

Policy Department Briefing: Open Access

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1. Introduction

This briefing paper gives an overview of the key drivers behind the development and growth of open access. The different routes to open access publishing are described. It includes a summary of the recommendations made by the Finch working group and sets out some of the concerns with the RCUK policy that resulted from it. Key points in the current, revised RCUK policy are listed and links to a selection of other recent policies, statements and initiatives are provided.

2. Definition

Research Councils UK (RCUK) defines Open Access as:¹

“Unrestricted, on-line access to peer reviewed and published research papers”.

Specifically a user must be able to do the following free of any access charge:²

- Read published papers in an electronic format
- Search for and re-use the content of published papers both manually and using automated tools (such as those for text and data mining) provided that any such re-use is subject to full and proper attribution and does not infringe any copyrights to third-party material included in the paper.

¹ RCUK Policy on Open Access, 2013, p4 <http://www.rcuk.ac.uk/RCUK-prod/assets/documents/documents/RCUKOpenAccessPolicy.pdf>

² Ibid

The Finch report (discussed in section 6) recognises that the movement has many different strands, and definitions and distinctions have become increasingly important as it has grown.³

3. Drivers for change

An explosion of interest and activity in open access has occurred since the 1990s, largely due to the widespread availability of internet access, which made it possible to publish a scholarly article and also make it instantly accessible anywhere in the world where there are internet connections.

There are three main strands of argument in favour of open access:

- **The ethical argument** that knowledge is a public good that should be freely available to all, especially if the research has been paid for out of public funds. This argument has strong support in the UK from the Government, the Higher Education Funding Council for England (HEFCE), Research Councils UK (RCUK) and other funding councils.⁴
- **The financial argument** that journals are too expensive and libraries can no longer afford to purchase a sufficient range of titles.⁵ The average cost per journal has been rising at a rate far above inflation for decades, while budgets at academic libraries have remained fairly static. Figures from JISC estimate that UK university libraries spend around £110 million on their journal subscriptions, with subscriptions to the large journal collections accounting for up to 80% of a library's journals budget (this is known as "the serials crisis").⁶

In traditional scholarly publishing, most of the work (authoring, reviewing, editing) is done freely by the academic community, leading some open access proponents to argue that "the publishers make excessive profits from the actually publishing (making available) process."⁷

³ Report of the Working Group on Expanding Access to Published Research Findings, 2012. Accessibility, sustainability, excellence: how to expand access to research publications, p16.
<http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf>

⁴ Darley, R., Reynolds, D and Wickman, C., 2014. Open Access Journals in Humanities and Social Science. London: British Academy

⁵ Ibid

⁶ <http://www.jisc-collections.ac.uk/News/Value-of-HEIs-to-publishing/>

⁷ http://www.ercim.eu/publication/Ercim_News/enw64/jeffery.html

The practical argument, of primary importance to Medical and Bio-science and (to a lesser extent) the STEM disciplines – Science, Technology, Engineering and Mathematics). Researchers in these fields argue that new knowledge and large-scale data-sets are developing so rapidly that only search engines can keep track of them, and that articles and data-sets therefore need to be openly available so that they can be mined for the meta-analyses which are the only way for scientists to keep track of knowledge and advance it constructively.⁸

The Finch Report concluded that open access to scholarly materials:⁹

- Enhances transparency, openness and accountability, and public engagement with research
- Forges closer links between research and innovation, with benefits for public policy and services, and for economic growth
- Improves efficiency in the research process itself, through increases in the amount of information that is readily accessible
- Increases returns on the investments made in research, especially the investments from public funds.

Greater usage?

Proponents also argue that making research available freely will increase the number of readers. For an individual researcher this could mean higher citations for an open access article, which increases the impact of their work. One of the main reasons authors make their articles openly accessible is to maximize their research impact. A study in 2001 first reported an open access citation impact advantage, and a growing number of studies have confirmed, with varying degrees of methodological rigor, that an open access article is more likely to be used and cited than one behind subscription barriers.¹⁰

There is conflicting evidence, however. The results of Publishing and the Ecology of European Research (PEER), an EU investigation into the impact of Green Open access, concluded that:

“Open access status does not in itself automatically lead to higher citation and visibility for the authors”.¹¹

4. Brief history of the open access movement

The open access movement is the worldwide effort to provide free online access to scientific and scholarly research literature, especially peer-reviewed journal articles and their preprints.

Libraries and librarians have played an important part in the movement, initially by alerting faculty and administrators to the serials crisis. In 1997 the Association of Research Libraries developed the Scholarly Publishing and Academic Resources Coalition (SPARC), an alliance of

⁸ Darley, R., Reynolds, D and Wickman, C., 2014. Open Access Journals in Humanities and Social Science. London: British Academy

⁹ Report of the Working Group on Expanding Access to Published Research Findings, 2012. Accessibility, sustainability, excellence: how to expand access to research publications, p5

¹⁰ For more on impact see: http://www.sconul.ac.uk/news/OAbriefing/OA_impact_briefing.pdf

¹¹ <http://www.peerproject.eu/>

academic and research libraries and other organizations, to address the crisis and develop and promote alternatives such as open access.¹²

Whilst it is not a single or even a unified movement (see “routes to open access” below), the net effect is that a growing portion of scholarly, formally published literature is appearing as open access.

The movement has progressed and gained momentum since 2002 through three major statements:

- Budapest Open Access Initiative (February 2002)¹³
- Bethesda Statement on Open Access Publishing (June 2003)¹⁴
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (October 2003)¹⁵

Within the UK Parliamentary attention was drawn to the issue in 2004 with the publication of the "Scientific Publications: Free For All?" report¹⁶, and again in 2012 with the Finch Report. Significantly open access has been taken up by the funding bodies for research.

The Research Information Network released a statement in March 2007 following discussions with a range of stakeholders from the library, publishing and research funding communities.¹⁷ CILIP was a signatory.

Academic Spring

The Academic Spring is a movement by academics, researchers and scholars which started in 2012. The movement opposes the restrictive copyright and subscription costs of traditional academic journals and calls for all taxpayer-funded academic research to be available for free online.¹⁸

5. Routes to Open access publishing/dissemination

Green open access: the author “self archives” by placing copies of material in open access repositories. The 'Green' route makes publications available freely in parallel with any publication system but is not, itself, publishing. Publishers sometimes insist on an embargo.

Gold open access: The author or author’s institution pays a fee, sometimes referred to as an Article Processing Charge (APC), to the publisher at publication time, the publisher thereafter making the material available 'free' at the point of access, usually in an open access journal. APCs are typically between £250 - £2500 and are often financed by a research grant or

¹² http://www.lib.cam.ac.uk/open_access/about.html

¹³ <http://www.budapestopenaccessinitiative.org/read>

¹⁴ http://dash.harvard.edu/bitstream/handle/1/4725199/suber_bethesda.htm?sequence=1

¹⁵ <http://openaccess.mpg.de/Berlin-Declaration>

¹⁶ <http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/399.pdf>

¹⁷ Research Information Network, 2007. Research and the Scholarly Communications Process: Towards Strategic Goals for Public Policy A Statement of Principles

¹⁸ A roundup of activities is on the Guardian website at <http://www.theguardian.com/higher-education-network/blog/2012/apr/12/blogs-on-the-academic-spring>

institutional funds.¹⁹ Some journals will waive the fee in cases of financial hardship, or for authors in less-developed countries. The 'Gold' route is one example of electronic publishing.

Grey open access: a decentralized system where authors make their work available in full text on their own websites.

Gratis open access: the removal of the payment barrier giving a right to read the article.

Libre open access: the removal of most of the restrictions on use and re-use of the article.

Open access repositories: digital collections of research material that has been deposited by their authors. The repository may belong to an institution, such as a university, or a discipline, such as physics or economics and can contain a variety of content types and formats, for example scholarly articles and preprints, reports, theses, audio, video, images and other material. Repositories expose metadata of each item thereby allowing the repository content to be found by search engines.²⁰

Open access journals: scholarly journals published electronically and available freely. A Directory of Open Access Journals is being maintained by the University of Lund:
<http://www.doaj.org/>

Hybrid open access journals: this model is a mix of subscription charges and publication fees. Only the articles for which the authors have paid APCs are available for free, others are behind a paywall. An increasing number of publishers (for example Springer, Blackwell, Cambridge University Press) are adopting this model.

6. The Finch report and UK open access policy

The Finch Working Group on Expanding Access

A Working Group on Expanding Access to Published Research Findings was set up in 2011 to examine how UK-funded research findings can be made more accessible. Chaired by Dame Janet Finch DBE (Professor of Sociology at Manchester University), the group was made up of representatives of researchers, universities, librarians, publishers, funders (Wellcome Trust, RCUK, HEFCE), learned societies and Research Information Network (RIN).

In June 2012 it published a report that made 10 recommendations to government, research funders and publishers on how access to research findings and outcomes can be made freely available for key audiences such as researchers, policy makers and the general public.

The key conclusion was clear policy direction (from Government, Funding Councils and Research Councils) should be set to support the publication of research results in open access or hybrid journals funded by APCs (i.e. for the Gold route).

¹⁹ <http://www.bris.ac.uk/library/support/research/open-access.html>

²⁰ http://www.lib.cam.ac.uk/open_access/publishing.html

Other recommendations included:

- 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;
- Pursuing proposals for providing free, walk-in access to the majority of journals through the public library network
- Developing the infrastructure of subject and institutional repositories 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;
- Careful consideration of funders' limitations on the length of embargo periods, and on any other restrictions on access to content not published on open access terms, to avoid undue risk to journals that are not funded in the main by APCs. Rules should be kept under review in the light of the available evidence as to their likely impact on such journals.

The report is available at:

<http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINALVERSION.pdf>

Government response to Finch

The government responded to the report in July 2012, stating that it is “firmly committed to improving access” and accepted all the proposals (except for one specific point on reducing or removing VAT on e-journals). The response can be downloaded from:

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

Following the Finch report, RCUK issued a new policy on Access to Research Outputs. This policy went beyond Finch's recommendations, laying almost exclusive stress on APCs for Gold open access, and was widely criticised.

- In January 2013 The House of Lords Science and Technology Select Committee launched a short inquiry into open access. It reported in February 2013, and recommended changes to RCUK's policy.²¹
- In April 2013 The House of Commons Business, Innovation and Skills Select Committee also held hearings on open access. It reported on September 12th, concluding that “whilst Gold open access is a desirable ultimate goal, focusing on it during the transition to a fully open access world is a mistake”. The report also acknowledged a lack of agreement over how to achieve full open access, and stated that due regard should be given to the important role played by the Green model.²²

²¹ <http://www.parliament.uk/business/committees/committees-a-z/lords-select/science-and-technology-committee/inquiries/parliament-2010/open-access/>

²² <http://www.parliament.uk/business/committees/committees-a-z/commons-select/business-innovation-and-skills/inquiries/parliament-2010/open-access/>

7. Concerns about Gold open access

Funding APCs

APCs vary greatly in size, but currently they mostly run at between £250 and £2000 per article (rising swiftly in some STEM journals). Even RCUK's own figures did not envisage that they could all be paid out of public money.²³

If Gold remains the preferred option, this could be seen to discriminate against anyone who could not get APC funding, such as early-career researchers, retired researchers and researchers in universities with limited research budgets.

Researchers in the arts, humanities and social sciences will find it difficult to secure funds for the publication of their research in Gold open access journals as, unlike the natural sciences, research in these disciplines is often undertaken without any dedicated funding from external sources.

The impact of Gold on lifelong learning

Academic librarians recognise the importance of lifelong learning by endeavouring to open up their collections to the public. The Gold model will have a negative effect on the ability to conduct research outside of an academic institution, as finding resources to pay APCs will be an insurmountable barrier to publication for many researchers not affiliated with a university.

The Finch report recommended policies and arrangements for supporting publication by independent scholars be established. Subsequent to this, the Wellcome Library made funds available to pay the open access publishing costs for publications that result substantially from research based on the Library's collections.²⁴

The impact on research intensive universities

The Gold model will present particular financial and practical challenges to research intensive universities. Recent research suggests that, with APCs at £1500 (the lower end of the range used in the Finch Report's modelling), adopting Gold would cost the more research intensive universities 25 times as much as going Green.²⁵

The impact on library budgets and the potential for double dipping

The availability of funding for publications on a Gold access basis is very limited, so libraries will have to pay journal subscriptions for the foreseeable future if acceptable levels of access are to be maintained. There is also concern about "double-dipping"; a publisher accepting APCs in a hybrid journal but not reducing its price commensurately.

Overseas researchers

Rapid uptake of a Gold Open access model in the UK while the rest of the world moves more cautiously might damage the international reputation of UK journals and research, as overseas

²³ Darley, R., Reynolds, D and Wickman, C., 2014. Open Access Journals in Humanities and Social Science. London: British Academy

²⁴ <http://wellcomelibrary.org/about-us/projects/wellcome-library-open-access-fund/guide-to-the-open-access-fund/>

²⁵ Swan and Houghton, 'Going for Gold? The costs and benefits of Gold Open Access for UK research institutions: further economic modelling' Report to the UK Open Access Implementation Group <http://repository.jisc.ac.uk/610/>

authors become reluctant to submit to UK journals because they have to find the APCs, and UK researchers find themselves prohibited from publishing in overseas journals because they do not offer a suitable open access route.²⁶

Prestige-driven publishing

Gold open access will not by itself diminish the mutually reinforcing incentives of both publishers and authors to engage in the prestige-driven publishing behavior that currently drives prices and profit margins up.²⁷ To address this problem, the RCUK has issued policy guidance asking institutions to ensure that decisions about where their authors publish are price sensitive.

8. Revised RCUK Open access Policy

By April 2013, RCUK had revised its policy, recognising that much open access would be Green and not Gold. Ultimately Gold remains the preferred model, however.

Block funding has been allocated to a special fund at each institution which can be used to pay APC's for Gold open access. Authors also have the option to publish in a subscription-funded journal so long as the journal allows Green open access, in which case authors would be required to deposit a refereed preprint version of their article in an open access repository typically with an embargo period of 6 to 24 months after publication (see section 10).²⁸ The current policy is at: <http://www.rcuk.ac.uk/RCUK-prod/assets/documents/documents/RCUKOpenAccessPolicy.pdf>

The Business, Innovation and Skills Committee report into open access, published in September 2013, concluded that, "whilst Gold open access is a desirable ultimate goal, focusing on it during the transition to a fully open access world is a mistake". The report states that due regard should be given to the important role played by Green open access and repositories, concluding that this model "could represent a more cost-effective and sustainable route to full open access". It recommends that the Government, which has spent £224m on repositories in recent years, takes an active role in working with JISC and the UK Open Access Implementation Group to promote standardisation and compliance across both subject and institutional repositories and that the Higher Education Funding Council for England's proposal to make immediate deposit in an appropriate institutional repository a pre-condition of Research Excellence Framework (REF) eligibility is implemented.²⁹

9. The Research Excellence Framework (REF)

The Research Excellence Framework (REF)³⁰ is the new system for assessing the quality of research in UK higher education institutions (HEIs). It replaces the Research Assessment Exercise (RAE) and is managed by the REF team based at HEFCE.

²⁶ Statement for the Commons Select Committee on Open Access from the editors of History Journals <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmbis/99/99vw39.htm>

²⁷ Brems & Munafò, 2013, Cited in Wellen, R.m 2013. Open Access, Megajournals, and MOOCs: On the Political Economy of Academic Unbundling. SAGE Open <http://sgo.sagepub.com/content/3/4/2158244013507271>

²⁸ Wellen, R.m 2013. Open Access, Megajournals, and MOOCs: On the Political Economy of Academic Unbundling. SAGE Open <http://sgo.sagepub.com/content/3/4/2158244013507271>

²⁹ <http://www.parliament.uk/business/committees/committees-a-z/commons-select/business-innovation-and-skills/inquiries/parliament-2010/open-access/>

³⁰ <http://www.ref.ac.uk/>

HEFCE will accept research material published via the Green route and gives a central role to the repository in housing these outputs. It states:

“Journal articles and conference proceedings must be available in an open-access form to be eligible for the post-2014 REF. In practice, this means that these outputs must be uploaded to an institutional or subject repository at the point of acceptance for publication.”

The repository may provide access in a way that respects agreed embargo periods, which HEFCE has aligned to RCUK's (i.e. 12 months for science, technology, engineering and mathematics and 24 months for arts, humanities and social sciences).

Library and information professionals in several universities already recognise that the institutional repository is a good system for providing, electronically, a record of research outputs for the purposes of the REF and have been using it to meet this end for several years. However, the spontaneous deposit of outputs by researchers is low. Making the deposit of publications in a repository a requirement of the REF should have a direct, immediate impact on repository use.

10. Embargo periods

RCUK's open access policy states that, where funding to pay APCs is unavailable, the embargo length for papers made available via the Green route should be no more than 6 months for biomedicine, 12 months for other STEM disciplines and 24 months for the arts, humanities and social sciences. However, there is some flexibility during the transition phase and it will be kept under review.

It is important to keep policies on embargoes under review as there is evidence that current government and RCUK policies might be incentivising publishers to introduce or lengthen existing embargo requirements in order to force UK authors to pay for Gold.³¹

The impact on learned societies will also be reviewed. Learned societies rely on surplus funds from journal subscriptions to support research projects and academic conferences and give grants to early career scholars. If embargo periods are too short, or abolished completely, these societies are concerned that their business models would be undermined.³²

Embargo periods and library subscriptions

Recent research undertaken by the British Academy found that libraries for the most part thought that embargoes for author-accepted manuscripts deposited in repositories had little effect on their acquisition policies, although there is evidence that 6-month embargo periods might have such an effect. Academics are not consistent in their posting of manuscripts, and libraries find that journals do not have high enough, or regular enough, percentages of such manuscripts posted to justify cancellations of journals.³³

³¹ The Business, Innovation and Skills Committee report cited evidence of a UK social science publisher switching from a zero embargo policy to a 24 month one in accordance with, it argued, changes to UK policy.

³² Darley, R., Reynolds, D and Wickman, C., 2014. Open Access Journals in Humanities and Social Science. London: British Academy

³³ Ibid

However, the research concluded that, if journal prices continue to rise, journals will be cancelled, whether deposited manuscripts are available or not.³⁴

11. Licences

Where a RCUK open access block grant is used to pay APCs for research, the resulting papers must be made available under a Creative Commons CC-BY licence. Where open access is through the Green route, the most liberal and enabling licences, ideally CC-BY, should be used.³⁵

Publishers relying heavily on revenues from the sale of reprints have raised concerns about the impact of CC-BY, and RCUK has committed to actively monitor this impact.

In some subject areas research outputs include images and other elements that are reproduced under permission from a copyright holder. RCUK, JISC and the UK Open Access Implementation Group are to produce guidance on the identification and management of third party copyrighted material included within a paper licensed under CC-BY.

12. Open access monographs

Moves towards digital and open access ebook publishing have been much slower than with journal articles, and experimentation is at a much earlier stage. However, the ethical argument for open access would include monograph publication, even though the financial and practical ones do not. As yet no business model exists for open access monograph publishing on more than a small scale. In 2013 RCUK and HEFCE made it clear that monographs are excluded from their current plans.³⁶

In recognition that monographs are particularly important in the humanities and some areas of the social sciences (less so in the life sciences and physical sciences)³⁷, in October 2010 the OAPEN-UK project commenced and is due to run until spring 2015. OAPEN-UK will explore the challenges of open access scholarly monograph publishing in the humanities and social sciences. <http://oapen-uk.jiscebooks.org/>

The National Monographs Strategy project is exploring the potential for a national approach to the collection, preservation, supply and digitisation of scholarly monographs. The project will consider open access <http://monographs.jiscinvolve.org/wp/>

13. Open Data

In academic research, data is “the output from any systematic investigation involving a process of observation, experiment or the testing of a hypothesis, which when assembled in context and

³⁴ Ibid, p8

³⁵ Under the Creative Commons CC-BY licence users are free to copy, distribute, display, perform and build upon a copyrighted work, for commercial and non-commercial purposes, on condition that the original author is credited and that the copyrights of any third party material in the work is not infringed

³⁶ Darley, R., Reynolds, D and Wickman, C., 2014. Open Access Journals in Humanities and Social Science. London: British Academy

³⁷ <http://www.theguardian.com/higher-education-network/blog/2014/sep/30/publishing-humanities-monograph-open-access>

interpreted expertly will produce new knowledge”.³⁸ Research data includes analogue sources, as well as “discrete digital objects” (e.g. text files, image files or sound files), “complex digital objects” (discrete digital objects made by combining a number of other digital objects, such as websites) and databases.³⁹

Open data is data that can be freely used, shared and built-on by anyone, anywhere, for any purpose.⁴⁰

There is no significant field of research that is not already rich in data. While the experimental sciences are particularly data intensive, social sciences and humanities enquiry can also generate large volumes of data.⁴¹

Many of the arguments for open access to publically funded research literature apply equally well to publically funded research data. Most funding bodies, including all the UK Research Councils, now mandate that research applicants produce a Research Data Management plan and that data sharing and reuse is designed into it where possible.

RCUK Common Principles on Data Policy states that:

“Publicly funded research data are a public good, produced in the public interest, which should be made openly available with as few restrictions as possible in a timely and responsible manner that does not harm intellectual property.”⁴²

However, datasets come in a wide variety of formats, sizes and complexities and the challenge of managing – and finding adequate space to store – these datasets has still to be addressed. In addition to the technical challenges, the legal, ethical, economic and competitor issues surrounding access to research data are complex. RCUK and other funders have not made open data a formal requirement and HEFCE do not consider it feasible at present to make access to data a formal requirement in a post-2014 REF.

14. Other policies and initiatives

- **Charity Open Access Fund (COAF)**

In September 2014, the Wellcome Trust joined with Arthritis Research UK, Breast Cancer Campaign, the British Heart Foundation (BHF), Cancer Research UK and Leukaemia & Lymphoma Research to create the Charity Open Access Fund.⁴³ COAF is a two-year pilot and will collect around £12 million into a single pot of APC money, available to researchers who are funded by any of the charities and based at any of the 36 universities and research institutes covered by the scheme.

³⁸ Pryor, G. Why Manage Research Data? In Pryor, G. (Ed), 2012, Managing Research Data, p2

³⁹ Ibid, p7

⁴⁰ <http://blog.okfn.org/2013/10/03/defining-open-data/>

⁴¹ Swan, A., 2011. Institutional Repositories - now and next

⁴² <http://www.rcuk.ac.uk/research/datapolicy/>

⁴³ <http://www.wellcome.ac.uk/About-us/Policy/Spotlight-issues/Open-access/Charity-open-access-fund/index.htm>

- **Access to Research**

One of the recommendations of the Finch Group was that the major journal publishers should grant public libraries a licence to provide free access to their academic articles. The Access to Research two year pilot, starting February 2014, is the outcome of that recommendation.

The pilot is led by the Publishers Licensing Society and offers access to more than 10 million academic articles. Figures released on 6 August reveal that more than 160 local authorities had signed up and more than 14,500 people had used the scheme. Libraries in London, Manchester and Taunton had the most users in the first four months of the scheme, and in July the top-ranked search term was “dementia”. More information at www.accesstoresearch.org.uk.

- **European Union’s Horizon 2020**

From 2014, research funded through the European Union’s Horizon 2020 programme will have to be published through either the “Gold” or “Green” open access routes.

- **League of European Research Universities (LERU)**

LERU published its Roadmap towards Open Access Advice Paper in June 2011
http://www.leru.org/files/publications/LERU_AP8_Open_Access.pdf

- **World Bank**

In April 2012 the World Bank announced that, from July 1st 2012, its research would be made available via open access:
<http://documents.worldbank.org/curated/en/2012/04/16200740/world-bank-open-access-policyformal-publications>

- **UNESCO**

In April 2012 UNESCO published Policy Guidelines for the Development and Promotion of open access:
<http://sparceurope.org/policy-guidelines-for-the-development-and-promotion-of-open-access/>

- **IFLA**

IFLA Statement on open access – clarifying IFLA’s position and strategy, The Hague, 15 April 2011.
<http://www.ifla.org/files/assets/hq/news/documents/ifla-statement-on-open-access.pdf>

- **OECD**

OECD Principles and Guidelines for Access to Publicly Funded Research Data, 2007
<http://www.oecd.org/science/sci-tech/38500813.pdf>

- **White House Office of Science and Technology Policy memorandum**

The White House Office of Science and Technology Policy (OSTP) memorandum was published in 2013 and outlines a constructive way toward open access. The memo directs each US funding agency with over \$100 million in annual research expenditure to develop a plan to support public access to the results of research funded by the federal government

http://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf

- **Research4Life**

Research4Life is the collective name for the four programmes – HINARI, AGORA, OARE and ARDI – that provides developing countries with free or low cost access to academic and professional peer-reviewed content online. More at www.research4life.org.

- **SHERPA**

SHERPA, based at the University of Nottingham, runs a service called JULIET which lists research funders archiving mandates and guidelines.

SHERPA also runs the RoMEO service, which lists publishers and their associated copyright agreements.

<http://www.sherpa.ac.uk/index.html>

15. Glossary

Open Access Oxford, at University of Oxford, has produced a glossary of open access terms <http://openaccess.ox.ac.uk/glossary/>

SHERPA has also produced a glossary <http://www.sherpa.ac.uk/glossary.html>