library organisations, national academies, and the mission groups for universities and colleges, with a deadline of 14 June for responses. A template was provided which set out the ten key recommendations of our Report, along with the series of 18 actions that different stakeholder groups would have to take in order to put the recommendations into effect. Respondents were asked to address five key questions:
 - a. What actions have your organisation and/or its members taken in response to recommendations or actions relevant to them?
 - b. What issues or difficulties have arisen, if any?
 - c. What further actions do you have in mind?
 - d. How have the actions or inactions of others affected your organisation and/or its members?

- e. Do you foresee further issues or difficulties that will need to be resolved in the future?

Respondents were also invited to make more general comments or suggestions.

- 1.5. Those organisations to which the template was circulated were asked to distribute it to their members as they thought most appropriate, and to consult them in drawing up their statements. The template was also made available on the RIN website. In the event, we received 26 responses from a range of organisations. The template is at **Annex A** and a list of bodies that submitted evidence is at **Annex B**.
- 1.6. In addition to analysing these statements, the RIN also drew on a wide range of other evidence for this review, including
 - Reports and presentations at meetings organised by a range of bodies including RCUK, the Wellcome Trust, Research Libraries UK, the Royal Society, the British Academy, the Academy of Social Sciences, the Royal Historical Society, the Foundation for Science and Technology, the Publishers Association, the Open Access Scholarly Publishers Association, PLOS and others¹.
 - Evidence presented orally and in writing to the House of Lords Committee on Science and Technology (henceforth, Lords S&T Committee), and the House of Commons Business, Innovation and Skills Select Committee (henceforth Commons BIS Committee), for their respective inquiries into open access, and the two Committees' reports.
 - Evidence gathered in the course of a study commissioned by RCUK into the policies and procedures adopted by universities in response to Research Councils' new open access requirements, as well as contributions from stakeholder representatives to a series of forums organised by the RIN.
 - Desk research on key developments by stakeholders in the UK, as well as international developments.
 - Meetings and discussions with individual representatives of key stakeholders.
- 1.7. The Working Group considered a draft report based on this evidence at a meeting on 24 September. It also took the opportunity in a pre-meeting to receive oral evidence from representatives of the Publishers Association, Jisc, the British Academy and the Academy of Social Sciences; and to question those representatives about key issues and developments since the publication of our Report. The bodies invited to provide evidence to us in this way have all been particularly active, along with their respective constituencies, in debating and helping to move forward the transition towards OA.

¹ Other learned societies that have been particularly active include the Royal Society of Chemistry, the Institute of Physics, the Academy of Medical Sciences, and the Society of Biology.

Their evidence, and their responses to our questions, thus provided a valuable supplement to the other sources listed above.

- 1.8. The report that results from our wide review of the evidence, and detailed consideration by the Group, is in two parts. **Part 1** outlines the actions that have been taken, and the issues that have arisen in implementing our original recommendations. **Part 2** provides an evaluation of progress, and makes recommendations for further action.

Part 1

2. Policy and procedural responses to our recommendations

- 2.1. Our original Report recognised that the process of implementation would be complex, and that we could not provide a simple blueprint, or provide answers to all the issues that would arise. We also recognised, however, that the key initial moves would have to be made at a policy level by Government, the Research Councils and the higher education (HE) funding bodies; and that universities, publishers, libraries, learned societies and other stakeholders would then have to follow in developing their own policy and procedural responses.
- 2.2. This section of our review outlines the policy responses to our recommendations from Government and funders; and the more detailed policy and procedural responses from universities and Jisc, and from publishers and learned societies.

Government and funders

- 2.3. The *Government* announced on 16 July 2012 – only a month after our Report was published - that it accepted all the recommendations, with the exception of an action relating to VAT. Two months later, in September, the Department for Business, Innovation and Skills (BIS) announced that it was providing £10m to help thirty research-intensive universities in the transition to OA, enabling them to initiate the process of developing policies and setting up funds to meet the costs APCs. Since then, BIS has maintained a dialogue with a range of stakeholders about key aspects of implementation; and the Minister for Universities and Science and his officials have also been active in communications, liaison and advocacy at an international level, promoting the merits of UK policies in a variety of forums, notably the G8 meeting of Science Ministers in June 2013.
- 2.4. *RCUK* issued its new policy, with some initial guidance, immediately following the Government's statement. It indicated that new funding arrangements would be put in place to meet the costs of publication in fully-OA and hybrid journals, and that the new policies would come into effect on 1 April 2013.
- 2.5. Key features of the new policies are a requirement that all research and review articles, and conference proceedings, that acknowledge funding support from any of the Research Councils should be published on open access terms; a preference for immediate OA through the 'Gold' route with a CC-BY licence; limits on embargo

periods that range from 6 to 24 months²; and a new model of funding via block grants to universities and other research organisations to meet the costs of OA, and in particular of APCs (see Sections 3 and 4). This new model acknowledges the continuing growth of Gold OA over recent years, but also the need for a more structured approach to supporting it. Institutions receiving block grants have thus been asked to set up publication funds, along with procedures for researchers to gain access to them. Costs of publication – including page and colour charges – may no longer be included in research grant applications, and should be met out of the block grant or other resources.

- 2.6. Block grants for the years 2013-14 and 2014-15 were announced in November 2012 for all but a few very small institutions. They amounted in total to £17m and £20m respectively for the two years, and were based on the assumption that APCs would be paid for 45% of relevant publications in the first year, and 53% in the second, with universities themselves meeting part of the cost³. The Spending Review process means that the amounts to be provided in subsequent years cannot be announced yet. The stated expectation, however, is that block grants will continue to increase in line with the anticipated growth in take-up. RCUK now expects the rate of compliance to reach 100% by 2017-18, with 75% via the Gold route..
- 2.7. Universities, publishers and others raised a number of issues relating to the new policies and their implementation, particularly with regard to embargoes; and these were reflected in evidence presented to the Lords S&T Committee, which launched a short Inquiry into the implementation of OA in December 2012. Following publication of the Committee's report in February 2013, and further discussions with universities and others, RCUK issued revised guidance on 6 March 2013; and a final version of the policy and related guidance on 8 April. This process brought amendments to significant features of RCUK's policies between July 2012 and April 2013. We address these, and other issues raised in evidence to the subsequent Inquiry by the Commons BIS Committee, in subsequent sections of this review.
- 2.8. *HEFCE* announced also in July 2012 that the four UK HE funding bodies would develop proposals to establish a requirement that publications submitted to a REF or similar exercise after 2014 should be 'as widely accessible as may be reasonably achievable at the time'. In February 2013, the funding bodies announced their intention to consult formally on this. A letter sought early input to help shape the consultation, including definitions of OA; the role of institutional and subject repositories; embargoes and

² As we explain in Part 2, the allowable embargo periods vary by discipline but also on whether funding is available to meet the costs of APCs.

³ Subsequent changes in RCUK's requirements relating to the use of the block grant and to universities' own contributions may mean, however, that this assumption needs to be changed. See Section 3.

licences; the approach to exceptions; and whether monographs and research data should be included within the scope of the policy.

- 2.9. There were over 260 responses to the February letter, and they informed a formal consultation paper issued on 24 July, with a deadline for responses by 30 October. It signals a key role for institutional repositories; a two-year notice period (so that the OA requirement will come into effect for articles published from 2016 onwards); and exclusion from the OA requirement for the time being for both monographs and research data. A key issue for consultation is the handling of exceptions to the OA requirement and/or the expected rates of compliance.
- 2.10. **Government Departments.** Shortly after the Government's acceptance of our Report, the Department for International Development (DFID) released its own Open and Enhanced Access Policy to take effect from 1 November 2012. In line with our recommendations, this expresses a preference for immediate access through fully-OA or hybrid journals (with a preference for the former) while also accepting Green OA under certain conditions. So far as we are aware, no other Government Departments or agencies have followed DFID in seeking to implement specific OA policies or requirements in relation to publications arising from research that they fund.
- 2.11. **Charitable funders.** The Wellcome Trust announced in June 2012 that it would strengthen the enforcement of its OA policies, and insist that where it funded payment of APCs, articles should be published with a CC-BY licence. Other major medical research charities such as Cancer Research UK and the British Heart Foundation, however, have made no significant changes to the policies they adopted when they joined some years ago in supporting – and requiring deposit of articles in – UK (now Europe) PubMedCentral. Other charitable funders of research such as the Nuffield Foundation and the Leverhulme Trust have not adopted OA policies at all.

Universities and JISC

- 2.12. Universities' practical responses to our Report have focused so far on meeting the requirements of RCUK's policies; but they have also been influenced by the national and international debates on OA, by the new policies of other funders (notably the European Union) and in particular by the prospect of more wide-ranging requirements relating to the next REF. Universities have faced a number of challenges in responding to these new policies and requirements, starting from very different positions. They all had to develop and implement new policies, procedures and systems in a relatively short period of time. They also had limited evidence on some key issues – including the number of publications that will be covered by RCUK policies; levels of APCs and the changing policies of journals; and the numbers of articles produced collaboratively with researchers from other institutions – on which to base their decisions.

- 2.13. In the early part of 2013 there were discussions with key stakeholders about key details of the RCUK policy. The final version of the policy and guidance issued in April 2013 included some greater flexibility, which was much welcomed.
- 2.14. For all these reasons, as well as a desire to put researchers themselves in the driving seat, universities have adopted relatively loose frameworks, recognising that policies, procedures and systems will need further development in the light of experience, and as more solid data is gathered. Almost all universities have thus decided to administer RCUK block grant as a single pot for the whole university; and most have adopted a first-come, first-served policy for the allocation of funds to individual authors. Similarly, almost all universities have adopted policies which state explicitly that researchers themselves retain responsibility for decisions on where to publish their articles, and we welcome this approach. Only a few universities' policies or guidance suggest that if a researcher wishes to publish in a journal that does not comply with RCUK requirements, they should reconsider that decision.
- 2.15. Uncertainties and concerns about costs (especially in the light of the expected OA requirement for the next REF), and a desire to build on existing investments in repositories, have also led many institutions to adopt policies that explicitly favour Green OA, except where dedicated funds are provided to meet the costs of APCs. And almost all universities are taking the opportunity to promote – or require - the deposit of articles in their repositories. This has had a notable and welcome effect in increasing over the past year the number of full-text publications that are accessible from institutional repositories.
- 2.16. Payment of APCs has been a growing part of the landscape for some years, as researchers have taken up the option to publish in OA journals. But until this year only a small number of universities had established a structured approach to Gold OA and the payment of APCs, other than for those supported by the Wellcome Trust. The RCUK block grant means that all universities have now set up central funds and structured systems. But relatively few have been able in the short term - and in the face of uncertainties about costs and funding - to identify and set aside additional resources for the payment of APCs, on top of the block grant provided by RCUK⁴. Some universities, however, are keeping this under review.
- 2.17. Universities in receipt of RCUK block grant have also developed systems and procedures to operate across the institution – in most cases led by libraries, but also involving research and finance offices - for allocating funds to researchers, making

⁴ A prominent exception is UCL, which has made available £2 million a year from its research budget, (in addition to funding received from the RCUK and the Wellcome Trust) to fund its OA infrastructure, including payment of APCs.

payments to publishers, and gathering evidence to monitor patterns of behaviour and the impact of the new policies across different parts of the university.

- 2.18. In order to help generate information of this kind, many universities are also seeking to enhance their service infrastructures by improving interoperability between current research information (CRIS) systems (often newly-installed), grants and publication databases, and repositories. Some of this work, and the appointment of new staff to help with the implementation of new policies, has been funded from the transition grants awarded to 30 universities by BIS. And Jisc is supporting work to develop the infrastructure of repositories, and to enhance interoperability between them.
- 2.19. In the interests of good relations with researchers, but also of keeping administrative costs to a minimum, universities have tried to keep processes simple. Thus most universities have adopted procedures that start when a researcher has an article accepted for publication. A minority, however, are seeking to influence researchers' behaviour at an earlier stage, with processes that start when an article is submitted for publication; one of the key costs here is added complexity. Many universities have also launched advocacy and communications campaigns to try to ensure that researchers are aware of the new policies, and of where they can go for further guidance.
- 2.20. Universities have made great strides over the past year in responding to the RCUK policy, and the proposals from HEFCE; but they acknowledge that what they have done so far falls short of an ideal. The picture presented here will therefore almost certainly change in the next year or so, as universities gain more experience, and more data on which to ground their policies and procedures. Most institutions will treat 2013-14 as the base year in which they generate data against which subsequent change can be measured.

Publishers and learned societies

- 2.21. Major publishers have significantly extended the range of Gold OA publication options, especially through hybrid journals. A Publishers Association survey indicates that the option to publish on Gold OA terms is now available for 70% of the journals published by its members⁵. Many, but not all, major publishers also provide an option to authors publishing via the Gold route to use a CC-BY licence (see Section 4).
- 2.22. Major publishers and trade associations have also been active in advocating the UK policies in international forums, and/or in providing advice, especially in Europe and the US. They have also involved themselves in collaborative efforts to develop standards

⁵ Most major publishers have introduced an OA option for all their wholly-owned titles. Negotiations continue, however, for titles that they publish on behalf of other organisations, especially learned societies.

and best practice; and to monitor progress in implementing the new policies, as well as the transition towards OA more generally.

- 2.23. Many learned society publishers, however, while they embrace OA in principle, have expressed concerns about its potential impact on the sustainability of their journals and publishing revenues. Many societies are still coming to terms with the changes in the publishing environment, and have yet to establish strategies in response. Some societies – across all disciplines but especially in the life sciences - have introduced OA options with hybrid or fully-OA journals, and licences which align with funders’ requirements; but others have been reluctant to make similar moves, and in particular to change their policies in order to meet RCUK’s specific requirements. In the humanities and social science (HSS) disciplines there has been significant opposition both to Gold OA and to embargoes of the length required by RCUK: some historical journals have introduced 36 month embargoes. The large-scale commercial publishers as well as newer open access publishers have liaised with and provided advice for learned societies; and the Open Access Implementation Group (OAIG)⁶ has sponsored the production of online guidance. We consider the position of learned societies further in Section 5.

Key points

- ❑ **We welcome the speedy and positive response to our Report and its recommendations from the Government, RCUK, HEFCE and the other UK Funding Bodies; and the steps taken to provide funding to support them.**
- ❑ **With the exception of DfID and the Wellcome Trust respectively, neither Government Departments nor major research charities have responded to our recommendations by introducing new OA policies in relation to publications arising from research that they fund.**
- ❑ **University responses have focused on meeting the requirements of RCUK’s new policies, with light-touch policy frameworks and simple processes that will require further development in the light of experience**
- ❑ **Major publishers and some learned societies have responded by extending the range of OA options through both fully-OA and hybrid journals; but some learned societies have been more reluctant to embrace OA.**

⁶ OAIG brings together representatives of a number of universities, publishers and other organisations committed to the development of OA. It has no connection with our Working Group.

3. The mixed economy and the balanced package

- 3.1. Our Report acknowledged the need for compromises by all parties. It thus presented what it termed a balanced package of recommendations that represented a best fit with the interests and aspirations of the different players in the scholarly communications system. Its central recommendation was that we should anticipate for the foreseeable future a mixed economy in which access provided via subscriptions, through the payment of APCs, and via repositories would all continue to play an important part.
- 3.2. But we also spoke of a transition period, and the need to accelerate and manage that transition in an ordered way. In this section we outline the progress that has been made towards the kinds of mixed economy and balanced package we recommended: issues that have arisen in implementing the Gold and Green models, and the balance between them; and progress in implementing extensions to licensing.

Green and Gold

- 3.3. Some universities have established in recent years policies to support OA; and a small number of them had established, even before we reported, funds to meet the costs of APCs. As we have noted earlier, however, a number of others in the Russell Group and other parts of the sector – including Oxford and Cambridge – have for a variety of reasons including uncertainties about costs and funding established policies with an explicit preference for Green OA. Although this approach is understandable, it underplays the key advantages that Gold, but not Green, OA can bring: immediate access to the published version of record with minimal restrictions on re-use.
- 3.4. Despite a commonly-expressed preference for Green, other commentators have voiced a fear that the new policies may mean that there is not parity of esteem as between articles which achieve OA via the Gold and Green models, with Green seen as second-best. We have seen no evidence that this is happening in practice, and it is important that such fears do not become self-fulfilling.
- 3.5. Policy responses favouring Green OA have been driven in large part by concerns about costs, and we consider this further in Section 9. Universities also expressed disquiet about the wording of the options presented to authors on publishers' platforms, which seemed at an early stage to present Gold as the only option compliant with RCUK policy. The wording has in many cases now been revised. But some have expressed similar unease about over-direction with regard to the advice to researchers given by the SHERPA FACT service, which is being developed to help researchers check whether the journals in which they wish to publish comply with funders' OA requirements. These concerns underline the sensitivity of these issues, and the need to pay close attention to the wording of any guidance to researchers.

Issues in implementing the Gold model

- 3.6. The Gold model has been around for some years, and has been growing fast. Some commentators retain concerns that it may not be practicable in all disciplines; and others fear the impact that it may have on the revenues of learned societies (see Sections 5 and 6). We also note here the fears that the Gold model offers incentives to publishers who solicit articles for publication and charge APCs without providing the editorial and publishing services associated with legitimate journals⁷; and that downward pressure on APC prices may lead to a reduction in the quality of such services. There is clearly a need for continuing vigilance on this issue⁸.
- 3.7. The flexibility introduced in the final version of RCUK's policies means that universities are no longer expected to contribute to APC costs under the FEC regime, and that they may use a proportion of the RCUK block grant to meet costs other than APCs. Universities have welcomed this flexibility. But both traditional and wholly-OA publishers are worried by the resulting reduction in the funds available to meet APCs; and it may carry implications for the funding necessary to meet the targets set by RCUK for the proportions of articles that will be compliant with its policy – 45% by the Gold and Green routes in 2013-14, rising to 75% by the Gold route alone in 2017-18. Hence the Open Access Scholarly Publishers Association (OASPA) and others have suggested that RCUK should issue principles and guidelines on how the funds should be used.
- 3.8. From a different perspective, many universities remain apprehensive that the block grants they are receiving from RCUK will prove insufficient to meet demand from researchers for APCs relating to publications arising from work funded by the Research Councils; and some fear that they may at some point have to consider rationing, with all the attendant issues of how to determine priorities. It is not clear at this stage that these concerns about RCUK block grant are justified; expenditure on APCs has been slow to pick up in the early months since April 2013. But universities have wider concerns about the cost implications of OA and the REF. It is important that these matters should be monitored actively, and addressed explicitly in RCUK's review in 2014. We consider issues relating to costs and funding in Section 9.
- 3.9. On a practical level, both universities and those publishers whose journals have focused up to now on the subscription model have faced challenges in responding to what is

⁷ See "Beall's List", a regularly-updated report which sets out criteria for categorizing predatory publications and lists publishers and journals that meet those criteria. <http://scholarlyoa.com/2012/12/06/bealls-list-of-predatory-publishers-2013/> . Some aspects of the list have been controversial. But a recent article in *Science* indicates real cause for concern. See John Bohannon, Who's Afraid of Peer Review? *Science* Vol. 342 no. 6154 pp. 60-65.DOI: 10.1126/science.342.6154.60

⁸ The Open Access Scholarly Publishers Association has established criteria for the authentication of OA publishers; and the Directory of Open Access Journals is also developing criteria for the inclusion of journals in the Directory.

expected to be a much increased demand for publishing under the Gold model. Building new systems and processes, and seeking to ensure that they interact efficiently with each other, has not been straightforward; while workable solutions have been developed, much remains to be done before they are fully efficient and interoperable.

- 3.10. Important issues such as how to deal with the payment of APCs for articles published in collaboration between authors from different institutions have also yet to be resolved, mainly because of the lack of solid evidence as to the pattern and scale of such publications. Universities should gather in the current academic year information on their patterns of collaborative publications, and the extent to which they are paying APCs for them. Universities will then need collectively, and in concert with RCUK, to review the feasibility of developing clearer guidelines, and dealing with the issue explicitly in future collaboration agreements.
- 3.11. The workflows around the charging and payment of APCs tend to be complex. Both universities and publishers have an interest – but from different perspectives - in securing a water-tight relationship between the timing of APC payments and of publication on fully-compliant OA terms. But further work is required to ensure that this is achieved speedily, reliably, and without undue checking and chasing from both perspectives. Universities and publishers should establish a collective mechanism to consider how they might improve the interactions between their separate systems.
- 3.12. Possible solutions include the use of intermediaries, or of deposit accounts and related schemes, in order to aggregate payments; but there are complications associated with both mechanisms.
- 3.13. The possible use of intermediaries to consolidate payments between universities and publishers was considered in a report⁹ in October 2012; and Jisc announced in January 2013 a pilot project in collaboration with Open Access Key (OAK)¹⁰. Many universities hope this may reduce administrative burdens, although the start of the pilot was delayed. Other intermediaries, such as the Copyright Clearance Center¹¹, EBSCO and Swets are also developing systems to manage and process APCs, or are planning to do so. But it is not yet clear how effective services of this kind will be in meeting the needs of both universities and publishers.

⁹ Research Information Network, *The Potential Role for Intermediaries in Managing the Payment of Open Access Article Processing Charges (APCs)*, Open Access Implementation Group, 2012.

¹⁰ <http://www.jisc.ac.uk/news/jisc-collections-and-open-access-key-to-collaborate-on-uk-gold-oa-article-payments-pilot-23-jan>

¹¹ See press statement at http://www.copyright.com/content/cc3/en/toolbar/aboutUs/newsRoom/pressReleases/press_2013/press-release-13-06-03.html.

- 3.14. Some universities have also taken up the advance payment schemes established by a number of publishers, with discounts on APCs of up to 25%, as well as potential for administrative savings. Some universities are particularly keen on the current Royal Society of Chemistry's (RSC's) recent Gold for Gold marketing initiative, under which institutions subscribing to a bundle of all RSC's journals, databases and magazines receive vouchers for free publication of a set number of OA articles without paying an APC.
- 3.15. Other universities and some publishers, however, are concerned about the loss of transparency that may result from bulk payments; and also about the risks of a perceived preference for certain publishers and journals, and thus a restriction on researchers' freedom to choose where to publish. Some universities are also fearful of a trap – as they see it – similar to that represented by the big deals for subscriptions. Again it is not clear whether - or to what extent - such concerns are justified. But it is important that the amounts paid into deposit accounts and prepayment schemes should be monitored in a co-ordinated way at both local and national levels.

Issues relating to repositories

- 3.16. Our Report spoke of the need for further development of institutional and subject-based repositories, so that they became an effective complement to other routes to access. We recognised that there would be costs associated with that, which we estimated at £3-5m. In the event, there has been no central initiative on that scale, although RCUK points out that it continues to provide support for institutional repositories (IRs) through the indirect costs included in research grants. Jisc has also continued to work on a range of key issues including metadata profiles, standards and aggregation; while the Wellcome Trust and others have continued to support the development of what is now Europe PubMedCentral. At a more specific level, DfID has continued to develop its R4D repository, and links with the Research Councils' Gateway to Research.
- 3.17. The development of repositories will become even more important in the light of the critical role that HEFCE and the other Funding Bodies envisage for them in the REF. It is broadly acknowledged, however, that we are still some way from the kind of repository services for UK researchers as a whole that we envisaged in our Report, for a number of reasons. There continue to be different drivers and approaches to the development of IRs, with demands for better internal research information management seen as more important than OA in some cases. Many universities are seeking to ensure that their repositories and research information management systems (CRISs) interoperate closely, or even merge. But across the sector, heterogeneity of both systems and approaches presents challenges.
- 3.18. Many repositories provide good services in managing records of publications, and in providing a route to access for a period. But few have fully addressed the challenges of

preservation for the long term; and discoverability, along with rights management, remains less than optimal in some repositories.

- 3.19. Some of these difficulties arise from lack of investment, which brings with it a lack of local capacity to improve IR services or to take advantage of (inter)national shared and/or commercial services. Sustainability, both technical and financial, remains a long-term challenge for almost all repositories. And it seems likely that it will prove difficult to establish subject-based repositories in areas which are more fragmented and/or less-well-funded than those where successful repositories exist at present.
- 3.20. Repositories thus vary in the nature and scale of the services they offer, and it is often suggested that automated deposit of publications is key to the success of many of them. Publishing trade bodies have stated that their members are willing to extend such services, so long as issues relating to embargoes and rights can be resolved. Although there have been substantial increases in the numbers of full-text publications deposited and accessible via IRs in the past year, some universities have indicated to us that they would welcome the benefits in version management and discoverability that could be achieved through co-operative agreements with publishers; and we suggest that discussions should take place to explore how that might be achieved.
- 3.21. But it is important in assessing progress to date to make a clear distinction between deposit and access. It remains the case that while the great majority of publishers allow researchers to *deposit* a version of their articles immediately on publication, most of them insist – for subscription-based and hybrid journals – on an embargo before they can be made accessible. The Commons BIS Committee’s assertion that 60% of journals allow immediate access does not reflect the reality of journals’ policies as experienced by UK authors; and its claims about the proportions of all publications currently accessible on OA terms that are represented by Green OA are highly-contested¹².
- 3.22. Repositories should also take further steps to address the issue of linkages between publications and research data. Many repository managers are already being called on to consider the repository’s role in data management; and Jisc has established a programme and is working with international initiatives to promote good practice, improved infrastructure and greater interoperability. The key point here is that the research data agenda places even greater emphasis on the need for interoperability, open standards, common vocabularies, and working across institutional, national, publisher and funder systems.

¹² See paragraphs 8 and 43, and 22 and 33, respectively of the Committee’s Report. An authoritative estimate of the proportions of articles accessible via the Gold and Green routes in 2009 showed that 8.5% of all articles were accessible on publishers’ sites, and 11.9% via repositories or other websites. Bjork, B-C et al Open Access to the Scientific Journal Literature: Situation 2009 *PLOS One* 5(6) e11273. doi:10.1371

- 3.23. The relationships between IRs and subject-based repositories have been put into sharper focus by the requirements of ESRC and MRC that publications should be made accessible via two specific repositories, Research Catalogue and Europe PubMedCentral respectively; and by the funding bodies' indicating that their OA requirement for the next REF will be based on deposit and access via IRs. Fulfilling this latter requirement in a cost-effective way will pose challenges for many universities, and the funding bodies will need to address these in partnership with Jisc. But we foresee significant developments in IRs, particularly in smaller institutions where there has been relatively little activity to date.
- 3.24. In the meantime, despite the significant progress in some universities over the past year, it remains a struggle for many institutions to secure active engagement from their researchers and to ensure that publications are deposited in the IR. Some IRs are still dominated by metadata records for most of their published articles, alongside the full texts of grey literature of various kinds. Others are concerned that perceptions of low quality are exacerbated by publisher restrictions which mean that even when full text publications are available, they rarely take the form of the published version of record; and that in turn gives rise to unease about the proliferation of different versions.
- 3.25. The key source of contention with regard to repositories, however, has been in relation to embargoes. The Lords S&T Committee commented adversely on the confusions that arose in relation to RCUK's policies on embargoes, while the Commons BIS Committee recommended changes to policy. We consider these issues more fully in Part 2.

Infrastructures for Gold and Green

- 3.26. Realising the full benefits of OA, whether Gold or Green, depends on further development of infrastructures to increase efficiency and effectiveness. We have noted earlier at several points the need for interoperability between systems both within and across universities, funders, and publishers. That in turn depends on the development of metadata standards and vocabularies, as well as technical standards and services; and all this will help to improve the visibility and discoverability of OA publications.
- 3.27. Some of what is required depends on action at an international level. But there is also a need for UK-wide approach which brings publishers, universities, libraries and funders together to facilitate co-operative work on issues such as workflows, metadata and preservation standards, machine-readable licences, technical services and standards, and so on. Jisc has a critical role to play here, and is already active in developing and promoting the implementation of interoperability standards through, for instance, its support for the Gold OA infrastructure initiative, the vocabularies for OA (V4OA) project, and various projects led by the National Information Standards Organisation (NISO) in the USA and by the Consortia Advancing Standards in Research Administration Information (CASRAI). It is important that work of this kind, and the

building of strong operational relationships with key players and stakeholders, should continue to feature prominently among Jisc's priorities. Co-ordination is essential here, and we echo the Commons BIS Committee's view that the development of the repository infrastructure should not be regarded simply as a matter for individual universities.

Extensions to licensing

- 3.28. Our Report stressed the importance of extensions to licensed access to journals for two main reasons. First, even though OA has been growing fast, a substantial majority of the articles published each year across the globe – and those published in past years – are not as yet accessible on OA terms. Second, for people outside the HE sector and a small number of large research-intensive companies, often the only way to gain access to articles is via expensive pay-per-view systems. In order to provide access for more people and organisations to a reasonable proportion of the published research literature, we argued that extensions to current licensing regimes were an essential step, at least for the short-to-medium term.
- 3.29. The Government's response to our Report supported the objective, but passed to 'independent funding bodies' the responsibility for making funds available. And although licence extensions were a key element in our recommendations, they have received relatively little attention; they did not feature at all in the recent report of the Commons BIS Committee. Some commentators have argued that action of the kind we recommended is not worth the effort. We do not agree. We therefore trust that there will be a renewed focus on action to address our recommendations in this area.
- 3.30. The main initiative to date – much welcomed by the Government - has been led by publishers. They have been taking steps to implement their proposal to provide walk-in access to journals in public libraries across the UK. The Publishers Licensing Society (PLS) has worked with public library representatives and technology partners to launch a technical pilot to run in ten local authorities for three months from September 2013. Provided that this pilot reveals no fundamental problems, the intention is that publishers should make their content available through the initiative for an initial two-year period starting in December.
- 3.31. We pointed in our Report to the need for effective marketing, and for guidance to both librarians and users on the nature of content that will be unfamiliar to many of them. We underline once more the importance of devoting significant effort and resources to this. But we reiterate our warm welcome for this initiative, and look forward to learning about its impact.

- 3.32. Progress in other areas has been much less evident to date. Jisc has been active, but has been hindered by lack of active engagement and direction, as well as significant funding support, from other stakeholders.
- 3.33. As we noted in our Report, there has for long been talk of the duplications, gaps and sheer inefficiencies in providing access to journal content for people – often the same people – working in the HE sector and the NHS. A report was commissioned by Universities Scotland in 2012 on the options for collaborative procurement of journals across the two sectors; and Jisc is exploring options to extend university licences so that they allow for access to NHS staff. The reorganisation of the NHS in England has hindered progress, but a trial is planned to start in April 2014, with the key aim of assessing levels of usage.
- 3.34. Jisc is also exploring ways to extend HE licences with a small number of publishers so that universities can opt to provide access to SMEs. Some pilots are also planned under which groups of micro and small companies - for example those on the Sci-Tech Daresbury campus and those in the Biocity incubator - will be given access to journals for a limited period, again in order to assess levels of demand.
- 3.35. In the meantime, many universities continue to provide some level of walk-in access to journal content, though there can be practical difficulties: access to campus networks may not be straightforward; some libraries complain that licence terms are not always clear; and some levy charges to commercial users. For these reasons, few universities see expanding walk-in access and use as a priority, and demand is relatively low.

Key points

- ❑ For a variety of reasons including concerns about costs and funding, and a desire to build on their investments in repositories, many universities have established a preference for Green OA, at least for the present.
- ❑ Close attention needs to be paid to the language used by universities, publishers and services such as SHERPA FACT in advising researchers on the options available to them.
- ❑ Both publishers and universities have expressed concerns about the levels of block grant provided by RCUK; but it is not clear that those concerns are justified.
- ❑ It is too early to assess the pattern and scale of collaborative publications, and therefore to provide clear guidance to universities on the payment of APCs for such publications

- ❑ Publishers and universities should work together to ensure that the processes relating to payment of APCs and publication on OA terms are closely and promptly aligned
- ❑ The value of prepayment schemes, and their implications, are not yet clear
- ❑ There is a need for collective action to develop the infrastructure for both Gold and Green OA, to improve interoperability and the flows of information between different systems, including repositories
- ❑ The initiative to provide walk-in access to scholarly journals through public libraries will be launched in December 2013; but there has been relatively little visible progress to date on our other recommendations designed to extend licensed access to scholarly content.

4. Licences and IPR

- 4.1. Our Report recommended that support for OA publishing should be accompanied by policies to minimise restrictions on rights of use and re-use, including the use of text and data mining (TDM) tools. RCUK requires the use of a Creative Commons attribution licence (CC-BY) when an APC is paid; and there is a looser requirement to allow non-commercial re-use when an APC is *not* paid, but an article is made accessible via a repository. There have been some discussions between stakeholders about allowable uses, and the licences to support them, under this looser requirement for articles in repositories, and it is important that those discussions should continue with the aim of producing clear and agreed guidance.
- 4.2. As RCUK has recognised, CC-BY licensing is controversial, and we agree with the Lords S&T Committee and the Commons BIS Committee that further evidence should be gathered about its suitability in different contexts and in different disciplines. Some major OA publishers, particularly in STM disciplines, have employed the CC-BY licence for several years, and stress its importance in facilitating the creation of a critical mass of content accessible for any use. But a small number of OA publishers use licences that restrict commercial use, and look to the sale of reprints and other rights to commercial users such as pharmaceutical companies as a significant source of revenue¹³. Fears of loss of such income have led at least two publishers to set APCs at a premium price for authors who wish to use a CC-BY licence; *but fears that this might become a common phenomenon have not so far been realised*.
- 4.3. Many major publishers now offer CC-BY as an option, rather than requiring its use as a matter of course; though some try to make it clear that authors need to use CC-BY if they are to comply with RCUK's requirements following payment of an APC. There have been a number of teething problems as publishers have adapted their systems and platforms, and the licence or copyright status of some articles has not always been clear to readers up to now. We trust that these issues will be resolved soon.
- 4.4. More fundamentally, many authors and editorial boards have expressed disquiet about 'giving away intellectual property rights' without any ability in practice to monitor how it is being used. In many HSS disciplines, where lengthy articles and other publications in connected prose are the norm, sometimes with passages in languages other than English, and extended quotation from third party sources, there is unease about the potential for error and misrepresentation arising from TDM, and through the creation of

¹³ At least one fully-OA publisher, Dove Medical Press, has a business model that depends on the sale of reprints.

derivatives. Some survey data suggests¹⁴ that where authors are offered the choice, they tend across most disciplines to opt for more restrictive licences that restrict use for commercial purposes (as in the CC-BY-NC) licence) and/ or the creation of derivatives (as in the CC-BY-ND licence).

4.5. Unease on these issues is thus widespread, among researchers in some STM as well as HSS disciplines. A meeting convened by the Wellcome Trust and the Royal Historical Society in April 2013 discussed actions¹⁵ that might be taken in response to disquiet on a number of issues relating to CC-BY licences, including

- ❑ the risk that securing permission to include third party material in published articles might become even more difficult than it is at present
- ❑ fears that the integrity of authors' published work might be compromised, or that it could be modified in ways that authors would find unacceptable
- ❑ worries that the licence offers implicit encouragement to uses that are incompatible with scholarly ethical standards, or with good academic practice (though the claim that it promotes plagiarism seems over-stated)
- ❑ the removal of the ability of both authors and publishers to generate secondary income from their publications, and the risk that the loss of such income poses to some journals.

4.6. RCUK is committed to reviewing the requirement for CC-BY licences in its review in 2014; and in the meantime to produce guidance on the use of the licences¹⁶. But it is important in advance of the RCUK review that the steps recommended at the Wellcome Trust/RHS meeting to gather evidence on the key issues it identified should be pursued as a matter of urgency under the aegis of the co-ordinating structure we recommend later in this report.

4.7. The case for liberal licences has been closely associated with the demands from some parts of the research community for access to a critical mass of content for text and data mining (TDM). It is clear that TDM tools have great potential for the analysis of vast numbers of publications beyond the capacities of individual researchers or teams; and

¹⁴ For example the survey conducted by Taylor and Francis (<http://www.tandf.co.uk/journals/press/openaccess-21Mar2013.pdf>). The methodology for the survey has, however, been subject to some criticism.

¹⁵ A note of the meeting is at <http://www.researchinfonet.org/wp-content/uploads/2013/02/Note-of-Wellcomeworkshop-on-CC-BY-in-hums-and-soc-sci-final.pdf>

¹⁶ See also the *Guide to Creative Commons for Humanities and Social Science Monograph Authors* published by the OAPEN project. <http://oapen-uk.jiscebooks.org/files/2011/01/CC-Guide-for-HSS-Monograph-Authors-CC-BY.pdf>

that at present there are major barriers to overcome before they can be used effectively¹⁷. There is conflict, however, about how those barriers might most effectively be removed.

- 4.8. Major publishers and their trade associations are seeking to promote a licensing approach. Some publishers' licences for institutions already include rights to use TDM tools; and publishers are working with CrossRef (the cross-publisher citation linking service) and the Publishers Licensing Society to develop a common platform for TDM. The *Hargreaves Review of Intellectual Property and Growth*, however, urged the Government to press at EU level for the introduction of an exception to copyright to allow researchers to use TDM tools on content to which they have legal access.
- 4.9. Tensions between the licensing and copyright exceptions approach were revealed when an EU working group was established in December 2012 under the framework of 'Licences for Europe'. Discussions broke down in May 2013 when librarians, researchers and others withdrew from the working group. Meanwhile, in the UK the Intellectual Property Office has prepared a draft amendment to introduce an exception into the Copyright, Designs and Patents Act 1988; and it was issued for consultation in June.
- 4.10. In part because of these tensions and delays, it remains unclear at present how best to facilitate the use of TDM tools; and take-up, particularly for content accessible via repositories, remains low. Our Report did not cover this issue in detail, since the Hargreaves Report was already addressing it; but we hope that the issues can be resolved soon, and that TDM tools become more widely used.

Key points

- ❑ **CC-BY licences remain controversial for many researchers, and also some publishers**
- ❑ **Action to address the issues identified at the Wellcome Trust/RHS meeting in April 2013 should be pursued as a matter of urgency**
- ❑ **There have been tensions between the licensing and copyright exception approaches to providing facilities for text and data mining, but take-up of the use of TDM tools remains low.**

¹⁷ See, for instance, McDonald, D and Kelly, U, *The Value and Benefits of Text Mining*, JISC, 2012, and Clark, J, *Text Mining and Scholarly Publishing*, Publishing Research Consortium, 2013.

5. Learned societies

- 5.1. Our Report acknowledged and underscored learned societies' critical roles in underpinning the scholarly and research communities in the UK; and those attributes were prominent again in the evidence we gathered for this review. Societies aim to foster and promote the specific disciplines or subjects they represent, by facilitating communication and knowledge exchange between researchers, policy-makers, practitioners, and users of research, including the public at large; by supporting education in their subject areas; by nurturing researchers with opportunities for professional development and guidance at key stages in their careers; by fostering professional collegiality and promoting good practice (in some cases as professional regulators); and by disseminating research findings widely among national and international communities.
- 5.2. Publishing and communicating the results of research are central to the missions of most societies. The disseminate high-quality research through journals that are often among the leading international publications in their fields. Journals have also come to play a key role in providing the surpluses that sustain societies' core activities; many societies depend heavily on their overall publication revenues – often drawn in the main from overseas subscriptions, which are thus supporting UK research. Concerns about the risks to these revenues, and to the sustainability of their journals, have made some societies reluctant to embrace OA.
- 5.3. The potential damage to learned societies that may result from moves to OA – by whatever route – remains a matter of great concern to the Group; and it is disappointing that many commentators, including the Commons BIS Committee, have ignored this issue.
- 5.4. Not all societies start, of course, from the same position. Levels of dependence on publishing revenues vary considerably, and have in most cases arisen in an ad hoc and unplanned way. Moreover, since the transition to OA is already under way and being promoted by many funders, the issues and problems that some societies are facing would have arisen, even if to a different timetable, quite aside from the impact of our Report and the subsequent policy developments by RCUK, HEFCE and others.
- 5.5. As we noted in Section 2, commercial publishers and newer open access publishers, along with others, have liaised with and provided guidance for learned societies; and worked with them to understand their needs and to explore the opportunities that may exist to extend OA.
- 5.6. Some learned societies have been active - through workshops and conferences as well as newsletters and other means - in communicating with their members about the new OA policies and their implications; but also in seeking to explain to Government and

funders the specific characteristics and needs of their disciplines. Some societies, however, have expressed frustration about what they perceive as lack of consultation, and delays in setting up meetings to address their concerns. Nevertheless, projects have been established by the Academy of Social Sciences and the British Academy, with funding from AHRC/ESRC and HEFCE respectively, to assess the specific characteristics and needs of learned societies and researchers in HSS.

- 5.7. There remain concerns, not confined to the HSS disciplines, that as OA policies are implemented, a decline in revenues will mean that some societies will have to reduce the scale of their activities in support of their disciplines. We have detected, however, a belief among some other learned societies that change can be put off indefinitely. We are therefore concerned that there are real dangers to such societies as the scholarly publications world changes around them. Some of the smaller societies lack the capacity and capability to engage with the transition, and need help to do so.
- 5.8. The pace of publication in many society journals (particularly but not solely in HSS), together with the 'bundling' of journals where publishing is in association with a commercial publisher mean, however, that change may take some time to show through. And concerns about low levels of funding for research in their disciplines have led many societies to favour Green but not Gold OA. Some of these societies want lengthy embargo periods to be associated with Green OA, however, since they fear that a long half-life for articles in their particular disciplines¹⁸ means that short embargoes would mean that they would lose subscriptions. Societies responsible for some historical journals have thus extended their embargo periods to 36 months; and in STM areas such as ecology, some societies retain a preference for 24 month embargoes..
- 5.9. The guidance from publishers and others, and the projects we have noted above, may help to address some of these issues and tensions; but as yet they are far from resolved. Hence we believe that learned societies should be a specific focus in the monitoring of progress in the transition to OA, and that work should continue to develop a closer understanding of their interests and concerns, and of the impact that specific OA policies may have on them in the coming years.

Key points

- ❑ **Learned societies start from different positions in engaging with the transition to OA, and while some are relatively well-advanced, others have proved reluctant to do so**
- ❑ **Many societies need further help to ensure that they continue to develop and enhance services of great value that they provide for the research community.**

¹⁸ As measured by downloads. We consider the issue of half-lives and their implications for embargo periods in Part 2.

6. Disciplinary differences

- 6.1. There has been substantial debate about the applicability of OA to different disciplines. We noted in our Report how the levels of OA provision and take-up varied significantly across disciplines, so that their starting points for OA were very different. Progress in many areas of the life sciences, for example, has been much more rapid than in many areas of engineering. We envisaged that the pace of change would continue to vary, but we stressed that for the longer term we did not wish to see a division between those disciplines that fully embrace OA and those that do not. That would indeed be unrealistic, since the publishing world will continue to change, and there will be growing pressure for access to research outputs irrespective of discipline.
- 6.2. It is widely accepted, however, that the differences we outlined will continue to be a feature of the OA landscape for some time to come, and that the impact of the new OA policies will not be uniform across all disciplines. Many commentators expect that average levels of APCs will vary by discipline, and many also urge that embargo periods should continue to vary too. It is clear also, as RCUK notes, that attitudes towards the CC-BY licence differ by discipline.
- 6.3. The differences between disciplines (and sub-disciplines) are often fine-grained, although a major distinction is often made between STM and HSS disciplines. Nearly all commentators suggest that the transition to OA will be much more lengthy and complex in many of the HSS disciplines. But it is important also to recognise that there are significant differences within STM: that what applies in some areas of physics, for example, will not necessarily apply in many areas of chemistry; approaches to research and publication in many areas of mathematics have characteristics more in common with some HSS disciplines than with, for example, the life sciences; and that within the HSS disciplines themselves, what applies to linguistics or economics may not apply to philosophy or to literary studies.
- 6.4. Some of this results from the differences in cultures and practices: divergent patterns of research and publishing, and also of reading and use of publications. The half-lives of journal articles vary considerably between disciplines; and many commentators argue that significantly longer embargo periods are needed in order to protect journal – and learned society – revenues in disciplines where the half-life may be up to 8 years or more. We welcome the British Academy's project to gather more systematic information on these issues. We also note the suggestion from the Royal Historical Society that a code of practice for journals in the HSS disciplines should be developed, though we question whether a single code could cover all the HSS disciplines. A generic code covering *all* disciplines might be more useful.

- 6.5. But differences in cultures and practices do not tell the full story: levels and patterns of funding play an important role too. There is in general terms less project funding available to support research in HSS as distinct from STM disciplines, though again it is important not to take this generalisation too far: some areas of social science such as demography or social psychology receive substantial amounts of project funding as compared with STM disciplines such as pure mathematics, for example.
- 6.6. In those disciplines where a high proportion of research is undertaken without project funding from the Research Councils or other sources, the major source of support for research in the HE sector¹⁹ is the salaries that researchers receive from their universities. They in turn are funded from a range of sources, but especially QR block grant. In the HSS disciplines, the combined budgets of the AHRC and the ESRC amount to roughly 10% of all Research Council funding; and QR thus constitutes a much bigger proportion of the total funding to support research. An important implication is that in those disciplines, policies relating to the REF and to QR have a much bigger impact than the policy requirements set by RCUK.
- 6.7. Some HSS commentators have argued that the Gold model is not viable in their particular disciplines, since direct funding support to meet the costs of APCs is not available, and APC costs will be relatively high. This assumes, of course, that QR and other resources cannot be used to meet APC costs, an issue to which we return in Part 2. For the moment we simply note that differences in the ways in which disciplines (and in some cases sub-disciplines) access funding for research is bound to lead to variations in sources of funding for APCs.

Monographs

- 6.8. Although we reject a simple binary division between STM and HSS disciplines, a clear difference between most of the disciplines in the two groups is the value attached to monographs and other books such as edited collections of essays; they form a substantial proportion of the material submitted to the RAE exercises from 1986 to 2008 in many HSS disciplines²⁰. As we noted in our Report, relatively few research monographs are as yet available online, and still fewer on OA terms. For the health of research in those HSS disciplines where a high proportion of work is published in book form, developing a secure future for books of all kinds (noting that the distinction between monographs aimed at academics, and trade books aimed at a more general

¹⁹ Significant amounts of valuable HSS research are also undertaken, of course, by scholars without any affiliation to a university or other research institution, and it is important that such scholars should continue to be able to publish the results of their work. But our focus and our policy recommendations related to research supported from public funds.

²⁰ See the evidence for 2008 presented in Nigel Vincent, 'The Monograph Challenge' in Nigel Vincent and Chris Wickham (eds) *Debating Open Access*, British Academy 2013.

audience is fuzzy at best) is a matter of real concern. We also noted in our Report some of the experiments under way to investigate options for OA models for monographs; but we concluded that it was impossible to encompass monographs within our policy recommendations, beyond seeking to encourage further initiatives.

- 6.9. Both RCUK and the HE funding bodies have come to similar conclusions, and have for the present excluded monographs and other books from their OA requirements. Meanwhile, however, experiments and initiatives such as OAPEN²¹, Open Book Publishers²², and Knowledge Unlatched²³ have continued to develop; the Wellcome Trust has introduced an OA requirement, with full funding support, for monographs and book chapters which arise through its funding; and UCL is leading a proposal submitted to the EU to develop a shared infrastructure for OA monographs.
- 6.10. In the light of such developments, HEFCE anticipates significant developments in OA options for monographs over the next few years, and we agree. We also agree with those who predict that overall solutions are likely to be complex²⁴, and that alongside the current experiments, there needs to be further investigation of the general shape of the monographs market, and much more engagement with the research community on these issues. We therefore welcome the plans that HEFCE is developing, in partnership with the AHRC and ESRC, for a programme of work to explore OA options for monographs and other books; and its convening of a steering group to oversee the work.

Key points

- ❑ Differences between disciplines in terms of cultures and practices, and also of funding patterns, are more complex than a simple division between STM and HSS disciplines
- ❑ Differences in the ways in which disciplines access funding for research mean that the sources of funding for APCs are bound to vary on a disciplinary basis.
- ❑ There is a need for further analysis of the market for monographs and other books, and while there are likely to be significant developments in OA options, developments in the long term are likely to be complex

²¹ <http://oapen-uk.jiscebooks.org/>

²² <http://openbookpublishers.com>

²³ <http://www.knowledgeunlatched.org/>

²⁴ Vincent, op.cit.

7. Co-operation between stakeholders

- 7.1. Our Report stressed that effective and sustainable progress in the transition to OA depends on co-operation and goodwill between different stakeholder groups, who need to develop a deeper and shared understanding of their interdependent roles. No single player can deliver a sustainable system, or manage all the risks. Hence we emphasised the importance of dialogue, and for an implementation strategy that ensures active co-ordination and engagement from all stakeholder groups.
- 7.2. These themes are echoed in statements from our respondents. Many of them speak of discussions to improve communication and gather feedback; and about collaborative work on issues such as metadata and standards, workflows, the development of repositories and so on. As the Association of Learned and Professional Society Publishers puts it, there is a need to bring stakeholders together ‘from the entire length of the scholarly communications chain’, to examine how to prevent duplication of effort, how divergent work-streams could be brought together, and how information and metadata can be created and shared for the benefit of all.
- 7.3. But there is no single body that is taking responsibility for overseeing the transition to OA in the UK, and for providing a structure to support the kind of shared dialogue, active co-ordination and engagement from all stakeholders that we envisaged. Bodies such as Jisc and the RIN are facilitating parts of the necessary work; but publishers and others suggest a need to establish a formal structure for dialogue, engagement and collective action in dealing with the inevitable and continuing issues that arise during implementation. We agree that such a structure should be established as soon as possible, to help address the issues that we highlight in this review.
- 7.4. We point in the rest of this section to some areas where elements of collective action are already evident, although much further work is required in each of them.

Infrastructure, metadata and standards

- 7.5. As we noted in Section 3, realising the full benefits of OA, whether Gold or Green, depends on further development of infrastructures to increase efficiency, effectiveness and discoverability. We also noted the efforts being made to improve interoperability between systems both within and across universities, funders, and publishers, and to promote the uptake of existing standards, and of services such as the unique identifiers for researchers provided by the ORCID initiative.
- 7.6. But there is also a need for more concerted action at national level. A number of organisations have suggested the need for a UK-wide collection of OA publications, in order to ensure their preservation for the long term, and also to facilitate discovery and re-use, with analytics tools to enable data mining alongside research intelligence. As

public money is invested in OA, there is a need for stakeholders at many levels to consider the complex issues relating to long-term preservation of OA content.

Preservation of UK OA material will be enabled through the legal deposit regulations for non-print materials, which were introduced in April 2013. They empower the British Library (BL) and other legal deposit libraries to collect, store and preserve digital content and provide a national archive of such content, including e-journals. Those libraries are therefore currently investing public funds in digital systems to enable digital preservation at large scale, and this needs to be taken into account in the future implementation of OA.

- 7.7. Effective development of an infrastructure to address all these issues clearly depends on co-operation. It is important that all stakeholders should continue to build strong operational relationships with each other; and to agree on key priorities and how they can most effectively be addressed in building the infrastructure, including the necessary underpinning work on metadata and standards. Support for work of this kind should continue to feature prominently among Jisc's priorities.

Evidence and monitoring

- 7.8. We have noted at several points in this review the lack of evidence on many key features of the OA landscape. There is still a lack of reliable data and information on issues such as the use of repositories; disciplinary differences in the behaviours of authors and readers in the UK and the rest of the world; the impact of different lengths of embargoes; and the likely impact of the new OA policies from RCUK and others. We have also noted the efforts being made by universities, funders and publishers to gather evidence on such issues, and to monitor progress from their own perspectives. At present, however, there is no basis for ensuring that such data collection is consistent, or its outputs comparable.
- 7.9. We stressed in our Report the need for co-ordination in gathering and analysing evidence on key features of the transition to OA: the pace, scale and patterns associated with increases in accessibility, and also the use made of OA publications; the costs and revenues relating not just to OA, but to the remaining subscription-based journals and articles; the impact on learned societies; and the impact if any on the quality of services to both authors and users. Individual stakeholders may be able to generate information on parts of the overall picture; but it is unlikely that they will be able to cover all parts of the landscape. Moreover, there is the risk that partial information and divergent methodologies will create a misleading picture, and unnecessary tensions between different stakeholders.
- 7.10. Some initial work has been commissioned by the Open Access Implementation Group (OAIG). A working group has also been convened by the Research Information Network (RIN), to seek to develop a framework of indicators covering key aspects of the transition to OA. One of the challenges will be to gather and analyse what may well

be commercially-sensitive data. The work is as yet in its early stages, but the aim is to produce a report for consideration by the various parties, including recommendations on how the process should be governed for the medium term, by early 2014. We welcome this work, which we hope will provide useful input into RCUK's review of its policies in 2014.

Communications and advocacy

- 7.11. Many in the library and OA publishing communities have for long been active in seeking to promote the cause of OA, and take-up of OA options by researchers; and many OA advocates have seen the new policies as an opportunity to enhance their efforts. There is no shortage of material about the nature and benefits of OA, and guides on how to achieve it. Impressive arrays of such material are readily accessible via various aggregating services²⁵ as well as some university library websites.
- 7.12. But universities, publishers and learned societies have all recognised the need for special efforts to inform researchers about the nature and implications of new OA policies. We have moved rapidly from a situation where OA was largely regarded as a specialist interest, to one where all researchers need to understand sufficient to enable them to engage, in relation to publishing their own work. Universities have adopted a mixture of targeted, cascade and broadcast approaches in order to reach as many researchers as possible. Most have also produced simple guides informing researchers about what they need to do to comply with RCUK's as well as with their own institutional policies and procedures. A number of learned societies have run workshops, seminars and conferences, as well as communicating with their members through newsletters and their websites. Some publishers have been active too in providing general guidance.
- 7.13. There is agreement across all stakeholder groups, however, that levels of awareness and understanding remain low across the research community; and that there is a need for more effective communication as implementation of the new policies gathers pace. Some commentators, indeed, are critical of the efforts made so far. RCUK has acknowledged that misunderstandings and misinterpretations of its policy remain, despite the guidance and FAQs that it has issued; and there may be a need to address some of the myths that have arisen. We agree with Jisc and others who suggest that this is another area where collective or co-ordinated action is likely to be more efficient in avoiding duplication of effort, and more effective in reaching a wider range of researchers.

²⁵ See, for example, the Open Access Scholarly Information Sourcebook (<http://www.openoasis.org/>); and the rather fuller Open Access Directory (http://oad.simmons.edu/oadwiki/Main_Page)

Key points

- ❑ Publishers, libraries, Jisc and others have co-operated in efforts to develop the infrastructure to support OA, but much remains to be done.
- ❑ Work has been initiated to develop an agreed framework of key indicators of progress in the transition to OA
- ❑ There is a need for collective action to inform researchers about the changes that are taking place, and their implications, with consistent messages and practical advice.
- ❑ More broadly, there is a need for a formal structure to facilitate and co-ordinate action by all stakeholder groups, and to address issues and problems as they arise.

8. The UK and the rest of the world

- 8.1. We noted at several points in our Report the implications of the international scope of research publishing; and as we noted in Section 3, our recommendations designed to increase access in the UK to publications produced across the globe have received relatively little attention. We also pointed in our Report to policy developments in support of OA in other countries, but in addition to differences in the pace of transition, and the risks and potential costs so long as UK policies are ahead of those in the rest of the world. Hence we stressed the importance of sustaining and enhancing the UK's role in international efforts to accelerate the transition to OA.
- 8.2. Our Report has clearly been influential as a catalyst for debates across the world, especially in Europe and North America; and to a significant extent the UK is now being watched as a test case in implementing policies that explicitly promote Gold OA in the context of a mixed economy. This leadership role brings risks as well as potential benefits.
- 8.3. UK organisations including RCUK, Jisc and the publishing trade associations have therefore been active in discussions with the EU, and with other relevant bodies in Europe and the USA. RCUK is represented on the Science Europe working group on open access, and through Science Europe and the Global Research Council. It is also collaborating with the Wellcome Trust and other UK and European funders to fund a study which will examine how best to develop an open market for APCs
- 8.4. Some commentators fear, however, that the UK's support for Gold OA is out of step with the emerging policies of major funding agencies in the rest of the world, which they believe are moving steadily and overwhelmingly towards policies based on Green OA. In the meantime, they argue, while the UK research community is paying to make its research accessible across the globe, articles published by overseas authors remain behind subscription pay-walls, at least for the duration of embargo periods. Hence the global research playing field is no longer level, and UK researchers and universities are disadvantaged.
- 8.5. On the kinds of view set out above, policy developments in the UK since our Report take the form of a quixotic and expensive experiment that will not advance the cause of OA. We do not agree²⁶. While we acknowledge the differences in emphasis between the UK and many other countries, we believe that policy developments across the world are more nuanced than a simple rush for Green and we agree with those who believe that it is too early to predict changes in the international publishing market. Moreover we

²⁶ Nor do we agree with the rather odd assessment of a recent assessment of OA strategies in the European Research Area (including the UK) that none of the funder policies they identified favoured Gold OA. Science-Metrix, *Open Access Strategies in the European Research Area*, 2013.

believe that the arguments we presented in our Report in favour of a more balanced approach still stand.

- 8.6. Some have urged the case for international harmonisation. But we agree with those who see harmonisation across a range of organisations and countries with different interests and perspectives as too challenging a goal, and argue instead for co-operation and co-ordination in order to build understanding of such differences and their implications. It is important that the Government, RCUK and others should continue to engage with key partners and international organisations to that end²⁷.

Key policy developments

- 8.7. As we anticipated, there have been some important policy developments beyond the UK since we reported last June. Only a month later, in July, the EU Commission issued two papers: first a Communication on better access to scientific information²⁸, which announced its intention to introduce an OA requirement for all papers arising from Horizon 2020; and second, a Recommendation²⁹ to member states to define clear policies on OA. With regard to Horizon 2020, the Communication envisages OA via both the Gold and Green models, though the arrangements for the payment of APCs are not yet clear. Discussions are currently under way on the precise regulations that will apply.
- 8.8. Individual countries in Europe have also continued to develop their policies and positions. Thus, the Deutsche Forschungsgemeinschaft (DfG) has continued its policy of providing funds to universities to meet the costs of APCs for publication in OA (but not hybrid) journals; the Netherlands Organisation for Scientific Research (NWO) has established a policy preference for Gold OA, and support for the payment of APCs through an incentive fund; and the Austrian Science Fund (FWF) continues to support both Gold and Green OA, with policies that allow researchers to apply for funds to meet the costs of APCs up to three years after a research grant comes to an end. In France, the Minister for Higher Education and Research stated in January 2013 that the Government would continue to support both Green and Gold models, but also to develop a third model, platinum, that would provide, on the basis of hybrid business models developed

²⁷ At the very least, there is a need for agreement on the vocabulary used to describe funders' policies, to make it easier for grant-holders to understand their obligations

²⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Towards Better Access to Scientific Information: Boosting the Benefits of Public Investments in Research*. COM(2012) 401 final.

²⁹ *Commission Recommendation of 17.7.2012 on access to and preservation of scientific information*. C(2012) 4890 final

in collaboration with all the stakeholders in research publishing, access without payment for both authors and readers³⁰.

- 8.9. Among other major research nations, the Australian Research Council has introduced a new policy that requires publications to be deposited in an OA repository within twelve months from the date of publication. In the USA, the Office of Science and Technology Policy issued in February 2013 a Memorandum³¹ directing Federal funding agencies to develop within six months plans to increase public access to both publications and data arising from the research they fund. The plans have not yet been published; but the NSF, for example, has already announced proposals for a new requirement that researchers should deposit a copy of their work in a new public access system, with conditions of deposit likely to vary, depending on publishers' policies, and the length of time before the publication will be made available free of charge. NSF will consult during the next two years before final award terms and policies are established³².
- 8.10. Alongside these developments in individual countries, there have been discussions leading to policy statements from three international organisations.
- 8.11. First, Science Europe, the association of 51 research organisations across Europe, issued in April 2013 a Position Statement with principles on the transition to OA³³. The aim was to promote a coherent and collective approach across Europe, and more widely. Some publishers and learned societies, however, have expressed disquiet about the statement, in particular about its advocating short embargo periods, and the assertion that 'the hybrid model, as currently defined and implemented by publishers, is not a working and viable pathway to OA'. Publishers are concerned because they see a shift to the hybrid model as a critically-important pathway for established journals to make the transition to OA. Science Europe, on the other hand, appears to be concerned about the risks relating to hybrid journals and 'double-dipping', and the need for offsets between subscription prices and APCs. We discuss these issues in Section 9.
- 8.12. Second, the Action Plan³⁴ issued by the Global Research Council in May 2013 sets out a series of 14 actions under the headings of raising awareness in the research community, promoting and supporting OA, and assessing its implementation. The plan is intended

³⁰ See the Minister's speech of 24 January 2013 at <http://www.enseignementsup-recherche.gouv.fr/cid66992/discours-de-genevieve-fioraso-lors-des-5e-journees-open-access.html>

³¹ Office of Science and Technology Policy, Memorandum for the Heads of Executive Departments and Agencies: *Increasing Access to the Results of Federally Funded Scientific Research*. 22 February 2013.

³² NSF Public Access Initiative, available at http://www.nsf.gov/about/budget/fy2014/pdf/45_fy2014.pdf

³³ Science Europe, *Position Statement Principles for the Transition to Open Access to Research Publications* April 2013

³⁴ Global Research Council *Action Plan towards Open Access to Publications*, May 2013

to initiate a process, taking into account that individual regions, countries, and funding agencies work from different backgrounds, and are likely to move at different speeds. It is in line with UK policy in acknowledging hybrid journals as a starting point; and in accepting that since the transition to OA may take some time, moves to increase access through subscription licences are an option to be explored, especially if consortia can capitalise on economies of scale.

- 8.13. Finally, a statement³⁵ issued by the G8 Science Ministers in June 2013 recognised that different routes to open access needed to be explored and developed in complementary ways, and that co-operative efforts should continue to promote increases in public access to the results of publicly-funded research across the globe. An initial meeting to that end is planned for March 2014.
- 8.14. Despite the publishers' reservations about the Science Europe statement, it is important that efforts to influence and co-ordinate policy at an international level should continue; and that they should so far as possible encompass discussions with the full range of stakeholder groups.

Overseas journals

- 8.15. At a different level, researchers in HSS disciplines in particular have pointed to the reluctance of publishers and editors of journals from outside the UK to adopt policies in compliance with UK funders' requirements. Indeed, there are few incentives for them to do so, since most of the articles they publish do not involve UK authors³⁶. Hence there is little evidence of take-up of Gold OA, or of short embargo periods, by HSS journals beyond the UK. This poses a problem for UK researchers who wish to publish in such journals, which may be the leading, or simply the most appropriate, journals through which to disseminate their work. Although comment has so far concentrated on HSS, it is conceivable that such issues may apply to researchers in some STM disciplines³⁷.
- 8.16. Commentators therefore argue that it would be wrong to direct UK researchers to abandon the search for international recognition that is associated with publishing in the leading international journals in fields such as political science or anthropology. More specifically, the implications could be serious for those working in disciplines such as modern languages and literature, history or area studies where publication in an

³⁵ G8 Science Ministers Statement London UK, 12 June 2013

³⁶ See in particular, Chris Wickham, 'Open access in the UK and the international environment: the view from Humanities and Social Sciences', in Nigel Vincent and Chris Wickham (eds) *Debating Open Access*, British Academy, 2013

³⁷ In the life sciences, however, the experience of the Wellcome Trust is that major overseas publishers offer a compliant Gold OA option with a CC-BY licence

overseas journal – and often in a foreign language - is essential to securing any international recognition for their work.

- 8.17. Since the transition to OA will vary in pace in different circumstances across the globe - sometimes at the sub-discipline level - we believe that funders should acknowledge that there may be a limited number of circumstances (such as publication in a foreign language) where genuine difficulties arise. RCUK's expected rates of adoption of OA over the next few years may provide sufficient flexibility; but it is important that this should be kept under review as the expected rate for OA rises towards 100%. Similarly, the UK funding bodies, as they develop the arrangements for the next REF, should deal with these issues explicitly, either through an exception, or by setting an expectation for the adoption of OA that allows sufficient flexibility for authors to publish in overseas journals.

Key points

- ❑ **Our Report and subsequent policy developments have provided a catalyst for debate on OA in many other countries and international forums; the UK is seen as a test-bed for the implementation of a policy preference for Gold OA**
- ❑ **There have been significant policy developments in the EU, the US and other major research nations, and attempts to stimulate and co-ordinate activity through forums such as Science Europe, the Global Research Council, and the G8**
- ❑ **While there are differences of emphasis between the UK and some other countries, we do not accept the view of some commentators that the UK is isolated**
- ❑ **Concerns have been raised about possible restrictions on the ability of UK authors to publish in important overseas journals, and we believe there should be scope to address those concerns.**

9. Funding and costs

- 9.1. Our Report recognised that increases in access could not be achieved without some increase in costs, and this has been for the most part accepted. We also stressed that any cost estimates were subject to a great deal of uncertainty; but that they were modest in comparison with the amounts spent on other aspects of the research process. As we discuss below, many universities have in practice been unable in the short term to identify and set aside additional funding on top of the block grants from the Wellcome Trust and RCUK; but it is not clear that such funds will in fact be required, at least in the short term.
- 9.2. Our best estimates were based on modelling undertaken for us by Cambridge Economic Policy Associates, an independent consultancy with specialist knowledge in this area. Its analysis was a development from earlier studies they had undertaken, which had been commissioned, overseen and published jointly by JISC, the Publishing Research Consortium, Research Libraries UK, the RIN, and the Wellcome Trust ³⁸.
- 9.3. Our judgement based on that analysis was that achieving a significant increase in access, making use of the Gold and Green models as well as extensions to licensing, would require an additional £50-60m a year in expenditure across the HE sector during the transitional period. As we noted in Section 2, in order to support the transition to OA, the Government provided an initial £10m, and RCUK £17m in 2013-14, with the promise of increases in subsequent years; but no additional funding has been provided for licence extensions. It is as yet unclear how the costs of the proposed OA requirement for the next REF will be met.
- 9.4. Some commentators take the view that since OA will result in higher returns on the investments in research, it is reasonable to expect the Government and its agencies to meet those additional costs. Our Report argued that since publication and dissemination is an integral part of the research process, they should be funded as such. This position is now enshrined in RCUK policy, as it has been for some time by the Wellcome Trust.
- 9.5. Nevertheless, as we noted in Section 2, few funders have as yet followed RCUK and Wellcome in providing funds for OA. The Association of Medical Research Charities (AMRC) and its members, as well as research charities operating in other areas, have raised concerns about the costs of APCs. The Wellcome Trust and the AMRC are

³⁸ The assertion in Commons BIS Committee's report that the Group relied on economic advice from the Department of Business Innovation and Skills (BIS), which thereby compromised our independence, is incorrect, and appears to be based on a misunderstanding arising from a minute of one of the Group's meetings. An early suggestion that BIS economists might provide assistance was in the event rejected as inappropriate. As we explained in our Report, the Group instead commissioned an independent report, and received no economic input from BIS.

undertaking a survey of member charities and other Europe PMC funder group members to gain a clearer understanding of their policies and the associated costs.

- 9.6. For many universities, a key concern at present is that block grant from RCUK covers only part of the additional costs they will incur in the payment of APCs, as well as additional administrative costs. The grant is of course intended to cover, in a flexible way, publications arising from research funded by the Research Councils. Other research in universities is funded either by HEFCE and the other UK Funding Bodies (through QR block grant) or from other research funders and sources of university income. We look forward to a wider range of research funders committing to support publication costs, as an integral part of their funding of research, and to universities evolving ways in which publication can be funded where research is not supported directly by project grants.
- 9.7. Most universities have decided that they will not, at least for the present, add to the RCUK block grant from other sources of revenue available to them, although some have indicated that they will keep this under review. Estimates of costs both for the sector as a whole and for individual universities in meeting RCUK's requirements remain largely speculative at this early stage.³⁹ Even though expenditure on APCs has been slow to take off in many universities, there are common fears across the sector that, since the take-up of Gold OA and resulting costs are difficult to anticipate, funding gaps may arise.
- 9.8. The evidence we have gathered indicates that such worries about costs have underpinned many universities' decisions to favour the Green rather than the Gold model. But at the same time we noted concerns from some learned societies and others that universities may introduce rationing of funds to support APCs, with all its divisive implications, since authors' failure to secure such funds may be taken as a judgement on the quality of the research they are undertaking. There is no evidence at this stage to suggest that such concerns are justified: as we have seen, almost all universities have adopted a first-come, first-served approach. But some researchers may need to be reassured on these points.
- 9.9. These concerns and uncertainties are exacerbated by a number of factors. First, many universities still lack comprehensive information about the numbers of articles that will be covered by the RCUK policy, the numbers for which they are likely to be asked to pay an APC, and the likely average level of APCs.
- 9.10. The lack of solid evidence, for example on the high, but varying, proportions of publications produced in collaboration with researchers from other institutions (in the

³⁹ It should also be noted, however, that smaller less-research-intensive institutions are receiving only small sums in block grant, and the smallest nothing at all.

UK or overseas) means that most universities are for the present adopting a very flexible approach to payment of APCs relating to such publications. Where the collaboration is with UK institutions, universities are accepting responsibility for payment of the full APC on a 'knock-for-knock' basis. Where the collaboration is with an overseas institution, most universities are prepared to pay the APC even where their home researcher is not the lead or corresponding author; but it is not clear whether such policies can be sustained on a large scale.

- 9.11. It is too early as yet to draw up firm guidelines on these issues; but this means that universities have no clear idea of the implications for their overall expenditure on APCs. It is clearly important that universities should generate systematic information about patterns of collaborative publications and their cost implications, in order to create a more solid basis for future decisions.
- 9.12. A second area of concern relates to the page and colour charges that are levied by a number of journals. Such charges have until now been largely hidden from university administrators. Researchers could seek provision for them to be included in research grants; and if that was not the case, the charges were generally paid from research team or departmental funds. Henceforth, RCUK will not allow provision for these charges in research grants; and some universities worry that colour charges in particular may take a significant proportion of the RCUK block grant.
- 9.13. Universities' particular concern relates to journals which levy page and colour charges in addition to APCs; and the cases where it may not be clear to authors that the two separate kinds of payment are required. Again, it is important that further evidence should be gathered on these issues, as well as the overall pattern of expenditure on these charges. There is also a need for greater clarity on these points on journal websites; and also to inform authors about options to avoid colour charges where it is acceptable for the print (but not the online) version of the publication to be black and white.
- 9.14. A third area of concern relates to administrative costs for both Green and Gold OA: payment, monitoring and reporting systems; the development of repository infrastructure; providing advice to researchers on the complexities of different funders' and publishers' policies; and so on. Start-up costs have been supported by the pump-priming grants awarded to thirty universities, and are allowable also from the initial RCUK block grants. But all universities are still in the relatively early stages of developing and implementing their systems, which are in many cases still at this stage labour-intensive; and as we noted in Sections 3 and 7, much remains to be done to develop interoperable systems with efficient flows of information between them.
- 9.15. Moreover, at this stage some significant UK-wide services to help universities are not yet operating to full effect. We have noted concerns about the currency and comprehensiveness of the information provided by the SHERPA FACT service, which is

intended to provide to provide clear guidance to universities and researchers on the compliance of journals with RCUK and Wellcome Trust policies. These concerns are being addressed; but along with the absence to date of the proposed API which would allow institutions to build the information from SHERPA FACT into their own systems, they have added to universities' administrative burdens in checking on compliance over the past few months. Similarly, the delays in the launch of the JISC APC pilot service, which would aggregate payments to publishers, also added to costs for those universities intending to use the service.

- 9.16. We trust that the steps now being taken to ameliorate some of the difficulties relating to administrative systems and costs will become effective soon; but for all the reasons set out above, levels of administrative costs for the longer term remain unclear.
- 9.17. All these concerns about costs are set in the wider context of the prospect of an OA requirement for the next REF; for such a requirement will cover a much larger number of publications than those covered by the current RCUK policy. Although the REF proposals stress access via institutional repositories, universities anticipate that the demand for payment of APCs will also increase (which is of course another reason why many universities are adopting Green as their favoured model). Whatever the balance between Gold and Green OA, some universities are concerned that an OA requirement associated with the REF will increase the cost burdens they face.
- 9.18. The prospect of growth in the adoption of OA has also brought a heightened focus on issues relating to transparency in the journals market. We argued in our Report that one of the advantages of OA publishing is that it brings greater transparency about costs and prices; and that we expected greater competition on price as well as the status of the journals in which researchers wish to publish. One year on from our Report, it is too early to see whether or not this is happening.
- 9.19. Some commentators, however, fear that market information is not sufficiently transparent, and that it is difficult to get a complete picture on APC pricing levels. Such fears are in part associated with reservations about the pre-payment schemes that some publishers have adopted, although as we noted in Section 3, significant numbers of universities have taken up publishers' offers of this kind, at least on an experimental basis. The Wellcome Trust – in partnership with RLUK, JISC, and others – has commissioned a study to analyse the developing market for APCs, and explore the associated opportunities and risks. There are clearly balances to be struck here, between promoting innovative approaches to publishing and pricing on the one hand, while avoiding the risk of a damaging downward pressure on the range and quality of publishing services on the other; and at the same time seeking to ensure value for money for researchers, institutions and funders. We agree that pricing models are

bound to evolve, and look forward to the results of the study. More evidence will give a better basis for future decision-making by all stakeholders.

VAT

- 9.20. The only one of our recommended actions that the Government did not accept is that it should work together with universities to find ways to reduce the VAT burden on e-journals. The problem here is that while books and journals are among the limited list of goods subject to a 0% rate under the VAT Act 1994, HMRC's view is that this applies only to the 'printed' versions. E-journals and e-books are treated as a supply of 'electronic services' which are subject to the 'standard' rate, currently 20%. Moreover, while businesses can recover VAT on the goods and services they purchase in order to produce more goods and services, universities are not in a similar position.
- 9.21. Universities can recover VAT only where it relates to a wholly taxable supply. Most university activity is of course concentrated on supplying education or research; and since the supply of education is an 'exempt supply', and research is largely outside the scope of VAT, universities are unable to reclaim input VAT wholly related to these activities. Where input VAT relates to both taxable and exempt activity, such as administrative costs, however, then an element of this VAT can be recovered under an agreed partial exemption special method. The recovery rates vary across the sector, depending on the method agreed for each university. While some universities enjoy recovery rates of around 15% to 20%, most are well below that, falling to 5% or less. Moreover, practice across the sector is that VAT recovered is allocated at institutional, rather than individual activity level, and so funds recovered are not distributed back to the e-journals budget.
- 9.22. There have been many attempts over the past few years to persuade HM Treasury and HMRC, as well as the EU, to reduce or eliminate the VAT burden that falls on e-journals and thus on university libraries⁴⁰. But HM Treasury's view is that EU Directives preclude the possibility of a zero rate (which is peculiar to the UK); and that although there has been debate in EU member states about the possibility of a reduced rate for digital content, the prospects of such a move are remote.
- 9.23. We must accept that judgement. Nevertheless we believe that it would be helpful for university finance officers and librarians to share their experiences on securing VAT refunds; and on the basis of shared experience to pursue discussions with HMRC.

Expenditure on APCs and subscriptions

- 9.24. The most pressing issue of all for universities in terms of cost is that they see little prospect at present of offsetting reductions in the costs of journal subscriptions as they increase their expenditure on APCs. The publishing trade associations indicate that

⁴⁰ For a brief history of these attempts, see Chapter 6 of *E-only journals: overcoming the barriers*, Research Information Network, JISC, Publishing Research Consortium and Research Libraries UK, 2010

publishers are working hard to provide information in how their pricing for APCs and subscriptions is calculated, and how changes in overall income are balanced. And we welcome the commitments that major publishers have made to adjust their subscription prices to take account of the rise in revenues they receive as APCs.

- 9.25. It is also clear, however, that it will not be straightforward to find ways to achieve offsets that meet the aspirations of universities and funders, but also the interests of publishers. Publishers suggest that in calculating adjustments to subscription prices, they must take into account the interests of all subscribing institutions on an international basis, not only those who have been paying APCs on behalf of their authors. The rationale is that no library should be charged a subscription fee for Gold OA content.
- 9.26. The problem here, as we noted in our original Report, is that the costs to the UK of the transition to OA depend critically on levels of take-up, particularly of Gold OA, in the rest of the world. If the rate is significantly lower than in the UK, universities will - under the policies at present articulated by major publishers - see little reduction in their subscription costs. For if even half of all the articles produced by UK authors were to be published after payment of an APC, that would still account for only c3% of the global total of articles published each year. If reductions in subscription prices are to be calculated on a global basis, any savings to UK universities would therefore amount to 3% at most, against which they will be making very significant increases in expenditure on APCs. Hence universities and funders are concerned as to whether any offsets should operate at an international, national or institutional level.
- 9.27. We emphasised in our Report that the relationships between universities' and funders' expenditure - and publishers' revenues - on *both* subscriptions *and* APCs would need close attention; and we recommended that future negotiations between universities and publishers should take into account the financial implications of the shift to publication in OA and hybrid journals.
- 9.28. There are a number of possible ways in which offsets between APCs and subscription costs might be addressed, with approaches that focus on one side of the coin or the other; and various organisations have undertaken some initial modelling. Much depends on the pace of transition to OA in the rest of the world. We consider these issues further in Part 2.

Costs and benefits

- 9.29. As we have repeatedly emphasised, modelling and estimates of the cost of a shift to OA must be treated with caution. Any estimates depend on forecasts of the levels of take-up of the Green and Gold models; of the average levels of APCs; of any reductions in the amounts paid for subscriptions; and, critically for individual countries or institutions, of

the levels and speed of take-up across the world. We repeat that forecasts on all these issues remain subject to wide variation.

- 9.30. Both the Lords S&T Committee and the Commons BIS Committee have expressed surprise that the Government did not undertake a full cost-benefit analysis (CBA) of its OA policy; and they have recommended that such an analysis should be undertaken, and updated to reflect actual rather than projected costs during the transition period. An initial study is being commissioned by BIS to review the relevant literature and to advise on the feasibility of a full CBA and how it might be undertaken.
- 9.31. Two significant pieces of work have been produced since our report, both focusing on costs rather than the wider benefits of OA. The first, by Houghton and Swan⁴¹, explored the costs for individual universities using various levels of APC as well as Green OA under two assumptions:
- a. worldwide OA, where the model explored is assumed to be in place across the globe
 - b. unilateral OA, where the model explored is adopted by the university alone, all else remaining the same.
- 9.32. The assumptions are of course unreal extremes. The analysis shows that, with certain provisos, all universities would see cost savings from worldwide Gold OA with APCs at current average levels, and even if the average rose to £2,000; but that all would face additional costs if they moved unilaterally. For Green OA, again all universities would face additional repository-related costs under the unilateral assumption, but at a much lower level than for Gold OA.
- 9.33. The second study, undertaken by economists at BIS⁴², modelled costs over ten years from 2011 to 2020 for two options:
- A. providing Gold OA for UK articles that are currently accessible on OA terms, growing at a rate of 20% a year
 - B. providing Gold OA for articles arising from Research Council funding only, with a mixture of Green and Gold for other UK articles
- 9.34. These two options were tested against a ‘do-nothing’ option, again with an assumed growth rate for OA of 20% a year. The analysis indicates that the additional costs of

⁴¹ Swan, A and Houghton, J, *Going for Gold? The costs and benefits of Gold Open Access for UK research institutions: further economic modelling*. UK Open Access Implementation Group, 2012. See also Houghton, J and Swan, A, *Planting the Green Seeds for a Golden Harvest: Comments and Clarifications on “Going for Gold”*, *DLib Magazine*, 19, 1/2, 2013

⁴² *Open Access. Economic Analysis of Alternative Options for the UK Science and Research System*. Department for Business Innovation and Skills, 2013

option A are £500m over ten years, and for option B £400m. Hence it suggests that option B provides better cost-effectiveness.

- 9.35. Both these studies focus on costs. They therefore do not attempt to quantify the differential value of Gold OA, with immediate access to the version of record and full re-use rights, as distinct from the delayed access to another version of the article with more limited re-use rights provided by Green OA. But there are broader issues to address with regard to benefits.
- 9.36. The central case for OA is built around the principle that the results of publicly-funded research should be freely accessible in the public domain. As we stated in our Report, we believe that improving the flows of information and knowledge produced by researchers will promote
- ❑ enhanced transparency, openness and accountability, and public engagement with research;
 - ❑ closer linkages between research and innovation, with benefits for public policy and services, and for economic growth;
 - ❑ improved efficiency in the research process itself, through increases in the amount of information that is readily discoverable and accessible, reductions in the time spent in finding it, and greater use of the latest tools and services to organise, manipulate and analyse it; and
 - ❑ increased returns on the investments made in research, especially the investments from public funds
- 9.37. The BIS economic analysis points out that benefits of this kind mean that an OA policy will be ‘instrumental in advancing the agenda [of the Government’s] Innovation and Research Strategy for Growth’⁴³; but it also notes the difficulties in seeking ‘to attach specific values to the benefits attributable to open access’. Even setting aside questions relating to the opportunity costs of investing in OA rather than some other initiatives, there are the broader difficulties associated with identifying the economic benefits of investment in basic research (the kind of research that predominates in scholarly journals). Econometric studies, surveys and case studies all indicate that the benefits are substantial, but that they come in a range of forms, and that no simple model of economic benefits is possible⁴⁴. Houghton’s intuition⁴⁵ is that reducing the barriers to access to the knowledge stored up in scholarly journal articles will increase the returns

⁴³ <http://www.bis.gov.uk/assets/BISCore/innovation/docs/I/11-1387-innovation-and-research-strategy-for-growth.pdf>

⁴⁴ Salter, A and Martin, B The economic benefits of publicly-funded basic research: a critical review. *Research Policy*, 30 pp 509-532, 2001.

⁴⁵ Houghton, J et al, *Economic Implications of Alternative Scholarly Publishing Models: Exploring the Costs and Benefits*, JISC, 2009

on investment in research. But for all the reasons set out above, quantifying the benefits to set alongside estimates of the costs will not be straightforward.

Key points

- ❑ **Although research is funded from a number of different sources, relatively few universities as yet have decided to fund APCs by adding to the block grant provided by RCUK**
- ❑ **Universities' caution about Gold OA is exacerbated by lack of solid information and uncertainties as to average APCs, likely levels of take-up, and the costs associated with collaborative publications, page and colour charges, VAT, and administrative costs**
- ❑ **Funders, universities, Jisc and publishers need to work together to consider the relationships between expenditure on APCs and on journal subscriptions, and the scope for offsets between the two**
- ❑ **Work published since our report on the possible costs of the transition to OA explores various options, but should not be regarded as definitive; and it may well prove difficult to attach specific values to the benefits attributable to OA.**

Part 2

10. Progress towards the balanced package and the mixed economy: an evaluation

- 10.1. As we noted in Section 3, our Report presented a balanced package of recommendations and actions that represented a best fit with the interests and aspirations of different players in the scholarly communications system. It was based on a review of evidence from a wide range of sources and perspectives: much wider and fuller, we believe, than some of our critics have been prepared to acknowledge⁴⁶. Our central recommendation was that we should seek to accelerate and manage a transition to OA over an extended period which would be characterised by a mixed economy providing: immediate free access to articles supported by APCs; subscription-based journals with immediate access under licence, or free access via repositories after embargo periods; and extensions to licensed access for a wide range of journals for the benefit of people and organisations beyond the HE sector.
- 10.2. Our recommendations thus built on and enhanced policy developments over the past decade. But there is no doubt that the Government's acceptance of our Report, the new RCUK policies and the funding bodies' consultations, have galvanised activity across the HE sector and the publishing community. We welcome the significant progress that has been made. There is momentum behind the moves to OA in nearly all parts of the scholarly communications system, and the picture we present in this review is an interim one, which will change considerably even in the course of the coming year.
- 10.3. We recognise, however, that progress has been mixed, has engendered lively debate, and has given rise to the many issues we discuss in Part 1 of this review. In this Part 2 we therefore provide an evaluation of what has been achieved, what remains to be done, and of key issues and problems that need to be addressed; and recommendations for further action.

The balanced package and the pace of change

- 10.4. Both the mixed progress and the lively debate were to be expected, and we welcome the prominence which the substance of our Report now enjoys in planning the future of a robust research environment in the UK.

⁴⁶ We do not accept the Commons BIS Committee's assertion that there were critical gaps in our evidence base.

- 10.5. Within the concept of the balanced package, however, we also spoke of the need to manage the transition to OA in an orderly way. Following the publication of our Report, some commentators have recognised the inherent difficulties:
- ❑ striking a balance between the needs and aspirations of users, creators and funders;
 - ❑ the necessity for continuing dialogue on the balance between Gold OA publications, extensions to subscriptions, and the provision of access via repositories; and
 - ❑ the need to distinguish between policies and guidance appropriate to the transition period on the one hand, and the longer term goal of Gold OA publishing on the other.
- 10.6. Other organisations and individuals, however, have sought to challenge our approach, and to promote a more rapid or exclusive transition to OA via either the Gold or the Green route.
- 10.7. As we anticipated, both the rates and scale of change vary across different disciplines and institutions, not least because they start from very different positions. Both publishers and universities note increases in interest from researchers in OA, and growth in the take-up of OA options, albeit in many cases starting from a low base. For publishers such as PLOS and BioMedCentral the transition to OA has already taken place, and they are growing fast. However, the Wellcome Trust notes that rates of compliance with its OA requirements still remain after many years lower than it would wish.
- 10.8. Most universities were unprepared for the nature and pace of the changes, but have succeeded in moving quickly on a number of fronts in the course of the past year. The challenges were exacerbated from universities' perspectives in the early stages by lack of clarity around RCUK and publisher policies, and the requirement to spend the BIS transitional funding – which was in itself much welcomed - within a very short time. Decisions had to be made quickly, based on limited information, and with little time for wider discussion and engagement with researchers on OA and its implications. The greater flexibility introduced into RCUK's policy in the early months of 2013 has been much welcomed by universities; but the uncertainties before the final policy and guidance was issued on 8 April came with a cost.
- 10.9. It is important also to set the debates and concerns about RCUK policy alongside the consultations about OA requirements for the post-2014 REF. Publishers, universities, learned societies and researchers are all aware that the impact of those requirements is likely to be much larger than that of the RCUK policy. There is thus a concern that the criteria and requirements for the REF should align with those adopted by RCUK; but at

the same time a belief in some quarters that RCUK requirements as currently defined may not be appropriate for all circumstances.

- 10.10. As a result of all these factors, universities have seized the challenge of moving to an OA world in a variety of ways. It is evident that many have made significant progress in accelerating the use of the repositories they had already established, and in firming up their mandates on staff to deposit publications in them. We welcome this progress along the Green route, as well as the parallel progress to expand the use of Gold OA.
- 10.11. The policy requirements from RCUK and the HE funding bodies will stimulate significant change over the next five years. But it is important that momentum should be maintained, not least in order to avoid uncertainties for researchers who need to plan their research and publications well ahead. In order to build on the achievements of the past few months, however, it is important also to establish greater clarity of direction for the future. Otherwise, there is a risk that the gains of establishing a co-operative and managed process will be eroded.
- 10.12. At a policy level, there is also a need to address a key imbalance in the focus over the past year. As the Publishers Association has expressed it, the emphasis has been almost exclusively on increasing access at a global level to UK research outputs, while our recommendations on improving access in the UK to the global outputs of research have been given much less attention. This imbalance has been reflected in much of the debate about our Report, most recently in the Report of the Commons BIS Committee, which has nothing to say about ways to increase access to the global outputs of research for people in the UK.

Recommendation 1

The pace of change should be maintained whilst setting greater clarity of direction, in line with the recommendations we set out below on the development of the mixed economy.

Recommendation 2

There needs to be a renewed emphasis on implementing our recommendations on improving access within the UK to the global outputs of research through licence extensions and similar initiatives (see also recommendations 10-12) alongside our recommendations on outputs produced by UK authors

Green and Gold

- 10.13. We avoided for the most part the language of “Green” and “Gold” in our Report, since we preferred not to use terminology which might not be comprehensible to many readers; but these terms have become so widely used that we now feel able to adopt them.
- 10.14. Much of the debate over the past year has indeed revolved around “Green versus Gold”. Since we emphasised the importance of a mixed economy, we had hoped that discussion could move on from such a binary opposition. Some commentators have challenged our support for the Gold model, and have called for a shift from that position in favour of a policy based on Green OA with short embargoes. We understand why such arguments are being deployed, and how concerns about costs can give rise to a policy-preference for Green. We discuss those concerns further in paragraphs 10.24-10.33 below.
- 10.15. Nevertheless, we re-state once more the importance of balance between the core objectives on which our original Report was based:
- ❑ Expanding access to published research findings
 - ❑ Sustaining the excellent performance of the UK research base and the delicate ecology in which funders, universities, learned societies and publishers all have vital roles to play
 - ❑ Ensuring that costs and funding models are appropriately balanced, in order to promote innovation without undue risks to the evolution of journals’ underlying business models.
- 10.16. In this context, we wish to re-emphasise the following points. First, our recommendations amounted, as we have stressed at several points, to support for a mixed economy during a transition period (the length of which we cannot determine), in which both Gold and Green models should continue to play key roles. The rapid growth of Gold OA publishing indeed means that such a mixed economy is already in place, and in that sense our Report simply reflected current realities. But it is important that support should continue to be provided for both models, and that publications that achieve OA through either route should be treated as of equal value. This will minimise any potential for divisiveness between those researchers who can, and those who do not, for whatever reason, manage to secure funds to pay APCs.
- 10.17. Second, the Gold model is the one which will ultimately deliver most effectively against the objectives of making published research findings accessible and free at the point of use, as quickly and to as many people as possible. Those who have criticized our support for Gold underplay the key advantages that Gold, but not Green, OA brings: immediate access to the published version of record with minimal restrictions on re-use.

- 10.18. Third, we also believe that it would be wrong to restrict funding support for the payment of APCs – as the Commons BIS Committee suggests - to fully-OA journals, and to refuse it to hybrid journals. This position is largely driven by concerns about so-called double-dipping (see 8.11). However, concentration on this issue risks sacrificing the potential value of hybrid journals. At present, the great majority of high-quality journals are still hybrid rather than fully-OA. Learned Societies in particular have welcomed the opportunity to consider a more gradual transition using the hybrid route. More generally, we see the modification of existing publications through this route as consistent with our preference for managed rather than dramatic change, as a means to ensure that high standards are not compromised, and as giving more flexibility to suit the circumstances of different disciplines. In these ways the use of the hybrid route will assist not impede the transition to OA. In current circumstances, restricting the ability of authors to provide immediate access to articles they wish to publish in hybrid journals would be more likely to hold back the transition to OA rather than accelerate it.
- 10.19. Fourth, we stress the importance of distinguishing between the mixed model we advocate during the transition period, and the long term goal of Gold OA. Thus while we endorse support for Green during the transition period, we also stress that we cannot agree with those who urge policies based solely on Green OA with very short embargoes. Such policies may look (except to publishers) like a comfortable and relatively cheap option. But the apparent solution risks undermining the subscription journal model on which it relies, and also the peer review process which is integral to publishing and which underpins high quality research. In the long term it is unsustainable.
- 10.20. Fifth, it is clear to us that the proper development of a mixed economy depends for the foreseeable future on funding being provided for the Gold model. From the perspective of those who are instinctively wary of Gold OA, it is easy to resent this funding as apparently favouring Gold to the exclusion of Green. In reality, however, it is an essential means of creating balance within the “balanced package” we advocate. For the Green model is already being funded by subscriptions as well as funding for the development of repositories. The new funding mechanisms for Gold now being established are essential to make the mixed economy work.
- 10.21. For all these reasons, we hold to the view that a transition to the Gold model via a mixed economy is the most effective way of balancing our objectives of increased access, sustainability and excellence; and we are pleased that both RCUK and the Funding Councils support this. Indeed, we now see the real prospect of enhanced organic growth in the adoption of OA.
- 10.22. We also believe that a managed and accelerated transition of the kind we have recommended will be an effective means of facilitating and fostering innovation, not

least since entry costs are reduced. There have been significant developments in areas including linkages between and management of publications and data, platforms for peer reviewers, semantic enrichment of articles, the launch of the ORCID and FundRef services, and so on. Innovations of this kind not only improve services to authors and readers, they also help to keep costs down in the longer term; and at least some of them can encourage researchers to become more involved in the processes around publication and dissemination of their research.

- 10.23. We have no doubt that innovations of these kinds will continue as the research communications environment, and the mixed economy we advocate, develop further. But as we acknowledged in our Report, policies to accelerate change bring risks too, and there will also be a need for vigilance in ensuring that ‘predatory’ publishing ventures are kept in check; that the quality of publishing services to both authors and readers is sustained or, rather, improved; and that the experiences of different disciplines do not vary in damaging ways. These are proper matters to keep under active review during a transition period; and indeed the need to monitor them would have arisen quite apart from the moves now in train to implement our recommendations.

Recommendation 3

We reaffirm our support for a mixed economy in which Gold and Green OA - the latter with appropriate embargoes - both play important roles in a transition period that will last for the foreseeable future. In that context, we also reaffirm our recommendation for a clear policy direction set towards support for Gold OA.

Funding and costs

- 10.24. We acknowledged in our Report that the transition to OA will involve additional costs, although in the long term we see no reason why OA should prove more expensive than the subscription model⁴⁷. And we hold to the view that publishing is properly seen as an integral part of the research process, and should be funded as such. Indeed, one of the benefits of Gold OA - as distinct from the subscription model - is that it makes that position much clearer. As we stressed in our Report, we cannot be certain about the precise level of costs during the transition, still less how they will change over time. There remain too many uncertainties about the pace and scale of moves towards OA not only in the UK but in the rest of the world, average levels of APCs, the scope for reducing expenditure on journal subscriptions, and other issues.

⁴⁷ Many reports have reached the same conclusion. See, for example, King, D.W. and Tenopir, C. (2004) ‘An evidence-based assessment of the author-pays model’, *Nature*, Web Focus: Access to the Literature; CEPA (2008) *Activities, costs and funding flows in the scholarly communications system in the UK*, RIN; and Houghton, J et al (2009) *Economic Implications of Alternative Scholarly Publishing Models*, JISC.

- 10.25. In this context, we are pleased by the Government's and the Research Councils' provision of block grants to universities to meet the costs of OA in general and of APCs in particular; and by the steps that universities have taken to establish policies and procedures in response. As we have noted in paragraph 10.20 above, new funding mechanisms of this kind are essential to the development of the mixed model we advocate.
- 10.26. There is still some way to go. Until Gold OA publications are routinely funded whatever the source of support for the research on which they are based, the mix in the mixed economy will be limited. Our Report envisaged that funds would be provided from three main sources: new funds from the public purse; reallocation of funds from within existing research budgets; and efficiency savings from all players in the scholarly communications system, including publishers.
- 10.27. Since we believe that publication should be regarded as an integral and legitimate cost of research, it follows that the funding which pays for research should also be used to cover publication costs, unless there is some specific impediment to this. Although the Funding Councils have made clear that there is no impediment in the case of QR block grant, only a relatively small number of universities, as we noted earlier, have so far allocated funds from QR and other sources to meet the costs of APCs. We welcome the initiatives that some universities have taken, however, and we anticipate further experiments as well as organic growth in funding for APCs. Universities will need to consider along with HEFCE and the other Funding Bodies the costs of implementing an OA requirement for submissions to the next REF, by whatever route, and how those costs will be met.
- 10.28. We acknowledge, however, that in these early stages in implementing our recommendations, uncertainties about costs have raised difficulties for universities. For they lack solid information about key issues including the numbers of articles their researchers publish that will be covered by RCUK and other policies; the numbers of those articles published in collaboration with other institutions; the likely balance between Green and Gold publications; the likely average levels of APCs, and also of page and colour charges; VAT; the capital and running costs of an enhanced infrastructure of repositories; and administrative costs. It is important that all these matters should be kept under active review in a co-ordinated way at both local and national levels, in order to help universities and funders in decision-making for the future.
- 10.29. The potential increase in costs during the transition period is a particularly important issue for research-intensive universities, as we noted in Section 9. For meeting the costs of OA, and especially of large numbers of APCs - whether for hybrid or for fully-OA

journals - represents additional expenditure on top of what universities are paying for subscriptions.

- 10.30. A significant proportion of the transitional costs, of course, is being met, in line with our original recommendations, through the initial pump-priming grant of £10m from BIS, and the block grants from RCUK. The latter amount to £17m in 2013-14, with substantial increases promised over the next four years. Nevertheless, universities are concerned that overall funders' OA requirements could result in their having to meet large increases in expenditure on APCs, while their expenditure on subscriptions stays largely at current levels. Such concerns about increases in total costs have strongly influenced some universities' and commentators' preference for Green OA, where publication continues to be funded by subscriptions.
- 10.31. In this context, it is important also that a close watch should be kept on the evolving market for Gold OA and APCs, in terms both of their costs, but also of their relationship to journal subscriptions. For one of the most important issues that universities and funders will be seeking to address in the next stage of the transition to OA will be the scope for offsets between expenditure on journal subscriptions on the one hand, and APCs on the other.
- 10.32. We noted in Section 9 that there are a number of possible ways in which offsets might be addressed, with approaches that focus on either APCs or on subscriptions. Various organisations have undertaken some initial modelling; and experiments such as the Royal Society of Chemistry's Gold for Gold initiative, the discounts on APCs offered by some publishers, and the more general commitments from major publishers to avoid 'double-dipping', have all been welcomed. We anticipate further discussion of these issues between universities, funders and publishers. While care will have to be taken to avoid infringements of competition law, we believe that there should be a commitment on all sides to explore the space for compromise between the different kinds of approaches to offsets, and the basis on which calculations are made.
- 10.33. All this indicates the need for further work in the modelling of costs, and regular monitoring of APC prices. Since this current review is our last act, however, the Group is not in a position to commission a review of prices such as the Commons BIS Committee recommends. Rather, the responsibility for further review and monitoring of this kind should rest, we believe, with the co-ordinating structure we recommend below.
- 10.34. But costs and prices represent only one side of the equation in assessing the impact of the new policies. We reiterate our belief that the transition to OA will bring substantial social and economic benefits, although putting a precise value on them is far from straightforward. The Lords S&T Committee and the Commons BIS Committee have

recommended a full cost-benefit analysis, and BIS is now commissioning an initial feasibility study. We look forward to seeing the results of that work.

Recommendation 4

Universities, funders and publishers (including learned society publishers) should keep under review, in a co-ordinated and transparent way, key elements that feed into current uncertainties about costs and funding, and undertake further cost-modelling.

Recommendation 5

Universities, Jisc, funders and publishers should work together, within the constraints of competition law, to consider whether and how, expenditures and revenues for APCs and journal subscriptions might be offset against each other. All parties recognise both the significance and complexity of these issues.

The international context

- 10.35. The international environment has an important influence on many of the issues we have discussed. Many commentators have suggested that the UK is isolated in its policies, and out of step with the rest of the world. We dispute that view. The UK is clearly being watched as a test case in adopting policies that explicitly promote Gold OA, and is admired by many for its proactive approach. It is simply not the case that the rest of the world is rushing towards Green; the situation is far more nuanced than that. As in the UK, there are differences among funders, institutions, and publishers. But support for Gold OA is a significant feature of policy and practice in many leading research nations, including the USA, China, Germany, France, Canada and Australia⁴⁸; and international bodies including the Global Research Council and the G8 have explicitly recognised both the Gold and the Green models (see Section 8).
- 10.36. We agree with those who argue that it is too early to predict how the international publishing market will develop over the next few years, or how this will interface with public policies; but there is no doubt that the situation is developing fast. The UK should continue to play the leadership role which it has already established.

Recommendation 6

The Government and funders should remain active in seeking to influence and co-ordinate appropriate policy at an international level through bodies such as Science Europe, the EU, the Global Research Council, and the G8; and share the emerging evidence as to the impact of policies in the UK.

⁴⁸ The list of national affiliations of authors who publish in PLOS and BioMedCentral journals mirrors the various rankings of major research nations.

Embargoes

- 10.37. Embargoes have been the subject of much discussion across the world. If the Green model continues to be part of the mixed economy we recommend, as we believe it must, then the length of embargoes is a critical issue. There is clearly a balance to be struck between embargo lengths that provide, on the one hand, speedy access to research publications, and on the other hand sustainability for subscription-based journals and the business models that underpin them
- 10.38. The recommendation in our Report was that limitations on the length of embargoes should be considered carefully, to avoid undue risk to valuable subscription-based journals. We accept the argument that minimal (or no) restrictions on access would represent a fundamental threat to the viability of such journals, whether published by commercial publishers or learned societies. More specifically, we argued that where dedicated funding is not provided to meet the costs of APCs, 'it would be unreasonable to require embargo periods shorter than 12 months'⁴⁹. The Government accepted that argument, and stated that a longer period of up to two years could be justified 'in those disciplines which require more time to secure payback'.
- 10.39. The translation of that into practical policies has been a fraught process (as we describe in Section 3), and a major contributor to the sense of uncertain direction during the past year. The position which in the end emerged in the RCUK policy and guidance issued in April is now reasonably clear, and has achieved a wide degree of acceptance, although some tensions remain on policy for the longer term.
- 10.40. RCUK's policy allows for embargoes of up to 6 months for STM, and 12 months for HSS disciplines. Where funding for APCs is not available to the researcher, however, the allowable embargo is extended for the duration of the transition period to 12 or 24 months respectively, in line with our Report and the Government's response to it. But publications in the biomedical sciences must be accessible within six months of publication in all cases, which aligns with the maximum embargo period allowed under policies established some years ago by the Medical Research Council and the Wellcome Trust; this exception to the main pattern of RCUK policy remains contentious in parts of the publishing community. Meanwhile the Funding Councils have stated that the same embargo periods will apply also to publications submitted to the next REF.
- 10.41. Although policy and guidance is now much clearer than it was initially, there are still some concerns about the application of embargoes. A number of universities in the

⁴⁹ The Group did not, as the Commons BIS Committee asserts, recommend specific embargoes of 24 months for HSS subjects, and 12 months for STM subjects. Rather, it recommended that limitations on embargo periods should be carefully considered to avoid undue risk to valuable journals, and kept under review.

Russell Group⁵⁰ and elsewhere have adopted, in guidance to their researchers, decision trees that differ from the one adopted by RCUK, and along with a preference for Green, indicate allowable embargo periods of 6 months for STM and 12 for HSS, even where funding for APCs is not available. They thus do not reflect RCUK's position that such embargo periods apply only when funding is available to meet APCs, and the relevant journal does not support Gold OA.

- 10.42. On the other hand, universities are troubled by evidence of increases in the variety and length of the embargoes allowed by publishers, what they perceive as the complexity of the information provided on publishers' websites, and the consequent difficulty that researchers may have in ascertaining what they are or are not permitted to do. Some of these problems are the result of complexities in the policies of some publishers and journals, of changes in those policies in response to the new RCUK requirements, and the speed with which they have been reflected by the developing SHERPA FACT service. But it is of critical importance that all stakeholders should have access as soon as possible to a service that provides unambiguous, comprehensive, accurate and up-to-date information about embargoes as well as other important aspects of journals' policies; and that such information should be available in machine readable form through an API.
- 10.43. In addition, some commentators have suggested that our recommendations have provided an incentive for publishers to increase the length of their embargo periods, so that payment of an APC becomes the only compliant option for authors. Evidence about changes in embargo requirements is patchy at present: some publishers have sought to consolidate around a 12 month embargo, while on the other hand Elsevier has recently reduced the embargo periods for some of its journals where authors are funded by one of the Research Councils or the Wellcome Trust⁵¹. Building a comprehensive picture is not straightforward, but this is clearly a matter about which information should be collected systematically as the situation develops.
- 10.44. More generally, there is continuing debate about the principles on which embargoes should be determined. Those who advocate Green OA rather than Gold sometimes argue that speedy access to publications can be secured by very short embargoes. However, we would reiterate our original conclusion that the balance to be struck

⁵⁰ See, for example the guidance and decision trees provided by Bristol, Oxford, Sheffield and York universities.

⁵¹ For Springer's consolidation of its policies self-archiving around a 12 month embargo, see <http://www.springer.com/open+access/authors+rights?SGWID=0-176704-12-683201-0> . For Elsevier's embargo periods for RCUK and Wellcome Trust authors, see http://cdn.elsevier.com/assets/pdf_file/0004/154786/EmbargoPeriods_2.pdf ; and the comparison with the embargo periods for other authors at http://cdn.elsevier.com/assets/pdf_file/0018/121293/External_Embargo_List_2013.pdf

between speedy access and sustainability must take account of a number of considerations, which may vary by discipline and other factors. In the context of the mixed economy which we advocate, we would regard it as a very high risk strategy to experiment with very short or zero embargoes.

- 10.45. Indeed, set against the arguments for shorter embargoes, some commentators have thus argued for much *longer* embargo periods to protect publishing revenues; and some journals have introduced much longer periods already (see Section 6). Arguments of this sort are made especially in relation to journals published by some learned societies, where the protection of revenues is justified with reference to the desirable uses, in support of the research community and their disciplines, to which publication surpluses are put by the societies.
- 10.46. The balance to be struck in setting maximum embargo periods should not, however, be confused in our view with separate – but very important – considerations about the viability of learned societies and the maintenance of their broader roles. If the balance to which we have referred is properly informed by evidence and input from all parties, the perceived vulnerability of learned societies should be minimised. This issue will require careful monitoring over a number of years, however, recognising that learned societies' dependence on publishing income is highly variable, and the extent of their vulnerability in the face of global shifts in the publishing environment currently unknown. Given the widespread and strong support for sustaining the role of learned societies in underpinning research communities in the UK, it is appropriate that the key stakeholder groups should work together to find ways to address that vulnerability, should it arise.

Recommendation 7

We believe that major funders' current positions on embargoes strike the right balance. The decision tree adopted by RCUK provides a useful summary and should be fully reflected in the advice and guidance provided by funders, universities and publishers to researchers.

Recommendation 8

As the implementation process develops further, we recommend that the co-ordinating structure we propose below should keep funders' rules relating to embargo periods under review, with active steps taken to gather evidence on their impact on different kinds of journals and in different disciplines; and to gather systematic data on trends in journals' policies with regard to embargoes via a service that is accessible to all stakeholders and is comprehensive, accurate and up-to-date.

Recommendation 9

The co-ordinating structure we recommend should monitor the impact of OA policies on learned societies, and co-ordinate moves to assist learned societies to develop their business models in order to achieve sustainable futures.

Extensions to licensed access

- 10.47. Extending licensed access to subscription journals was an important component in the balanced package which we recommended. But this is an area in which little visible progress has been made to date.
- 10.48. As we noted earlier, the focus in implementing our recommendations has been almost exclusively on access for articles published by UK authors. Relatively little attention has been paid to increasing access for the benefit of UK readers to the 94% of articles produced across the globe each year by authors from outside the UK. This is unfortunate, since as we pointed out in Section 3, licensed access to scholarly journals remains patchy across the UK, particularly outside the HE sector; and that is unlikely to be remedied in the short term by a rapid shift to a wholly OA environment across the world. Licensing will remain an important route to access for some time to come; and we believe that extensions to licensing remain an important mechanism for achieving increases in access.
- 10.49. By far the most significant action on this front has been taken by the publishers, who have worked – through the Publishers Licensing Society – with local authority librarians to implement the initiative under which walk-in access for a large range of scholarly journals will be provided via public libraries. A technical pilot is now under way working with ten local authorities, and we look forward to the launch of the full two-year pilot across the UK in December this year. As we noted in our original Report, however, it is of critical importance that the initiative should be accompanied by a significant marketing effort to ensure that potential users are aware of the new service; and to provide high-quality guidance to both librarians and users.
- 10.50. We also recommended further action in three other areas. First, in order to reduce the inequalities in the numbers of journals that are accessible to staff and students in different HE institutions, we recommended renewed discussion of the possibilities for developing a licence regime to provide access to a large core of journals for all universities. Such discussions should draw on the experience of the successful SHEDL initiative in Scotland. We recognise the practical and funding issues that would need to be addressed; but it is disappointing that no action has been taken on this recommendation.
- 10.51. Second, we recommended steps to increase and rationalise arrangements for licensed access for staff in the NHS, and greater co-ordination with the HE sector. Action to

address the current complex arrangements have been hindered by the re-organisation of the NHS in England, although as we noted in Section 3, Universities Scotland and NHS Education Scotland have commissioned a study of the possibilities for joint procurement. But we welcome Jisc's plans to launch, with the help of external funding, a one-year pilot with a range of publishers to test the feasibility of extending HE licences so that they provide access to NHS staff.

- 10.52. Third, we recommended steps to extend licensed access to the various organisations in central and local Government, SMEs, and the voluntary sector who have only very limited access at present. We acknowledged the practical difficulties, but suggested that publishers, professional and learned societies, libraries, and others with relevant expertise should work together with representative bodies for those sectors to consider options to provide access to a broad range of relevant content for the benefit of consortia of organisations within their sectors. And since the benefits to society and the economy would be significant, we believe that it would be right for some level of pump-priming funds to be made available from the public purse to support such work.
- 10.53. It is disappointing that progress so far has been limited. We noted in Section 3 Jisc's discussions with some publishers to extend HE licences so that universities can opt to provide access to SMEs; and this may provide a practical way forward. But it is regrettable that more has not been done to stimulate progress at national level and in a pro-active way on this and our other recommendations on licence extensions.

Recommendation 10

We look forward to the full launch of the public libraries initiative, and recommend that publishers and public librarians, with the help of their colleagues in universities, consider how to market it effectively, and to provide high-quality guidance material.

Recommendation 11

We welcome the work that Jisc is doing to investigate options for extensions to licensing, and recommend that further discussions should be initiated through the co-ordinating structure we recommend below to explore how to provide licensed access to more journals, and to people and organisations in sectors beyond universities and research institutes.

Recommendation 12

Government should give further consideration, in the light of the work of Jisc and other organisations, to allocating some pump-priming funding to facilitate the extension of licensed access to SMEs and third sector organisations which could benefit from this.

Infrastructures

- 10.54. Realising the full benefits of OA, and ensuring that the new policies are implemented efficiently, depends on developing effective infrastructures. The frameworks of policies, procedures and systems that universities have implemented to date are in most cases deliberately loose and flexible, and they will develop further over the coming year. The same goes for many journals and publishers.
- 10.55. But as we noted in Sections 3 and 9, there is much to be done in seeking to ensure interoperability across systems both within universities, and between them and publishers and funders. A key priority must be to facilitate, and automate where possible, the flows of information between different systems. This depends to a significant extent on developing and promoting the uptake of metadata and technical standards. Jisc is working with others to that end, but that work will take some time to come to fruition.
- 10.56. Jisc has a similarly key role to play in developing the infrastructure of repositories for UK publications in a co-ordinated and interoperable fashion, working at international as well as UK-wide levels. Technical innovation is a key feature of the repository landscape at present, but investment has been patchy across the HE and research sectors, and has not reached the scale we envisaged in our Report. We echo the Commons BIS Committee's disappointment at the Government's view that these matters are essentially a matter for individual universities, and we would encourage the UK funding bodies to work together with Jisc to develop a more co-ordinated approach. Varying levels of engagement and investment have an impact on universities' capacity to enhance their services and to take advantage of broader national and international initiatives; and the pace of technical change means that all institutions, as well as national bodies, face challenges of sustainability.
- 10.57. Infrastructure developments are also needed to facilitate text and data mining (TDM). There are tensions on how best to achieve this, whether through an exception to copyright, or through a licensing approach (see Section 4). The resulting delays in making effective provision to facilitate researchers' use of TDM tools are unfortunate.

Recommendation 13

Through the co-ordinating structure we outline below, universities, funders and publishers should continue and enhance their work with Jisc and others to develop the infrastructure of repositories for UK publications; and more generally to develop the technical infrastructure to support both Green and Gold OA, in order to promote greater interoperability and more efficient flows of information between different systems.

Co-operation and evidence: the need for a co-ordinating structure

- 10.58. Our Report stressed that an ordered transition to OA depends on co-operation and goodwill between all the key stakeholders, none of whom can deliver a sustainable system on their own. We acknowledge that the past year has seen co-operation on some issues, such as metadata standards; but such activity has tended to be ad hoc and unco-ordinated, since no single body has been identified to take on the co-ordinating role. There is now an urgent need for a formal structure to ensure engagement and active co-ordination of efforts across all stakeholders in the research communications system; to avoid duplication of effort and divergent work-streams; to deal with problems as they arise; and to oversee the collection and collation of data from different parties. Such a structure is, we believe, essential for dealing with many of the difficulties that we have identified, as well as for supporting learned societies, and coordinating communications with the research community.
- 10.59. A key theme of this review has also been the lack of solid evidence on key issues, and hence the need for a co-ordinated evidence base, data collection and analysis, review and monitoring of those issues as the implementation of policies gathers pace. We have noted in Part 1 of this review the importance of work of this kind to assess patterns relating to a wide range of issues including:
- ❑ levels of APCs, including the take-up of publishers' prepayment and related schemes;
 - ❑ levels of expenditure and investment by funders, universities and research institutes;
 - ❑ take-up of the Gold and Green options in the UK and the rest of the world, and the use of repositories by both authors and readers;
 - ❑ the scale and patterns of collaborative publications;
 - ❑ disciplinary differences in researchers' attitudes and behaviours, funding levels, and the availability of OA options;
 - ❑ embargo lengths and their implications;
 - ❑ the availability, take-up and implications of different licensing options; and
 - ❑ the impact of OA policies on learned societies.
- 10.60. Without an existing mechanism for collecting and analysing evidence on issues such as these in a co-ordinated way, we have been obliged to recommend that various issues should be "kept under review" without being able to specify who should do this.
- 10.61. We welcome the initial work on some of the issues we have identified that has been commissioned by the Open Access Implementation Group (OAIG); and also the

working group that has been convened by the Research Information Network (RIN) to develop an agreed framework of indicators of covering key aspects of the transition to OA. The work is as yet in its early stages, and we believe that for the longer term it should be brought within the scope of the co-ordinating platform that we recommend.

- 10.62. Work on all these issues needs to be undertaken as a collaborative effort between all key stakeholders, and coordinated by one of them. We believe that Universities UK is the body best placed to do this, subject to appropriate resource being available. We believe that this coordination task should be co-funded by contributions from all the stakeholders, including Government, to demonstrate the commitment of all parties to the future development of OA in the UK.

Recommendation 14

A formal co-ordinating structure should be established, convened by Universities UK, to secure dialogue and engagement across all the stakeholders in research communications; to co-ordinate their work and avoid duplication or divergent efforts in areas including development of the infrastructure, evidence-gathering, monitoring, and communications; and to deal with issues and problems as they arise.

Annex A – Template for stakeholder statements

Finch Report: Survey of Progress One Year On

Request for Statements from Stakeholder Organisations in Response to Actions and Recommendations in the Finch Report

Request for information

The Working Group on Access to Research Publications (the Finch Group) published its Report, *Accessibility, Sustainability, Excellence: how to expand access to research publications*, in June 2012. The group will meet again in September 2013 to review progress in implementing its recommendations. The Research Information Network has been asked to support this review.

We are now inviting you to give us feedback, to be taken into account in our review. We are requesting feedback from a wide range of stakeholders, so that our review can reflect a rounded assessment of progress to date. **It is important that we receive authoritative views** which reflect stakeholder positions. So we would ask you to ensure that your response is formulated by a senior individual or group who can provide an authoritative assessment, from your particular perspective.

Context

The Report made ten recommendations, and outlined a series of 18 actions that different stakeholder groups would have to take in order to put those recommendations into effect. The review will not re-open the discussions about the group's policy recommendations, but rather will make an assessment of progress in implementing those recommendations, and of any further actions that might be desirable.

We would therefore like your feedback on the implementation of any recommendations or actions which are relevant to you (recognising that not all of these are relevant to each stakeholder group). We hope that your response will be full enough to give a clear picture, from your perspective, of how things have changed, or might change, in response to the Report and its recommendations.

Attached below is a template which we hope you will use as the basis for your statement. It is built around the recommendations in the Report, and the key actions it suggested were needed in relation to each of those recommendations. It is thus in five sections:

- i. overall policy and funding arrangements
- ii. publication in open access and hybrid journals
- iii. extensions to licensed access
- iv. the use of repositories
- v. the future of monographs

Under each recommendation and action that is relevant to your organisation we ask you to address five key questions:

- i. *What actions have your organisation and/or its members taken in response to this recommendation or action?*
- ii. *What issues or difficulties have arisen, if any?*
- iii. *What further actions do you have in mind?*
- iv. *How have the actions or inactions of others affected your organisation and/or its members?*
- v. *Do you foresee further issues or difficulties that will need to be resolved in the future?*

At the end of each section we have also asked some more general questions to enable you to make further comments or suggestions about what might be done further, or how the environment is changing from your perspective.

1. Overall policy and funding arrangements: key actions 1-5

The Finch Report recommended that various parties should:

- i. 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. *(Aimed at: Government, Research Councils, Funding Councils, universities)*
- ii. Consider how best to fund increases in access during a transition period through all three channels – open access publications, subscriptions, and repositories – and the balance of funding to be provided through additional money from the public purse, by diversion of funds from support of other features of the research process, and by seeking efficiency savings and other reductions in costs from publishers and other intermediaries. *(Aimed at: Government, Research Councils, Funding Councils, universities)*
- iii. Put in place arrangements to gather and analyse reliable, high-quality and agreed indicators of key features of the changing research communications landscape, and to review those indicators and the lessons to be drawn from them. *(Aimed at: Government, Research Councils, Funding Councils, universities, publishers)*
- 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. *(Aimed at: Government, Funding Councils, Research Councils, learned societies, publishers)*
- v. Renew efforts to sustain and enhance the UK's role in international discussions on measures to accelerate moves towards open access. *(Aimed at: Government, Research Councils, Funding Councils, universities, publishers)*

Questions

- a. What actions have your organisation and/or its members taken in response to these proposed actions?
- b. What issues or difficulties have arisen, if any?
- c. What further actions do you have in mind?
- d. How have the actions or inactions of others affected your organisation and/or its members?
- e. Do you foresee further issues or difficulties that will need to be resolved in the future?

General question

Do you have any further comments or suggestions as to:

- ☐ actions that should be taken, by your organisation or others, in relation to overall policy or funding for research publications?
- ☐ how the environment has changed, or might change further, as a result of actions that your organisation and others have taken?

2. Publication in open access and hybrid journals: key actions 6-11

Recommendations 1-3: the Finch Report recommended that:

1. 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; *(Aimed at: Government and its agencies)*
2. 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; *(Aimed at: funders)*

3. 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; (*Aimed at: funders, publishers, learned societies, Government*)

Actions 6-11: the Finch Report recommended that various parties should:

- vi. Establish effective and flexible mechanisms to enable universities and other research institutions to meet the costs of APCs (*Aimed at: Government, funders*); and efficient arrangements for payment, minimising transaction costs while providing proper accountability (*Aimed at: universities, publishers*).
- vii. Discuss with other funders in the commercial and charitable sectors how best to fund and promote publication in open access and hybrid journals. (*Aimed at: Government*)
- viii. Establish publication funds within individual universities to meet the costs of APCs, making use of dedicated moneys provided by funders for that purpose, as well as other available resources. (*Aimed at: universities*)
- ix. Develop in consultation with academic staff policies and procedures relating to open access publishing and how it is funded. (*Aimed at: universities*) The issues to be considered should include:
- a. whether to promote open access publishing as the principal channel for all research publications
 - b. how much funding should be provided to support the payment of APCs each year, the sources of that funding, and how the funds are to be administered
 - c. how to work together with researchers, and in line with the principles of academic freedom, in making judgements about the potential for publication in journals with different levels not only of status, but of APCs
 - d. how support for publication should be integrated with other aspects of research management, for example the development of research capacity, and support for early-career researchers
 - e. policies relating to payment of APCs when articles are published in collaboration with researchers from other institutions.
- x. Extend the range of open access and hybrid journals, with minimal if any restrictions on rights of use and re-use for non-commercial purposes; and ensure that the metadata relating makes clear articles are accessible on open access terms. (*Aimed at: publishers, learned societies*)
- xi. Provide clear information about the balance between the revenues provided in APCs and in subscriptions. (*Aimed at: publishers, learned societies*)

Questions

- a. What actions have your organisation and/or its members taken in response to these recommendations and proposed actions?
- b. What issues or difficulties have arisen, if any?
- c. What further actions do you have in mind?
- d. How have the actions or inactions of others affected your organisation and/or its members?
- e. Do you foresee further issues or difficulties that will need to be resolved in the future?

General question

Do you have any further comments or suggestions as to

- ☐ actions that should be taken, by your organisation or others, in relation to policies and funding to support Gold Open Access?

- ❑ how the environment has changed , or might change further, as a result of actions that your organisation and others have taken?

3. Extensions to licensed access: key actions 12-16

Recommendation 4: the Finch Report recommended that:

4. 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; (*Aimed at: publishers, learned societies, funders, universities, Government*)

Actions 12-13: the Finch Report recommended that various parties should:

- xii. Rationalise and extend current licence arrangements for the HE and health sectors, so that as many journals as possible are accessible to everyone working or studying in those sectors. (*Aimed at: Government, Funding Councils, universities, publishers, learned societies*)
- xiii. Work together to find ways to reduce the VAT burden on e-journals. (*Aimed at: Government, universities*)

Recommendation 5: the Finch Report recommended that:

5. 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; (*Aimed at: publishers, libraries*)

Action 16: the Finch Report recommended that various parties should:

- xvi. Continue to work with representatives of public libraries to implement the proposal to provide walk-in access to the majority of journals in public libraries across the UK, and to ensure that the initiative has the maximum impact. (*publishers, British Library*)

Recommendation 6: the Finch Report recommended that various parties should:

6. 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; (*Aimed at: Government, publishers, learned societies, libraries, business representatives*)

Action 14: the Finch Report recommended that various parties should:

- xiv. Discuss with representative bodies in the public, business and voluntary sectors the feasibility of developing licence agreements that provide access to relevant journals and other content across key parts of those sectors; and possible ways of funding such agreements. (*Aimed at: Government, publishers*).

Recommendation 7: the Finch Report recommended that:

7. 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; (*Aimed at: universities, libraries, publishers, learned societies*)

Action 15: the Finch Report recommended that various parties should:

- xv. Examine the feasibility of providing licensed access to journals for small research-intensive enterprises with which universities have close relationships. (*Aimed at: universities, publishers, JISC Collections*)

Questions

- a. What actions have your organisation and/or its members taken in response to these recommendations and proposed actions?
- b. What issues or difficulties have arisen, if any?
- c. What further actions do you have in mind?
- d. How have the actions or inactions of others affected your organisation and/or its members?
- e. Do you foresee further issues or difficulties that will need to be resolved in the future?

General question

Do you have any further comments or suggestions as to

- ☐ actions that should be taken, by your organisation or others, in relation to policies and funding to extend licensed access?
- ☐ how the environment has changed, or might change further, as a result of actions that your organisation and others have taken?

4. Use of Repositories

Recommendation 9: the Finch Report recommended that:

9. 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;. (*Aimed at: universities, libraries*)

Action 17: the Finch Report recommended that various parties should:

- xvii. Continue to develop the infrastructure of repositories and enhance their interoperability so that they provide effective routes to access for research publications including reports, working papers and other grey literature, as well as theses and dissertations; a mechanism for enhancing the links between publications and associated research data; and an effective preservation service. (*Aimed at: funders, universities, JISC, publishers*)

Recommendation 10: the Finch Report recommended that:

10. 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. (*Aimed at: funders*)

Action 18: the Finch Report recommended that various parties should:

- xviii. Consider carefully 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 during what is likely to be a lengthy transition to open access. Particular care should be taken about rules relating to embargo periods. 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. (*Aimed at: Government, funders, universities*).

Questions

- a. What actions have your organisation and/or its members taken in response to these recommendations and proposed actions?
- b. What issues or difficulties have arisen, if any?
- c. What further actions do you have in mind?
- d. How have the actions or inactions of others affected your organisation and/or its members?
- e. Do you foresee further issues or difficulties that will need to be resolved in the future?

General Question

Do you have any further comments or suggestions as to

- ☐ actions that should be taken, by your organisation or others, in relation to the development of open access via repositories?
- ☐ how the environment has changed , or might change further, as a result of actions that your organisation and others have taken?

5. Monographs

Recommendation 8: the Finch Report recommended that:

8. universities, funders, publishers, and learned societies should continue to work together to promote further experimentation in open access publishing for scholarly monographs; (Aimed at: universities, funders, publishers , learned societies)

Questions

- a. What actions have your organisation and/or its members taken in response to these recommendations and proposed actions?
- b. What issues or difficulties have arisen, if any?
- c. What further actions do you have in mind?
- d. How have the actions or inactions of others affected your organisation and/or its members?
- e. Do you foresee further issues or difficulties that will need to be resolved in the future?

General question

Do you have any further comments or suggestions as to

- ☐ actions that should be taken, by your organisation or others, in relation to open access monographs?
- ☐ how the environment has changed , or might change further, as a result of actions that your organisation and others have taken?

Annex B – List of stakeholders submitting evidence

Academy of Social Sciences

Association of Learned and Professional Society Publishers

British Library

Canterbury Christ Church University

Department for International Development

Higher Education Funding Council for England

International Association of Scientific, Technical and Medical Publishers

Jisc

Open Access Scholarly Publishers Association

Physiological Society

PLOS

Publishers Association

Research Councils UK

Research Libraries UK

Royal Historical Society

Scottish Funding Council

Scottish Science Advisory Council

Society of Biology

University of Birmingham

University College London

University of East Anglia

University of Leeds

University of Sheffield

University of Southampton

Wellcome Trust

Wiley-Blackwell