



House of Commons
Science and Technology
Committee

**Responses to the
Committee's Tenth
Report, Session 2003–04,
Scientific Publications:
Free for all?**

Fourteenth Report of Session 2003–04



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Report, together with formal minutes

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The Science and Technology Committee

The Science and Technology Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Office of Science and Technology and its associated public bodies.

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Scientific Publications: Free for all?: the Government Response

1. We published our Tenth Report of Session 2003—04, *Scientific Publications: Free for all?*, on Tuesday 20 July 2004. We received the Government Response to our Report on Tuesday 26 October. This Response appears as Appendix 1 to this Report. We have also received responses from other organisations that are the subject of our recommendations, namely the Office of Fair Trading (OFT); the Society of College, National and University Libraries (SCONUL) and the Consortium of University Research Libraries (CURL); the Securing a Hybrid Environment for Research Preservation and Access (SHERPA) project; Research Councils UK (RCUK); and the Joint Information Systems Committee (JISC). These are published as appendices to this Report. Many other organisations have also published comments on our original Report.

2. The Government Response is a distillation of responses from all the Government departments and other Government organisations that have an interest in the Report. They are: the Department of Trade and Industry (DTI), which took responsibility for co-ordinating the Government Response; the Department for International Development (DFID); the Department for Education and Skills (DfES); the Department for Culture, Media and Sport (DCMS); Her Majesty's Customs and Excise (HMC&E); the Department of Health (DoH); RCUK; the Higher Education Funding Council for England (HEFCE); and JISC. **We have had to consider whether the Government Response that we received accurately reflects the diversity of views and interests represented by these departments and bodies.**

3. Having received the Government Response, we asked the Joint Information Systems Committee for a copy of the response that it had independently prepared to our Report.¹ We were sent a copy of this document, but were asked not to treat it as formal evidence to be published because it had already been used to inform the official Government Response co-ordinated by DTI. We understand that JISC has been under pressure to amend this original response. We suspect that this is because it differs substantially in both tone and content from that of the Government, as is apparent from JISC's original evidence to the Committee. The version of JISC's response published here has been amended by JISC to reflect its negotiations with DTI. It is regrettable that an expert body should feel constrained in carrying out its advisory role, assigned to it by Government. We regard the approach taken by DTI to independent advice that conflicts with its own view as unduly sensitive. We will be raising this issue with the Liaison Committee in the context of the Cabinet Office's revised "Guidance, Evidence and Response to Select Committees" on the provision of evidence by Government to Select Committees.

4. The response from JISC endorses the Committee's Report both in principle and in practice. The Government Response, on the other hand, says that it endorses much of the Committee's Report "in principle", but in practice undertakes to implement none of the

¹ The Joint Information System Committee is a non-departmental public body funded by the UK Higher and Further Education funding bodies, under the auspices of the Department for Education and Skills. It is an advisory body tasked with providing world-class leadership in the innovative use of information and communications technology to support education and research.

main recommendations. This approach will prevent the main thrust of the Report being taken forward.² For example, the Committee recommended that “institutions need an incentive to set up repositories”, and that “Government appoints and funds a central body [...] to co-ordinate the implementation of a network of institutional repositories”.³ JISC agrees in its response: “if the UK is to remain at the forefront of educational and technological progress [...] a Common Information environment is required”.⁴ It goes on to note that, “significant additional funding will be required from Government for a sustainable initiative on a larger scale”.⁵ However, in its Response, the Government states that, although it “recognises the potential benefits of institutional repositories and sees them as a significant development worthy of encouragement”, it also “believes that each institution has to make its own decision about institutional repositories depending on individual circumstances”.⁶

5. By abdicating responsibility for implementing institutional repositories at a national level, the Government severely limits the benefits that such repositories can yield for access to scientific publications. Furthermore, the Government Response does not reflect the call for a coherent national strategy made by the Committee and by JISC in its response.

6. The differences between the responses to our Report from the Government and JISC go to the very core of the issue. Whereas, for example, “the Government is not aware that there are major problems in accessing scientific information”, and at one point describes the publishing industry as “healthy and competitive”, JISC states that it has “already identified the need for change in the scientific publishing model in order to improve access and has been funding projects and reports to stimulate change”.⁷ Whilst it is frustrating that the Government should ignore evidence of a problem that has been collected and reported by a Select Committee, it is worrying that it should ignore such evidence when it is compiled by the Joint Information Systems Committee, a body that is Government-funded and well placed to make an assessment of the issue. We suspect that JISC’s view and advice have been disregarded in the Government Response because it conflicts with interests held elsewhere in Government, particularly at DTI. We are not convinced that ignoring the position of an expert body in this way is in the best interests of the scientific community in particular, or the public in general. It is certainly not a good example of evidence-based policy making.

7. In our Report, we pointed out that the interests of the Office of Science and Technology (OST) and DTI, of which OST forms a part, are not necessarily synchronised on the issue of scientific publications. In its Response, the Government rejected this, stating that “since it is Ministers who decide policy and not officials, and OST and the sector unit are responsible to the same Secretary of State, the language of ‘conflict of interest’ is not

2 p 12

3 HC 399, Recommendations 43, 55. Institutional repositories are online archives set up and managed by research institutions to house articles published by authors at the institutions involved. Such repositories can accept articles either before or after publication (pre-print repositories and post-print repositories).

4 p 52

5 p 53

6 p 26

7 pp 14, 21

appropriate here”.⁸ This evades the point. Just as different departments within Government have different, and competing, interests, different sections within one department can have conflicting stances on a particular issue. That the various departments and organisations that have an interest in scientific publications do not always agree is obvious from the collection of responses that we received to our Report. JISC’s enthusiastic and assertive response has become, in the official Government document, bland and non-committal. **It is clear to us that, in the Government Response, DTI has sought to neutralise some of views put forward by the Joint Information Systems Committee and other organisations and departments. This will prevent the Government from making any significant progress on this issue.**

8. Even when taken on its own, the Government Response is clearly unsatisfactory. It fails to reply to the substance of some arguments and appears to misinterpret others. From the outset, the Government argues against the wholesale adoption of the author-pays publishing model as if this is what the Committee had recommended. This is not a recommendation that the Committee made. Indeed, we were very careful to ensure that our conclusions on the author-pays model were balanced and fair. Although the Committee considered that “the arguments for the author-pays publishing model are in many ways attractive”, it stopped short of recommending a mandate. We chose instead to advocate further investigation, particularly of the “free rider” issue and the impact of author-pays publishing on learned societies.⁹ It is a deliberate misunderstanding, if not a misrepresentation, of the Committee’s Report to state that “the Government is [...] not convinced that the ‘author-pays’ model is inherently superior to the current model”, and “it is not obvious [...] that the ‘author-pays’ business model would give better value for money than the current one”.¹⁰ These statements do not address the Committee’s findings. Furthermore, **rather than engaging in the complex issues posed by the Committee’s Report, the Government has clearly decided against the author-pays model ahead of the further investigation that it was urged to pursue. This approach prejudges the issue.**

9. The Government’s Response leaves much of the work in ensuring the effective dissemination of research findings to the whim of the publishing industry. Given that the publishing industry has not yet proved itself inclined to address many of the problems identified in the Committee’s Report, this stance is unacceptable. We are disappointed that the Government has chosen this approach rather than seizing the opportunity to make a positive difference.

10. We note, too, with disappointment the Office of Fair Trading’s response to the recommendations of our Report. **Following completion of the European Commission study into the market for scientific publications, to which the OFT response refers, we request that the Director General of Fair Trading agrees to write again to the Committee setting out the actions he proposes to take on the basis of the Commission’s findings and the concerns expressed in our Report.**

11. The Government Response does herald progress on a number of important issues. In particular, the Government is to be commended for its stated intention to establish a

8 p 9

9 HC 399, Para 190

10 p 9

Content Procurement Company to provide effective national co-ordination of purchasing of academic content. We are pleased that the Government agrees that “the data underpinning the results of publicly-funded research should be made available as widely and rapidly as possible, along with the results themselves”, and hope that this will lead to a new policy on the publication of “negative” results, particularly in the field of clinical trials.¹¹ We also hope that DFID will follow up its stated intention to work “with publisher, the UN and other bilateral donors to develop mechanisms that improve access in low bandwidth environments and [to work] to improve the ICT infrastructure and regulatory environments of developing countries”.¹² These are all very positive steps towards improving the global provision of scientific content.

12. The debate about scientific publications is still evolving, and the Committee will be pursuing the issues in a variety of ways. **We are disappointed that the Government has missed the opportunity to take more decisive action in response to our Report. We recommend that the Government reconsider its position on this important issue in the light of the other responses to our Report published here; the forthcoming RCUK policy on the publication of, and access to, research outputs; and in view of the support for the Committee’s stance from the Wellcome Trust, an important research funder. In this context, we do not believe that Government should continue to refuse to provide the modest funds necessary to make institutional repositories workable, and to allow the experimentation necessary to properly test the feasibility of the author-pays publishing model.**

11 p 11

12 p 16

Conclusions and recommendations

1. It is clear to us that, in the Government Response, DTI has sought to neutralise some of views put forward by the Joint Information Systems Committee and other organisations and departments. This will prevent the Government from making any significant progress on this issue. (Paragraph 7)
2. rather than engaging in the complex issues posed by the Committee's Report, the Government has clearly decided against the author-pays model ahead of the further investigation that it was urged to pursue. This approach prejudices the issue. (Paragraph 8)
3. Following completion of the European Commission study into the market for scientific publications, to which the OFT response refers, we request that the Director General of Fair Trading agrees to write again to the Committee setting out the actions he proposes to take on the basis of the Commission's findings and the concerns expressed in our Report. (Paragraph 10)
4. We are disappointed that the Government has missed the opportunity to take more decisive action in response to our Report. We recommend that the Government reconsider its position on this important issue in the light of the other responses to our Report published here; the forthcoming RCUK policy on the publication of, and access to, research outputs; and in view of the support for the Committee's stance from the Wellcome Trust, an important research funder. In this context, we do not believe that Government should continue to refuse to provide the modest funds necessary to make institutional repositories workable, and to allow the experimentation necessary to properly test the feasibility of the author-pays publishing model. (Paragraph 12)

Formal Minutes

Monday 1 November 2004

Members present:

Dr Ian Gibson, in the Chair

Paul Farrelly
Dr Evan Harris
Dr Brian Iddon

Mr Robert Key
Mr Tony McWalter
Dr Desmond Turner

The Committee deliberated.

Draft Report (Responses to the Committee's Tenth Report, Session 2003-04; Scientific Publications: Free for all?), proposed by the Chairman, brought up and read.

Ordered, That the Chairman's draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 12 read and agreed to.

Resolved, That the Report be the Fourteenth Report of the Committee to the House.

Ordered, That the Chairman do make the Report to the House.

[Adjourned till Wednesday 10 November at nine o'clock.]

Appendix 1

Response from the Government

Introduction

We welcome the publication of this Report. The inquiry and the subsequent Report have helped to widen and deepen the debate significantly.

The Government's ten-year science and innovation investment framework (2004-2014) has recently been published.¹³ It was recognised that the vision outlined in the ten-year framework will not be possible without a close partnership with science based companies, the scientific community and research charities. In our response to this inquiry we have ensured that we have consulted with key stakeholders from all areas of the debate, and we will continue to do so in the future.

The important contribution that dissemination and availability of research data can make through the provision of an effective information infrastructure is recognised in the ten-year framework. The availability of information systems to systematically collect, preserve and make available digital information will be vital in supporting the government's broader science and innovation goals, and we are pleased that the committee have also highlighted the importance of these areas.

To help meet the objectives of the ten-year framework, the Government wants to see the outcomes of publicly funded research made available to the widest possible audience, following peer review. However, business models which contribute to this overall goal must maintain quality and at a reasonable cost.

Format of our response

The response to the Committee Report has been led by the DTI, with contributions from DFID, DfES, DCMS, HMC&E and DoH. We have also consulted at length with RCUK, HEFCE and the JISC and with colleagues in funding bodies of the devolved authorities.

Many of the issues raised in the Select Committee Report are being taken forward by bodies funded either through Government or their agencies. As an "arms length" body the Office of Fair Trading will be responding separately with detailed comments on recommendations specifically addressed to them but we are aware of the contents of their reply.

We have considered what would be the most helpful structure for this response. All the points raised by the Select Committee have been addressed. However, where there were closely related issues, we have provided a single integrated response, making clear which of the Committee's individual points are being responded to.

A glossary of acronyms is provided in Annex A.

13 http://www.hm-treasury.gov.uk/spending_review/spend_sr04/associated_documents/spending_sr04_science.cfm

List of recommendations and Government responses

1. It is discouraging that the Government does not yet appear to have given much consideration to balancing the needs of the research community, the taxpayer and the commercial sectors for which it has responsibility. (Paragraph 22)

The interests of the research community, the taxpayer and the publishing industry (whether commercial or not for profit) are closely intertwined. The continuation of widely disseminated, accessible top quality peer-reviewed research, produced efficiently and at competitive prices is in everyone's interests. Discussions about this have involved a number of different departments, and the Government are grateful that the Committee's inquiry has promoted a more detailed debate. Within DTI, OST and the sector unit with Business Relations responsibilities for the publishing industry work closely together. Since it is Ministers who decide policy and not officials, and OST and the sector unit are responsible to the same Secretary of State, the language of "conflict of interest" is not appropriate here. Ministers receive advice from across the Department and reach a decision based on the evidence.

In a market in which different organisations are competing to provide services to the academic community, the Government does not think it should intervene to support one model or another. The Government is also not convinced that the "author-pays" model is inherently superior to the current model.

Consequently, the Government's approach is to facilitate a level playing field so the market can develop without any institutional barriers being put in the way of any particular publishing model. This option is the most appropriate to encourage competition and innovation in publishing, to promote greater accessibility, to maintain quality and to retain freedom of choice for authors. This approach does not favour one part of the value chain at the expense of another and is in the long-term interests of a sustainable scientific publications market.

2. We are convinced that the amount of public money invested in scientific research and its outputs is sufficient to merit Government involvement in the publishing process. Indeed, we would be very surprised if Government did not itself feel the need to account for its investment in the publishing process. We were disappointed by how little thought has been given to the issues within Government thus far and hope that this Report will prove to be a catalyst for change. (Paragraph 24)

18. Government invests a significant amount of money in scientific research, the outputs of which are expressed in terms of journal articles. It is accountable for this expenditure to the public. We were dismayed that the Government showed so little concern about where public money ended up. (Paragraph 55)

(2) (18) A considerable amount of work has been done on this issue. The future of scientific publications has been widely discussed between the DTI, DfES, DCMS, DFID and DoH and a cross-Government view has been formulated. The contributions of HEFCE, RCUK and the JISC were also important in formulating our strategy. This Committee Report has also provided a valuable contribution to the Government thinking. It is not obvious, however, that the "author pays" business model will give better value for

money than the current one and the Government will require clear evidence before supporting it further.

An author-pays model would lead to industry (which is a significant user) paying less and therefore, unless the author-pays model was cheaper to run, the Government would find itself forced to pay more. So far we have seen no convincing evidence that the author pays model would be cheaper to operate than electronic versions under the current model. It should be noted that the UK is responsible for 5.3% of articles to global STM journals, but only contributes 3.3% of the global subscription market. Therefore, a publishing model which loads the cost onto the authors of articles rather than the users themselves is not likely to be in our national interest. This is implicitly recognised in recommendations 68 and 74 below.

3. The backdrop of international interest and momentum for change sets the scene for the UK Government to take a lead in establishing an efficient and sustainable environment for the publication of research findings. (Paragraph 25)

53. Having taken the step of funding and supporting institutional repositories, the UK Government would need to become an advocate for them at a global level. If all countries archived their research findings in this way, access to scientific publications would increase dramatically. We see this as a great opportunity for the UK to lead the way in broadening access to publicly-funded research findings and making available software tools and resources for accomplishing this work. (Paragraph 131)

(3) The Government will be actively participating in international debate on scientific and other academic publishing, and we will be seeking to make a strong contribution to the current EU study into scientific publications.

(53) The Research Libraries Network (the RLN), whose members include the UK Higher Education Funding councils, RCUK and the British Library, has been established to act as a high level advocate for research information and will provide the UK with a strong voice in international debates on the development of research information technology in forthcoming months.

The Government has also endorsed the Declaration on Access to Research Data from Public Funding. The OECD have been asked to take further steps towards proposing Principles and Guidelines on Access to Research Data from Public Funding, taking into account possible restrictions related to security, property rights and privacy.

RCUK are currently producing a policy framework on the dissemination and preservation of the information outputs of research. The Government will assess the implications of this advice once it has become available.

When agreed this framework should constitute an important statement of principle that may be used to underline the UK's stance and commitment in the international arena.

The JISC has supported innovation in scholarly publishing in close collaboration with organisations in other countries. The JISC is also taking forward developments in standards to support repositories in the UK in partnership with international standards making bodies.

4. We will give a copy of this Report to the UK delegates to the Culture, Science and Education Committee of the Parliamentary Assembly of the Council of Europe. We hope that the Committee will pursue the issues raised here, both within the Council of Europe and on a wider international stage. (Paragraph 28)

Noted and the Government will ensure that they receive a copy of its response following publication by the Committee.

5. The British Library's Document Supply Service is an efficient and cost-effective method of providing access to articles in scientific journals. The decline in demand for Document Supply notwithstanding, we are persuaded that the service provides a valuable alternative route for users who would not otherwise have access to the journals that they needed. We recommend that the Government takes steps to protect the service. (Paragraph 31)

The Government agrees that the British Library's document supply service is valuable. It has recognised this by providing funding of £2m from the Invest to Save Budget for modernisation of the service. This has enabled the British Library to improve efficiency, offering a high-speed service with secure electronic delivery of documents. The British Library has also been allocated additional grant in aid to implement a major reform programme that will generate savings and provide further funding for the improvement of services, including document supply.

6. We are not convinced that the publisher practice of granting each subscriber access to a set number of digital "copies" of a journal is either effective or necessary. We recommend that the Joint Information Systems Committee strongly argues the case against such restrictive practices when it negotiates the terms for the next national site licence with publishers. (Paragraph 32)

Although this practice is standard for some publishers, the JISC never agrees to it. No JISC agreement is restricted to a number of simultaneous users. The preferred model is that of a common national licence, providing unlimited access to all registered users of libraries in all universities and colleges able to take up the deals negotiated by the JISC.

7. We congratulate the Medical Research Council on its support of the principle that primary research data should be made available to the scientific community for subsequent research. We recommend that the Research Councils consider providing funds to enable researchers to publish their primary data alongside their research findings, where appropriate. (Paragraph 33)

The Government believes that the data underpinning the results of publicly-funded research should be made available as widely and rapidly as possible, along with the results themselves. For a number of years now, the AHRB, ESRC and NERC have funded data centres responsible for managing primary research data generated from the research they support and for disseminating these data to the wider community. There is a cross Research Council group (led by CCLRC) looking at how research council policy needs to be developed in this area. The Government is not persuaded that additional funding needs to be provided to researchers rather, there may need to be additional investment by research councils to fund data facilities made available to support this objective. Institutional or thematic repositories should provide a useful environment for

disseminating such information and linking it to research results. For example, the Department of Health is exploring the possibility of a NHS repository.

The JISC works closely with the Research Councils and jointly hosts some of the primary data already supported by Research Council funds, through services in the social sciences and the arts and humanities, such as the Arts and Humanities Data Service and the Economic and Social Data Service^{14,15}. The institutional repositories created through the JISC funded FAIR programme already contain many types of academic material including e-prints and primary research data which should prove useful to researchers. The FAIR programme, through projects like E-prints UK, is also developing infrastructure to allow all e-prints stored in institutional repositories to be located irrespective of their location. Crucially, all the JISC activity in this area is standards based so that the interoperability between different data and information is enabled.

8. All researchers, regardless of the nature of their institution, should be granted access to the scientific journals they need to carry out their work effectively. (Paragraph 35)

9. We recommend that the Joint Information Systems Committee and the NHS work together to implement joint procurement procedures that reflect the close working patterns of NHS and the higher education sector and represent value for money for both. (Paragraph 36)

22. Current levels of flexibility within the journal bundle do not present libraries with value for money. Whilst we accept that unbundling STM information carries risks for the main commercial publishers, only when flexible bundled deals are made available will libraries achieve value for money on their subscriptions. Furthermore, although we recognise that bundled deals may be advantageous to libraries in certain circumstances, we are concerned about the potential impact bundling may have on competition, given limited library budgets and sustained STM journal price growth. (Paragraph 68)

(8) The Government endorses recommendation 8 in principle. Effective research depends upon researchers having access to the results and findings of their colleagues in the research community.

Overall, it is the Government's view that researchers should be free to publish their output wherever and however they consider most appropriate for their audience. However, this freedom must be set in the wider context of:

- a) two important principles stemming from the Research Councils' obligations as public funders of research:
 - i. ideas and knowledge derived from publicly-funded research should be available for public use and public interrogation and scrutiny; therefore, the results of research funded by Research Councils must be disseminated as widely and rapidly as possible;

14 <http://www.ahds.ac.uk>

15 <http://www.esds.ac.uk>

- ii. Research Councils are responsible for the cost-effective use of public funds; therefore, the means of publication must also be cost-effective.
- b) International considerations (see for example the response to recommendation 74)
- c) the wider impact on the academic community (see for example the response to recommendation 69)
- d) The loss of the contribution to the publication process from journal subscriptions by the private sector (see response to recommendation 68).

(9) The JISC has taken the lead in coordinating national negotiations for licensing deals, and continues to be well placed to lead on this. The JISC is raising awareness within universities and colleges to ensure they fully understand the beneficial terms of the JISC model licence. The Government will encourage the HEIs and NHS to explore whether their procurement procedures can be improved by more joint activity.

The Government is keen to see improvements in the procurement of academic publications and endorses the role of the JISC to explore the establishment of a Content Procurement Company. This would provide even more effective national co-ordination of purchasing of academic content. Such a company would be able to negotiate access to online content on behalf of all higher and further education institutions through the JISC as well as on behalf of other organisations such as the Research Libraries Network, NHS or the Museum Libraries and Archives Commission. This central negotiation will bring the benefit of terms and conditions of use that would not be possible if agreements were negotiated individually by institutions or organisations and much reduced subscription charges for access to content.

(22) In the Government's response to recommendations 20 and 27 we have stated that it is important that libraries are adequately funded, but that the ultimate choice on how funding is spent must be left to the libraries. In many cases bundling deals do provide a means of increasing value. We note that, to our knowledge, no large country has yet struck a deal with a major publisher. However, we are looking to the Higher Education funding bodies working through the JISC to continue to pursue licensing agreements that open up the widest body of material to the widest possible audience (including use for teaching and access for the general public). For example, the JISC is funding an analysis of Library Usage Statistics (due to report at the end of 2004) which will help to inform this debate.

10. Teaching is a crucial university function. Universities should be permitted, within reason, to derive maximum value from the digital journals to which they subscribe by using them for legitimate teaching purposes. We recommend that future licensing deals negotiated by the Joint Information Systems Committee explicitly include provisions to enable journal articles, whether print or digital, to be used for teaching purposes. (Paragraph 38)

The JISC's Model Licence already ensures that electronic resources can be fully utilised in learning and teaching. The relevant clauses allow for "use and manipulation of copyright material" while protecting that material from abuse. This means for example, that (providing it is properly attributed) a lecturer can copy and paste text from a journal article into a teaching material. However, the lecturer may not amend the published text, and it is

quite reasonable that publishers restrict such amendments of copyright material. A restriction in the JISC Model Licence states "For the avoidance of doubt, no alteration of the words or their order is permitted".

In light of the report, the JISC also intends to undertake an awareness programme regarding the licensing terms of JISC agreements, to improve the community's understanding of the flexibility provided in the licence terms.

11. It is not for either publishers or academics to decide who should, and who should not, be allowed to read scientific journal articles. We are encouraged by the growing interest in research findings shown by the public. It is in society's interest that public understanding of science should increase. Increased public access to research findings should be encouraged by publishers, academics and Government alike. (Paragraph 40)

The Government is not aware that there are major problems in accessing scientific information, or that there is a large unsatisfied demand for this. The Government would agree that the readership of scientific journal articles should not be deliberately restricted. We need to ensure that the public has the information it needs to feel confident about debating science and science related issues and making decisions on issues where science is a factor. This can be done through journals, but also public engagement activities. The Government is encouraging greater public engagement with science through its own programme and through publicly funded bodies such as the Research Councils. Such engagement can only benefit science and society.

12. We are not convinced that journal articles are consistently available to members of the public through public libraries. (Paragraph 42)

The Government is not aware of any evidence of a significant problem in meeting the public's needs in respect of access to journals through public libraries. There are a number of ways public libraries can help members of the public gain access to journals. Whilst the larger public libraries may hold copies of the most popular journals, most libraries will rely on the inter-library loan network and the British Library's recently modernised document supply service. If required, and subject to a charge, the British Library can provide copies of documents within two hours.

The Government published last year "Framework for the Future", its vision for public libraries over the next ten years, and is encouraging all public library services to understand the needs of their users better. Of course they must have due regard for value for money. The Government is encouraging close working between public and academic libraries across the country through the "Framework for the Future" Action Plan led by the MLA and its regional agencies in partnership with SCONUL. For health research, on-line resources such as the National electronic Library for Health have great potential to make the contents of all journals more accessible. The People's Network of computers in all public libraries, funded by the National Lottery, has allowed access to the Internet for everyone in the country. The UK Public also has some access to science, technology and health research articles via academic libraries; the potential significance of this facility should not be understated. Academic libraries can provide a key means of public access to scholarly material, and we understand that virtually all state universities in the U.S. allow public walk-in access.

Currently public access via UK Academic Libraries is not universally available. In a recent survey, 35% of the 84 academic libraries assessed restrict public access to their materials, but a growing number of libraries are opening their doors to the public offering significant additional resources to those in search of scholarly information.¹⁶

Some universities argue that their libraries are already so heavily used by staff and students, to whom they have to give priority, that the capacity is not there to let the general public in too. There are also a number of specific issues such as collections that could attract high demand, that need to be addressed.

We have asked HEFCE to assemble an expert group and advise Government on the best way to deliver this service and the problems that will need to be resolved, including any licence restrictions on access to journals by walk-in members of the public.

In addition, INSPIRE, a long-term project funded by the DfES in cooperation with the DCMS, aims to ensure that “any member of a public library can also access materials held in HE libraries” by 2013. There is widespread Government support for this initiative.

13. Digitisation should facilitate, not restrict access. We recommend that the next national site licence negotiated by the Joint Information Systems Committee explicitly provides for all library users without an Athens password to access the digital journals stocked by their library. (Paragraph 44)

The Government agrees that digitisation should facilitate and not restrict access. The Government looks to the Higher Education funding bodies, working through the JISC, to continue to pursue licensing agreements (including national site licences) that open up the widest body of material to the widest possible audience (including use for teaching and access for the general public).

However, the JISC Model Licence already provides for all library users, with or without an Athens password. The licence refers to users in two categories, Authorised Users and Walk-in Users.

- a) The licence defines “Authorised Users” as the current members of the staff of the institution (whether on a permanent, temporary, contract or visiting basis) and individuals who are currently studying at the institution. Users in this category are issued with individual Athens usernames and passwords. This means that they can gain access to electronic resources via the internet at any time and from any location; in other words they do not need to be on library premises and are not limited to library opening hours.
- b) The licence also contains a definition of “Walk-in Users”, covering all other permitted users of the library. The licence permits these users to access electronic journals and other electronic resources from workstations on the library premises. The Athens system is sufficiently flexible to permit this without Walk-in Users needing to be issued with an individual username or password.

Thus far from being more restrictive, Athens authentication widens access to electronic resources for Authorised Users (who represent by far the majority of the library's registered users), while offering Walk-in Users exactly the same level of access to electronic materials as they have to traditional print publications, i.e. access on library premises. For these reasons the JISC always urges publishers to comply with the Athens standard.

14. Publishers are to be commended for signing up to laudable schemes such as HINARI, AGORA and INASP-PERI. We hope that the provision of free and low-cost access to scientific publications for institutions and researchers in developing countries will continue to be a significant aspect of the way that they conduct their businesses. (Paragraph 47)

The Government agrees that Publishers are to be commended for championing and signing up to these schemes and encourages Publishers to continue to develop these initiatives. Publishers were instrumental in co-launching these initiatives with WHO, FAO and the Rockefeller Foundation. DFID has provided financial support to AGORA to enable the technology to deliver the system and is an active member of the partnership. DFID is exploring the feasibility of providing support to both initiatives to build capacity in developing countries to access these online systems and evaluate their success to date. The publishers involved in AGORA and HINARI continue to provide content free to the developing world.

The cost of supplying free or low-cost access to institutions in developing countries is only possible because there is no commercial market for the publications in the countries concerned (hence the exclusion of China and India). These initiatives only include access to digital copies of journals. As Internet access may not be readily accessible in developing countries DFID is considering working with publishers, the UN and other bilateral donors to develop mechanisms that improve access in low bandwidth environments and is working to improve the ICT infrastructure and regulatory environments of developing countries. DFID is also working with multilaterals and bilateral donors in this area to improve and harmonise donor policy.

While arguably providing free and low cost publications to researchers, the author-pays model would also need to ensure that authors from the developing world continue to be able to publish their articles.

DFID provides substantial funds to INASP-PERI programme that purchase electronic scientific journals for developing country use and builds capacity of developing countries to use this material. In addition, publishers are very supportive of the initiative and give discounted rates to PERI for the purchase of journals. DFID is also funding GDNNet, the Global Development Network, which aims to improve the capacity of developing country scientists to publish their research and SciDev.Net which provides access to scientific material, some of which is provided freely by publishers.

15. The digitisation of journals has the potential to greatly increase access to research findings for researchers in the developing world. (Paragraph 48)

The Government welcomes the Committee's recommendation, but suggests cost, IT infrastructure, human and institutional capacity, and developing country policy and regulatory environments should be considered in parallel as key to increased access.

16. We recommend that the Joint Information Systems Committee develop an independent set of measures, agreed by subscribers and publishers alike, to monitor trends in journal pricing. This will help exert pressure on the publishing industry to self-regulate more effectively and will give libraries and other users greater knowledge when they are deciding which subscriptions to take. (Paragraph 53)

Representative bodies such as SCONUL can play an effective role in the debate over journal pricing. The newly-formed Research Library Network will be particularly well placed to mediate between the requirements of the research community, bodies undertaking technical developments to enhance the procurement process and the academic library community.

With regard to journal pricing, the situation is complex, because of the number of models STM publishers employ for subscriptions to their journals. The JISC is currently funding two studies that will help clarify this situation:

- i. The Analysis of Usage Statistics study: to provide the JISC and its NESLi2 Negotiating Agent with accurate data about the national use of electronic journals to inform future negotiations.¹⁷ The study will analyse in depth usage data from a representative sample of small, medium, large, and very large academic libraries to ensure a full picture. The study will cover a minimum of 3 publishers (and ideally 5) in order to provide sufficient comparative data particularly for negotiating purposes.
- ii. The Journals Business Models Study: to identify the existing business models used by scholarly publishers in the international market place and analyse the benefits and disadvantages (including cost issues) to the library community. Models to be analysed include: the big deal (which can be e only or electronic plus print); individual title licences; e-versions of titles held in print; subject clusters; core subscription plus pay per view; and pay per view only. The study will also identify other business models and analyse these in a similar way. This analysis will explore amongst other things both usage based charging models and open access initiatives.

The results of both these studies are due in December 2004. The Government has asked the JISC to undertake the responsibility of monitoring trends in journal pricing, in collaboration with other bodies such as SCONUL and RLN.

17. It is not for us to pronounce on the acceptability of the profit margins secured by private sector companies. Nonetheless, high publisher profit margins need to be set against the context of faltering library budgets and an impending crisis in STM journals provision. Cancelled journal subscriptions due to pressures on library budgets will have a negative impact on publishers. It is thus in everybody's interest for profit margins to be kept at a reasonable and sustainable level. We urge publishers to act on the recommendations of this Report to address these issues. (Paragraph 54)

17 NESLi2 is the UK's national initiative for the licensing of electronic journals on behalf of the higher and further education and research communities, 2003-2006. NESLi2 is a product of the JISC and underwritten by the Higher Education Funding Council for England on behalf of the Funding Bodies.

20. Increasing usage rates do not equate to an increased ability for libraries to pay for journal bundles. The recent availability of usage statistics should not be used as a justification for publishers to raise their prices. (Paragraph 66).

24. We do not doubt the central importance of peer review to the STM publishing process. Nonetheless, we note a tendency for publishers to inflate the cost to them of peer review in order to justify charging high prices. This lack of transparency about actual costs hampers informed debate about scientific publishing. (Paragraph 76)

26. We are persuaded that the costs to publishers associated with digitisation will reduce over time. Consequently, we would no longer expect these costs to be used as a justification for steep increases in prices. In the meantime we are concerned that financially powerful STM publishers may be using their strength during this digital transition period to make excessive profits whilst the going is good. (Paragraph 79)

27. We believe that publishers should make it clear to subscribers what services and costs are and are not covered by the overall subscription price, enabling libraries and other users to weigh up the costs and benefits of taking out the subscription. We urge the Joint Information Systems Committee and other buying bodies to press for greater transparency in this area. (Paragraph 80)

28. Like the Office of Fair Trading, we are not entirely convinced by the cost-justification argument employed by publishers to explain rising prices. Publishers undoubtedly add value to the scientific process, but they also profit from it. (Paragraph 83)

32. Because library budgets generally have a fixed ceiling, by increasing prices, the publisher with the largest share of the budget can gain an even greater share and may also force other publishers out of the budget altogether. (Paragraph 93)

(17) (28) (32) It is not a matter for Government to determine profit margins for commercial companies or revenues for not for profit organisations, but rather to focus on a competitive market place. Reasonable profits are necessary to lead to a healthy level of investment in e.g new technology and value added services. Journal pricing should reflect the costs of production, including peer review, editorial issues, marketing and administration, infrastructure and the level of demand. If there is evidence that financially powerful STM publishers are using their strength to increase prices or make excessive profits, then that would be a matter for investigation by the OFT.

The Government is not convinced that there is an impending crisis in journal provision within the HE sector. Some in the sector have queried whether the general increase in journal prices over recent years is justifiable and sustainable; but the sector's aggregate spending on journal subscriptions continues to be only a small proportion of their total research costs and the total spend on journals only equates to 1% of HEFCE funding. The government has not seen evidence to suggest that access for researchers to journals and other research information is becoming more difficult. If anything, the reverse seems to be the case as increasing amounts of material become accessible from the researcher's desktop. According to figures produced by the Publishers Association, there is an increasing number of downloads from UK based publishers. These downloads are

estimated to be 250-300million in 2002, 500-600million in 2003 with a projected volume for 2004 of 1 billion.

(20) (27) The Government believes it is important that libraries are adequately funded and this is a matter for the relevant institutional authorities. The ultimate choice on how that funding is spent should be left to the libraries, who are best placed to know the requirements of their users. Bundling deals are a way of increasing value for the customer although libraries are under no obligation to purchase them.

There are a range of packages and pricing plans that libraries can take advantage of from both commercial and non-commercial publishers. ALPSP for example have recently launched their own bundled collection of journals, and have been met with a positive library response with 30 licences so far agreed.

Further savings can be made from libraries forming consortia and therefore enhancing their purchasing power. A report in August 2004 by the Primary Research Group estimated that savings of about 30%, could be made off the actual price generally negotiated with single libraries.¹⁸

With the advent of electronic journals, libraries have the opportunity to obtain robust quantitative data about levels of periodical use and to analyse how far their investment represents good value for money. Good analysis of such data could be a powerful tool in future negotiations with publishers when deals are to be renewed, and could help to inform thinking about viable economic models for electronic journals. However, in-depth analysis of this data is time consuming for individual libraries and may not be cost effective in the absence of useful benchmarks. A national overview is required to help inform future JISC negotiations on behalf of the community and assist institutions in assessing the value for money provided for such deals. It might also inform their purchasing decisions with respect to deals not currently covered by NESLi2 but of high importance to them. Thus, the JISC has funded an analysis of usage statistics and is due to report at the end of 2004.

(24) The Government agrees that cost transparency will help the academic world to understand the pricing regime and the products they are receiving. It would be in everybody's interest for contracts to be as transparent and unambiguous as possible, within the confines of commercial confidentiality. The Government would support greater clarity and has asked the JISC to discuss this further with the publishing industry.

(26) Digital-only delivery has the potential to reduce publishing costs, but these reductions can't fully take place while the demand for paper copies remains. Within the STM sector there is still a demand for a mixed model of print and electronic publications. Potential savings within the publishing process can only be fully achieved when print runs are no longer required. However it has to be recognised that investment in digital delivery is not a once only cost and requires significant continuous investment in technology and customer support.

19. We recommend that the Joint Information Systems Committee ensure that provision for continuing access in the event of cancellation to articles published during the subscription period is written into its next national licensing deal. (Paragraph 61)

The JISC model licence already provides for this. The clause in the licence means that on cancellation the publisher will provide the subscribing institution with a copy of the relevant journals on CD-ROM or provide access via their own server. The clause also provides for a "third party" to provide an archive of the material, although no such third party is yet in place to provide this service in the UK. It is always the JISC policy to negotiate for archival access.

The cost of maintaining internet access to content is very high. It is understandable that publishers are reluctant to freely provide this content to non-paying customers.

21. Although libraries may aspire to provide access to every scientific journal, they cannot afford to do this. It is inevitable that difficult choices between a number of journals with lower usage rates and impact factors will have to be made. Nonetheless, these decisions should be made in response to local user needs rather than as a side effect of bundling. (Paragraph 67)

The Government agrees that libraries need to ensure that local needs are satisfied as far as is reasonably possible, particularly in any bundling deal. The model provided by the JISC, and the advice of bodies such as SCONUL can play a valuable role in providing advice, as can the Research Library Network at a strategic level.

23. Publishers should publicly acknowledge the contribution of unpaid peer reviewers to the publishing process. We recommend that they provide modest financial rewards to the departments in which the reviewers are based. These rewards could be fed back into the system, helping to fund seminars or further research. (Paragraph 70)

The Government's understanding is that many disciplines do explicitly recognise the role played by named peer reviewers, whilst in other disciplines peer reviewers remain anonymous. Nevertheless, it is widely recognised that peer reviewers are a vital component of the publishing process. Acting as peer reviewers and as members of editorial boards is also an important element in career recognition for researchers. Financial rewards to the departments in which the reviewers are based is however a commercial decision for publishers and would need to apply to all business models. The Government is not aware of any significant demand from peer reviewers or the academic community to provide such rewards.

Any business model must preserve the integrity of peer review, and payment to departments could potentially lead to a conflict of interest between reviewer and publisher. There are also the potential consequences on economically marginal publishers, and major publications with a high rejection rate, where an additional cost would be incurred for all peer-reviewed articles, regardless of whether or not they are published. We are not persuaded that the increase in publishing costs that result from such a measure would be sensible at this stage. We are also concerned about the effort of administering such a payment system.

At a time of considerable financial pressure on library budgets it is questionable whether this is the right time to raise publishing costs, especially bearing in mind that a substantial number of journals are published by not for profit publishers.

25. We applaud the development by publishers of new technologies for digital journals. Innovative products such as ScienceDirect have brought increased functionality to researchers and users, making journals a more valuable research tool. (Paragraph 78)

42. Elsevier is no sudden convert to Open Access. The company has seen the direction of trends in publishing and has acted accordingly to minimise criticism of its current policies. We are in little doubt that Elsevier timed the announcement of its new policy on self-archiving to pre-empt the publication of this Report. It is good news that our inquiry has prompted such a high profile endorsement of increased access to research papers. Nonetheless, there are a number of serious constraints to self- archiving in the model proposed by Elsevier. (Paragraph 112)

57. We recommend that DTI works with UK publishers to establish how the industry might evolve in an environment where other business models flourished alongside the subscriber-pays model. Government also needs to become an intelligent procurer, outsourcing some of the technical work involved in establishing and maintaining institutional repositories to publishers who already have the relevant infrastructure and expertise in place. (Paragraph 140)

(25) The Government also applauds the developments in new technologies and the considerable investment that has been made to provide the technology infrastructure to support these advances. It is only through the profits generated from current products that publishers and learned societies can afford to develop new technologies that will benefit the whole of the academic community. The Government will continue to encourage the publishing community to develop their products to meet the needs of the academic community.

(42) Elsevier is one of a number of companies who have been reviewing their services offered to the research community, as a result of which they have included self-archiving in their business model. There are some constraints on the Elsevier model such as only allowing publication of a text version and a ban on authors posting articles on “central databases”, but these seem reasonable in the light of the value-add which subscribers pay to have. This is a welcome step forward, but many commercial and non-commercial publishers have been allowing self-archiving for many years. This is shown by the research of Stevan Harnad of Southampton University, which estimated that 80% (Currently 91%) of journals allow the published articles to be made available as a post print version on an author’s own website or Institutional Repositories.¹⁹

(57) The Government through the DTI is already working with Publishers, both commercial and not for profit, and their Trade Associations, to help improve productivity and competitiveness in the sector. The Government believes that a healthy and competitive publishing industry has already led to the development of innovative and creative business models and will continue to do so. The recent “Open Choice” offering from Springer, whereby authors can choose author-pays/open access, or the traditional subscription model, demonstrates publishing industry innovation leading, as the Select Committee recommendation hoped, to other business models existing alongside subscriber-pays.

19 <http://www.eprints.org/self-faq/>

The Government is happy to work with all elements of the community, whether publishers, funding bodies or academics, to promote an understanding of each other's needs. There are already a number of existing forums where this occurs. A new forum involving publishers, funders and librarians, set up and facilitated by the DTI, will have its first meeting in the Autumn.

Overall, as discussed in our response to recommendation 1, the Government's approach is to facilitate a level playing field. This includes working with RCUK on a common policy that allows scientists to publish through an author-pays journal where appropriate. The level playing field option is the most appropriate to encourage competition and innovation in publishing, to promote greater accessibility, to maintain quality and to retain freedom of choice for authors. This approach does not favour one part of the value chain at the expense of another and is in the long-term interests of a sustainable scientific publications market.

Institutional repository issues are covered in responses to recommendations 43,44,48,52, 54-56 and 58, below.

29. It is not enough for the Government departments involved to declare themselves to be aware of the problems surrounding the imposition of VAT on digital, but not print, publications. As the issue is so critical to the adequate provision of scientific publications and to reaping the full anticipated benefits from digitisation, we recommend that DTI, DfES and DCMS all make a strong case to HM Customs and Excise for a change to the existing VAT regime. (Paragraph 86)

30. We recommend that HM Customs and Excise make strong and immediate representations within the European Commission to bring about the introduction of a zero rate VAT relief for digital journals, in line with the zero rate currently charged on print journals. (Paragraph 88)

31. We recommend that HM Customs and Excise exempt libraries from the VAT currently payable on digital publications whilst it negotiates for a more permanent solution within the EU. (Paragraph 89)

(29) (30) The DTI, DCMS and Customs and Excise have discussed the VAT treatment of digital publications on a number of occasions. Customs are aware of the concerns expressed in submissions to the Select Committee's inquiry. However, the removal of VAT on digital publications is not possible. Under long standing European agreements the UK can retain its existing zero rates but cannot extend them or introduce any new ones. This is the case for all Member States that retain VAT zero rate derogations. There is no realistic prospect of the Commission proposing, or all other Member States agreeing to, any change in that position.

The only way to equalise the VAT treatment of print and digital publications would be to levy VAT on printed publications. The Government is committed to retaining the zero rate of VAT on books and newspapers.

The EU list of permitted VAT reduced rates (Annex H of the Sixth VAT Directive) does not include digital publications. A review of the reduced rate provisions is currently underway, but the prospects for significant agreed change presently remain remote and the

Government is not persuaded of the case for the inclusion of digital publications on the list. Whereas printed matter is clearly well defined, e-publications are closely related to a wide range of material that is capable of being downloaded, including films, music and software. The current rules for determining in which Member State VAT is due on digital publications, and their mode of delivery also makes them inappropriate for inclusion in the list of permitted reduced rates. This is because the VAT is paid to the Member State where the publisher is legally established rather than where they are purchased.

(31) It is not possible, under long-standing agreements with our European partners to exempt or zero-rate supplies of digital publications to libraries. Libraries are liable to pay VAT on many goods and services that they purchase in the same way as any other purchaser. The normal VAT rules do, however, allow institutions that are undertaking taxable business activities to recover the VAT they incur. In addition, local authorities are refunded the VAT incurred on goods and services (including digital publications) purchased in connection with their statutory public duties, including the provision of public library services. This refund scheme is achieved by section 33 of the VAT Act 1994, and is designed to ensure that VAT does not become a cost borne by local taxation.

Where VAT is not recoverable under section 33 or the normal VAT rules, it is established practice that publicly funded institutions should reflect this irrecoverable VAT in their bids for funding.

33. We recommend that the Government Response to this Report provides information on the measures being taken by the Office of Fair Trading to monitor the market for STM journals. We urge the Office of Fair Trading to commit to biennial public reporting on the state of the market, including how STM publication prices are developing; how prices change following mergers and acquisitions in the sector and the impact of bundling deals upon competition. (Paragraph 94)

As an independent, statutory organisation, the OFT have submitted a detailed response on this question.

34. We agree that universities should be able to allocate their budgets locally in response to the needs of their teaching and research communities. (Paragraph 96)

Universities have a freedom to allocate budgets as they see fit. HEIs are autonomous bodies drawing their income from a range of sources although for most the Government is still the majority funder. This money comes through a mix of block grant and project grants from several agencies and it is for the institutions to determine their individual strategies and priorities.

35. It is unacceptable that HEFCE has shown so little interest in library budgets. We recommend that it commission a study from HEPI to ascertain both current library funding levels and library funding needs. The results of this study could be used to inform the allocation of the block grant. (Paragraph 97)

We have been advised by HEFCE that they do not see the need to commission a study from HEPI at this time as they are provided with information on funding levels through HESA and SCONUL. As previously discussed, HEIs are autonomous bodies and their total spend on library budgets is actually a small proportion of their overall budgets.

36. HEFCE has a valuable role to play in advising universities on library funding requirements. We recommend that HEFCE establish a code of good practice for library funding that universities can draw upon when allocating their budgets. (Paragraph 98)

We have also been advised by HEFCE that they consider that good practice advice is generally best provided by competent sector bodies. HEFCE will invite Universities UK to consider whether such advice is needed, and if so request them to take the lead in establishing such advice, possibly in collaboration with SCONUL.

37. Pressure on library journal acquisitions budgets has resulted in cancelled subscriptions and has contributed to a decline in book purchasing. This compromises the library's ability to provide the full range of services required by its user community. (Paragraph 99)

38. There is undoubtedly some scope for libraries to make efficiency savings, as there is for most organisations. Nonetheless, the valuable services provided by the library are expensive and staff-intensive. It is unlikely that libraries will have more to spend on acquisitions until they see an increase in budgets. (Paragraph 101)

39. Whilst we accept that it is important that libraries are responsive to local needs, opting out of national licensing deals negotiated with those needs in mind only makes the situation faced by libraries worse. (Paragraph 104)

We note the Committee's comments in recommendations 37 and 39.

(38) As with all organisations, libraries are undergoing a period of change and organisations such as SCONUL can provide important advice. In terms of library budgets, as discussed, it is for individual universities to decide for themselves about how to allocate their block grant.

40. We recommend that the Joint Information Systems Committee negotiate with libraries, regional purchasing consortia and other national bodies responsible for procurement to agree a common strategy. Only by combining their resources will they be able to negotiate a licensing deal that secures national support and brings real benefits. (Paragraph 105)

The Government agrees with this recommendation and will encourage opportunities to improve the efficiency of library procurement, including NESLi2 and the regional purchasing consortia working more closely together. Ultimately, any such opportunities would be best negotiated by bodies such as the JISC. The JISC also intends to liaise with international journal procurement bodies and regional purchasing consortia to explore collaborative opportunities.

41. It is disappointing that many academics are content to ignore the significant difficulties faced by libraries. Until they start to see the provision of journals as, in part, their problem, the situation will not improve. (Paragraph 107)

The Government agrees that academics themselves have an important role to play in this debate and need to become more involved. Currently, anecdotal evidence suggests that most academics are either unaware of the debate, or have no strong opinion. Bodies such

as the Research Library Network can play an important role in stimulating debate, as can RCUK.

43. Institutions need an incentive to set up repositories. We recommend that the requirement for universities to disseminate their research as widely as possible be written into their charters. In addition, SHERPA should be funded by DfES to allow it to make grants available to all research institutions for the establishment and maintenance of repositories. (Paragraph 115)

44. Academic authors currently lack sufficient motivation to self-archive in institutional repositories. We recommend that the Research Councils and other Government funders mandate their funded researchers to deposit a copy of all their articles in their institution's repository within one month of publication or a reasonable period to be agreed following publication, as a condition of their research grant. An exception would need to be made for research findings that are deemed to be commercially sensitive. (Paragraph 117)

48. In order for institutional repositories to achieve maximum effectiveness, Government must adopt a joined-up approach. DTI, OST, DfES and DCMS should work together to create a strategy for the implementation of institutional repositories, with clearly defined aims and a realistic timetable. (Paragraph 120)

52. The cost to the taxpayer of establishing and maintaining an infrastructure of institutional repositories across UK higher education would be minimal, particularly in proportion to the current total UK higher education spend. When the cost is weighed against the benefits they would bring, institutional repositories plainly represent value for money. (Paragraph 130)

54. Peer review is a key element in the publishing process and should be a pillar of institutional repositories. We recommend that SHERPA agree a "kite mark" with publishers that can be used to denote articles that have been published in a peer-reviewed journal. Upon publication, articles in repositories should be allocated the kitemark and marked with the date and journal of publication by the staff member responsible for populating the repository. Authors depositing articles in institutional repositories should also be required to declare their funding sources in order to reduce the risk of conflicts of interest occurring. (Paragraph 135)

55. We recommend that the Government appoints and funds a central body, based on SHERPA, to co-ordinate the implementation of a network of institutional repositories. (Paragraph 136)

56. A Government-established central body would play a major role in implementing technical standards across institutional repositories to ensure maximum functionality and interoperability. (Paragraph 137)

58. We see institutional repositories as operating alongside the publishing industry. In the immediate term they will enable readers to gain free access to journal articles whilst the publishing industry experiments with new publishing models, such as the author-pays model. (Paragraph 143)

(43) (52), (55), (56) (58) The Government recognises the potential benefits of institutional repositories and sees them as a significant development worthy of encouragement. But it believes that each Institution has to make its own decision about institutional repositories depending on individual circumstances. However, an increasing number of universities are already establishing such repositories to enable greater access to their research output. The Government welcomes this development and initiatives where groups of universities collaborate to disseminate and develop more effective searching and improve interoperability across institutional boundaries.

According to the 2004 PALS report there are over 200 Institutional Repositories in the world, mainly populated with unpublished material.²⁰ institutional repositories have an important role to play with regard to access to information and institutional communication, but there are a number of issues that need to be resolved:

Cost—there is still considerable uncertainty about the cost of setting up institutional repositories. There are a number of possible models, some of which have already been piloted, including through a JISC initiative. HEFCE tell us that they do not yet have adequate information on their costs—there will inevitably be additional costs for example on technical support and administration—or a sufficient assessment of the merits of each model, to reach a firm decision to support one or more through a national scheme.

Technical aspects—The Government believe there is more work to be done on some key technical elements in particular, to develop dedicated search engines to help researchers to find material in them, and to secure national (or even international) agreement on a raft of technical standards for presenting, indexing and cataloguing their contents.

Coverage—many publishers already allow pre-prints and post prints to be deposited in an institutional repository. The RoMEO Directory of Publishers currently estimates that 66% of publishers already allow articles to be published as a pre-print and post print version on an authors own website or institutional repository.²¹

Quality—it is important that institutional repositories and academic journals (both commercial and not for profit) are able to co-exist. Journals provide the assurance of quality, underpinned by rigorous peer review, which is essential information for users when accessing articles in such repositories.

The JISC has provided support to universities and colleges for the creation of repositories through the FAIR programme, and projects funded under this programme (including SHERPA²²) are already committed to making their experience of repository development available to all UK universities and colleges.

20 Pathfinder Research on Web-based Repositories. January 2004. A report by Mark Ware Consulting Ltd for Publisher and Library/Learning Solutions (PALS).

21 RoMEO Directory of Publishers, <http://www.ecs.soton.ac.uk/~harnad/Temp/Romeo/romeosum.html>

22 SHERPA – Securing a Hybrid Environment for Research Preservation and Access -aims to investigate issues to do with the future of scholarly communication and publishing. In particular, it is initiating the development of openly accessible institutional digital repositories of research output in a number of research universities. These so-called 'e-print archives' will contain papers by researchers from the participating institutions. It is working initially with 21 institutions to create a network of repositories and has made significant progress in disseminating information,

The JISC is actively pursuing ways in which institutional repositories can be developed further and plans to support universities in providing best practice; software; models and infrastructure to support institutional repositories that hold research outputs. In leading the technical work on institutional repositories, the JISC will continue to work closely with all available sources of expertise and much of the development work it funds is already put out to tender, to utilise expertise in the private sector.

The JISC has also funded a project called ROMEO as part of its FAIR programme which explored intellectual property rights associated with self-archiving. The work is being followed up further, through the development of a copyright toolkit for publishing agreements and a model author/HEI licence for institutional repositories.

Responsibility for the amendment of university charters (where they exist) lies with individual institutions, with the approval of Her Majesty The Queen and not with the Government.

(44) Institutional and thematic repositories can play a significant role in the dissemination of research outputs. However the Government has no present intention to mandate Research Council funded researchers to deposit a copy of their published material in institutional repositories.

One of the key questions being considered in formulating a RCUK policy framework, on the dissemination and preservation of the information outputs of research, relates to the respective roles of institutional and thematic repositories (which is referred to in the response to recommendation 7). RCUK are consulting with all the important groups of stakeholders as part of this policy formulation, not least with SHERPA, the JISC and others with a strong interest and expertise in the development of institutional repositories.

The Government notes with interest the valuable work that SHERPA is carrying out to network institutional archives. We are aware of the technical developments, particularly in interoperability between repositories (through the use of the OAI-PMH software protocol) that are easing global accessibility to repository contents, irrespective of where these are stored. At the same time, we note the challenge of ensuring the necessary and consistent standards, not least in the harvesting of appropriate metadata.

(54) With regard to a kite-marking, the Government believes the assurance of quality is provided through publication in peer-reviewed commercial or not for profit journals, and does not in general see the need for an additional system. For clinical research, the UK has a leading position internationally as a funder of systematic reviews of research evidence. These approaches will be kept under review as institutional repositories develop.

(48) The Government agrees that a joined up approach is necessary for an issue such as institutional repositories. DTI, OST, DCMS, and DfES are actively working with bodies such as RCUK, the JISC, HEFCE and the British Library to determine a common approach. The Government also understands the role that repositories could play to link research outputs with learning and teaching resources. The JISC play a key role in defining standards for the provision, storage and use of digital information within the academic

sector and one of the main focus of its repository activity is to provide specifications and functional requirements for repositories at a local, regional, national and international level and for wide ranging resources. Part of this activity will be taken forward in the JISC Digital Repositories Programme from January 2005. The British Library clearly have strong interest in developing models of scholarly communication, and therefore we would also expect the Library to be at the centre of this debate. For health research, the Department of Health and the MRC will consider these issues together with other stakeholders in the UK Clinical Research Collaboration.

45. We recommend that institutional repositories are able to accept charitably—and privately—funded research articles from authors within the institution, providing that the funder has given their consent for the author to self-archive in this way. (Paragraph 118)

47. Institutional repositories should accept for archiving articles based on negative results, even when publication of the article in a journal is unlikely. This accumulated body of material would be a useful resource for the scientific community. It could help to prevent duplication of research and, particularly in the field of clinical research, would be in the public interest. Articles containing negative findings should be stored within a dedicated section of the repository to distinguish them from other articles. (Paragraph 118)

The Government accepts these recommendations in principle.

We note that the value of institutional repositories will depend critically upon the comprehensiveness of their collections, including both published and unpublished material from research, whatever the source of funding. In fields such as clinical research, comprehensive access to research outputs, including negative findings, is particularly important because “publication bias” can create a false impression of the balance of evidence about a treatment. In these fields, the Government is strongly in favour of agreements to widen access to unpublished findings, including international understandings about standards for repositories, databases and registers. In addition it is indispensable that a clear distinction must be made between those articles which have been published after rigorous peer review, and those that have not.

46. We recommend that DCMS provide adequate funds for the British Library to establish and maintain a central online repository for all UK research articles that are not housed in other institutional repositories. (Paragraph 118)

The British Library's bid for funding from the 2004 Spending Review is being considered by DCMS, and an announcement of allocations will be made in Autumn 2004.

The British Library is the main repository of the UK's published output, and the Legal Deposit Libraries Act 2003 (the 2003 Act) provides the framework that will enable it to establish a repository of non-print material. Exactly what non-print material is deposited and how this will be done will be the subject of regulations in the future. The Legal Deposit Advisory Panel (when instituted) will make recommendations to the Secretary of State for Culture, Media and Sport on the timing and content of regulations relating to legal deposit.

However, the 2003 Act does not allow for open access to legally deposited material. Section 7 of the 2003 Act places restrictions on the activities in relation to non-print publications, including the use, copying, adapting, lending, transferring and disposing of material. In addition, under the 2003 Act the Secretary of State may only make regulations permitting "relevant persons" to carry out these activities, where a "relevant person" means the deposit library itself, or a reader on the library's premises.

49. A greater degree of consistency is desirable in copyright agreements, from publishers, but also from Government, institutions and academics, who have the power to influence the terms on which copyright agreements are established. (Paragraph 121)

50. The issue of copyright is crucial to the success of self-archiving. We recommend that, as part of its strategy for the implementation of institutional repositories, Government ascertain what impact a UK-based policy of author copyright retention would have on UK authors. Providing that it can be established that such a policy would not have a disproportionately negative impact, Research Councils and other Government funders should mandate their funded researchers to retain the copyright on their research articles, licensing it to publishers for the purposes of publication. The Government would also need to be active in raising the issue of copyright at an international level. (Paragraph 126)

51. We recommend that higher education institutions are funded to enable them to assume control of copyright arising from their research. In order to carry out this function they will need in-house expertise and dedicated staff. (Paragraph 147)

In the Government's view, flexible copyright arrangements are part of the competitiveness basis on which publishers market their journals. Publishers, both commercial and not for profit, use flexible copyright arrangements to compete for the services of authors. Model licences are available through Trade Associations representing the STM sector, including the Association of Learned and Professional Society Publishers representing the not for profit sector, and the Publishers Association representing commercial publishers.

It is important that authors' work is protected from plagiarism and any move to assign control of copyright to institutions will need to take into account how an institution will monitor and address plagiarism issues. Institutions will have an additional administrative burden to protect the rights of authors. There is also the issue of legal liability on institutional repositories if material is found to be libellous, fraudulent or defamatory. Mechanisms will have to be introduced to allow them to deal with these occurrences.

RCUK are looking at this issue as part of their wider consideration, for example, whether it is right and appropriate for copyright to be retained by Research Council-funded authors, and for the copyright agreement to incorporate a licence to use by the publisher. The Government will consider the advice once it is formulated.

The JISC are also doing valuable work in this area. The JISC funded ROMEIO project has received international recognition for its work on documenting authors' agreements and permissions for institutional archiving across a range of leading publishers. The JISC also funds a Legal Information Service and has commissioned several reports on copyright. The JISC is about to embark on the production of best practice and development of infrastructure to support copyright practices within the scholarly communication process

with particular attention to author, publisher and academic institution relationships. This work should report within the year.

A statement of practices and principles relating to the publication of primary research supported by public funding within a learned journal, was jointly drafted by the Trade Associations covering both the commercial and non-commercial publishers. This was forwarded to Lord Sainsbury on 27 July 2004 and is attached at Annex B to this submission. The Government welcomes such efforts by publishers to identify a consistent approach to copyright agreements.

59. For the Government either to endorse or dismiss the new publishing model would be too simplistic. Without any Government action, some authors are already choosing to publish in journals that use author payments to recover costs. Author-pays publishing is a phenomenon that has already arrived: it is for the Government and others to decide how best to respond. (Paragraph 144)

Scientific publishing models are continually innovating, as can be seen in the move to digital publishing or in the development of the site licence. Models will continue to evolve, with different approaches co-existing and the Government does not believe that it makes sense to categorise certain business models only as “new”.

It is not up to the Government to prescribe any particular publishing models but we will aim to ensure that no institutional barriers are put in the way of any particular publishing models being developed.

Our preferred approach is to facilitate a level playing field, which will enable authors who wish to publish in author-pays journals to do so. The Government will monitor the progress towards this level playing field. However, at this point we are not convinced that the author-pays model is economic. Before fully supporting any new business model, the Government will need to be convinced that this model is better and cheaper.

A successful and sustainable scientific publications market is vital to the research process, and to strongly endorse or reject the author-pays approach would not be in the interests of allowing the market itself to evolve to meet the needs of authors. The Government's concern is to optimise the availability of quality research information to the scientific community, maintained and continually approved in a sustainable and efficient way.

60. The evidence produced so far suggests that the author-pays model could be viable. We recommend that Government mobilise the different interest groups to support a comprehensive independent study into the costs associated with author-pays publishing. The study could be used to inform Government policy and strategy. (Paragraph 150)

In the Government's view it is too early to make judgements about the viability of the author-pays model. There are already a number of author-pays journals but we note that in many cases, the costs of Open Access publishing models are still not clear. The estimated cost of producing an article can vary as much as £300–£2500, taking into account a number of factors including the number of articles rejected. These figures are likely to change as the market develops. It is also the case that most current Open Access initiatives are subsidised by charitable institutions. The true cost of any STM publication needs to

include investment, peer group evaluation, formatting, linking, profiling and archiving of information.

The Government is aware of the research being undertaken by the JISC who have commissioned a study to identify and analyse different Business Models for journal content and of a study by SIPPI, in cooperation with ALPSP to investigate different open access publishing models.^{23,24} Both of these reports are due to be completed by the end of the year. In addition the Government has noted the recent studies funded by the Wellcome Trust on author-pays publishing.

The Government has considered the possibility of commissioning its own study on the costs of author-pays publishing, however it is not considered that any new information would come to light at this time. This is because the key area of uncertainty is the extent to which the true costs of STM publications are reflected in current models. As the market evolves it will become clear how the business models and costs are also evolving and a suitable study may be required at that time.

61. Encouraging a public that is more scientifically literate and assisting women in their pursuit of successful careers in scientific research have been two of the Committee's longstanding concerns. We support, in principle, any measure that seeks to further these aims. (Paragraph 156)

The Government agrees with the Committee that public engagement with science is a key issue. This is reflected in our Science and Innovation Framework 2004–2014, which sets out our priorities in this area.

However, there are a number of more targeted ways in which measures can be put in place to assist women in science. For example, OST is making available £500,000 each year for the next three years for the development of a dedicated Women's Returners Package. This is being developed alongside the new Resource Centre for Women in Science Engineering and Technology (SET). The issues of finding ways in which women can be kept in touch with developments in their fields of SET whilst taking a career break are being actively explored through this package.

62. Although early indications are positive, it is too early to assess the impact that author-pays publishing has had on access to scientific publications. (Paragraph 159).

The Government agrees with the Committee that it is too early to assess the impact of author pays on access.

Ultimately, it will be the research communities themselves who will determine any future impact of author-pays publishing and the Government should not adopt a stance which either strongly encourages or discourages author choice.

63. The author-pays publishing model would be extremely advantageous to researchers in developing countries, enabling them to keep abreast of research conducted elsewhere. Financially, author charges would be less burdensome to researchers in the

23 http://www.jisc.ac.uk/index.cfm?name=funding_journals_business_models

24 See: <http://sippi.aaas.org/publishing.shtml>

developing world than current subscription rates. If the author-pays model were to prevail, publishers, Government agencies and other donors would need to adapt existing schemes, such as HINARI, AGORA and INASP-PERI, to meet the demands of the altered cost recovery model. (Paragraph 162).

As stated in the answer to recommendation 73, the author-pays model is still at an early stage of development and the implications of the author-pays model for developing countries is still not clear. HINARI and AGORA currently depend on the goodwill of publishers and are not reliant on funds provided by donors. There are wider discussions around international information standards and norms, including the development of Open Source systems, and the role of the UN, which would need to be considered if an author-pays model were to prevail. Donor-funded models such as INASP-PERI would need to be reviewed, and should in any case be reviewed in the light of publishers making journals available freely to developing countries.

64. We recommend that the Research Councils each establish a fund to which their funded researchers can apply should they wish to publish their articles using the author-pays model. The Research Councils will need to be funded by OST to take account of this increase in costs. We hope that industry, charity and other Government funders will consider similar measures. (Paragraph 165)

At present, the Government is not persuaded of the need to set up such a fund. Research Councils currently tend to treat author charges in the same way as page or reprint charges, i.e. as consumables met under direct costs. The exception to this approach is the MRC, which specifically recognises author charges as an indirect cost. The Government would be willing to consider applying this approach more widely to health research in concert with other research funders. As part of the development of the RCUK policy framework on the dissemination and preservation of the information outputs of research and in the context of the change to full economic costing of research projects, RCUK is now looking at how it might define, across all the Research Councils, a common approach that explicitly recognises the need to meet author charges, where this is deemed to be justifiable and cost-effective (see the response to Recommendation 8). The Government welcomes this.

65. Research Councils for disciplines that require only limited funding should be funded to enable them to pay for publication costs where necessary. (Paragraph 166)

The Government welcomes the Committee's recognition that the change to new models of publication will have different levels of impact on the finances of different Research Councils. We acknowledge that this will need to be taken into account in the current and future exercises to allocate funds across the Research Councils.

66. In order to succeed, most author-pays publishers, like everyone else, will have to publish articles of a high quality. It is not, therefore, within the interest of journals at the higher end of the market to lessen the rigour of peer review. Nonetheless, there is a risk that lower quality journals might seek to reduce their quality threshold in order to generate profit. Were the author-pays publishing model to prevail it would be vital to ensure that peer review was not compromised in order to retain confidence in the integrity of the publishing process. (Paragraph 172)

82. As is the case with any process, peer review is not an infallible system and to a large extent depends on the integrity and competence of the people involved and the degree of editorial oversight and quality assurance of the peer review process itself. Nonetheless we are satisfied that publishers are taking reasonable measures to main high standards of peer review. (Paragraph 207)

We strongly agree with the Committee's comments on the importance of peer review. As outlined in our response to recommendations 43, 44, 48, 52, 54–56 and 58, institutional repositories and journals need to run in parallel to ensure that rigorous peer review of research findings is not compromised. Peer review is crucial for quality control, whether in print format or in an electronic journal, and whether using the author-pays or subscription approach. It is imperative that the quality of research articles is maintained and not compromised by financial considerations, or hasty changes to business models. The leading journals have significant rejection rates and it is this that drives up the quality of the articles. In institutional or thematic repositories it will be important that there is an absolutely clear distinction between articles that have not yet been peer-reviewed (pre-prints) and those that have (post-prints) and also between different pre-print versions.

67. The introduction of a submission fee would be an important step towards ensuring the quality of scientific publications and we strongly recommend that author-pays publishers introduce this system. (Paragraph 174)

Payment for submissions is a commercial decision for publishers. There is however considerable doubt about the impact of paying for the submission of papers and how this may impact on the number of papers submitted. Nor is it clear how such a submission fee would operate in practice. Within a scientific discipline there may be a number of different potential publishers for a journal article. If submission fees were required each time an article were submitted, then this could imply substantial fees on authors submitting to journals particularly with a high rejection rate, and could conceivably be a key driver in deciding which journal to publish in.

68. The commercial and industrial sectors currently contribute significant funds to the publishing process through payments for journal subscriptions. Much of this money would be lost to the system if an author-pays model were to prevail. This is one of the key issues that needs to be addressed before the wholesale transition to an author-pays model can be supported. Government, publishers and industry need to work together to identify a solution to this problem in order to avoid a disproportionate increase in the amount of money that Government invests directly or indirectly in the publishing process. (Paragraph 177)

71. Author-pays publishing is a growing phenomenon. Its implementation on any scale will have important consequences for current funding structures and the UK publishing industry. So far the Government has shown little inclination to address this issue. (Paragraph 185)

73. We are satisfied that, by scaling publication with research costs, the author-pays publishing model would ensure a fairer global distribution of the costs of publishing research findings. (Paragraph 188)

74. The UK would put itself at a financial disadvantage internationally if it were to act alone in mandating publicly-funded researchers to publish in author-pays journals. (Paragraph 189)

(68) The Government agrees that the loss of private sector subscriptions would be significant. This would impact both on commercial publishers and learned societies. The problem of losing significant funds from the commercial and industrial sectors is a consequence of the author-pays model. There is no easy solution to this.

(71) It is not currently evident that author-pays publishing is a growing phenomenon. According to figures reported to us from Ulrich's Periodicals Directory, of 89 new journals launched so far in 2004, only 11 of these are Open Access journals.²⁵ This compares to 30 Open Access Journals that were launched during the whole of 2003. Ulrich's also shows that the percentage of Open Access journals launched, compared to all journals launched has actually decreased since 2001. In 2001, there were 63 new Open Access journals launched out of 308 journals (20.5%), 2002, 47 out of 255 journals (18.4%) and 2003, 30 out of 198 (15.2%). The current percentage for 2004 is 12.4%. Stevan Harnad of Southampton University has estimated that author pays accounts for less than 1% of all STM articles published.

(73) The author-pays model is still at an early stage of development, however, under such a model it is likely that the UK would end up paying more being a net exporter of scientific information. As the subscription model and the author-pays model will continue to co-exist, no single solution would be able to deal with the problems of access to and publication of articles from the developing world. It would be important that scientists from developing countries are not excluded from publishing their material by cost, or from having access to published scientific journals.

For the foreseeable future it is likely that whichever model is adopted, special arrangements, such as HINARI, AGORA and INASP-PERI will need to be made available for the developing world. (See also the response to recommendation 14.) If the author-pays model grows, then this may require changes to current funding structures. The Government will be monitoring the situation, and will address any funding issues at the appropriate time should the need arise.

(74) The Government strongly agrees with the Committee's comments on not putting the UK at a financial disadvantage internationally. Publishing is an international business. The majority of revenue from STM publishing, comes from exports rather than UK sales, resulting in global subscription revenue of £750 million. For example, The Royal Society of Chemistry receives approximately 90% of its revenue from exports, which is then funnelled back into the UK through its work training teachers, making the RSC the 2nd largest provider of training for teachers in the UK (after the Government). The Government would want to avoid placing the UK at a disadvantage in a global market, or damaging what is a thriving, innovative market in STM publishing.

69. Learned societies are greatly valued by the academic and wider research community. It is of concern to us that learned societies could stand to lose a substantial portion of It

²⁵ Ulrich's Periodicals Directory™ is a bibliographic database providing information on serials published throughout the world.

is of concern to us that learned societies could stand to lose a substantial portion of their income in a move to the author–pays publishing model. This is another key issue that proponents of the author–pays model need to address. (Paragraph 180)

Learned societies are established for the promotion and extension of knowledge for a particular discipline. They play a leading role in communicating cutting edge research and its applications through journals, conferences, seminars and workshops. They contribute to the sustainability of the science base more generally. According to an informal analysis of journals listed in Ulrich's Periodicals Directory, by Andrew Braid of the British Library on behalf of The Association for Learned and Professional Society Publishers, half the STM journals published worldwide are by not for profit organisations. Revenue generated through journals is re-invested within the community. They often provide financial and other support, providing grants for conferences and joint research activities linking groups at different universities. There are in excess of 200 learned societies in the UK.

The Government is concerned that learned societies could lose a substantial amount of income in a move to author-pays publishing. It is inherent in the author-pays publishing model that these societies, who have large amounts of export sales, will suffer. This point must be taken into account when assessing the costs and benefits of the author-pays model. It cannot be willed away. The Government would not wish to take any action that would threaten the viability of learned societies, with the resulting adverse impact on the academic community.

70. We strongly support further experimentation with the author–pays publishing model. In the short term Government may need to provide limited financial assistance to encourage publishers and institutions to take part in what, for them, may be an expensive process. We applaud the Joint Information Systems Committee for providing funding for this purpose so far and hope that it will continue to do so. (Paragraph 184)

The JISC is supporting four publishers wishing to move to the open access model through short term pump priming through its open access initiative and has recently launched a new phase of support for publishers who wish to transition to open access. The Government will be reviewing the results of these pilots and monitoring developments in models for scientific publishing. Decisions on the need for any Government intervention will be taken in light of this review.

72. Government has not shown much evidence of a joined-up approach to the challenges posed by changes to the model for scientific publishing. Whilst the central departments have been slow to respond to the author–pays publishing model, at least two Government–funded bodies have given public support to it. This creates unnecessary confusion. We recommend that it formulate a coherent strategy as a matter of urgency. (Paragraph 186)

The Government is not aware that any Government-funded bodies are acting in a way which would be inconsistent with the overall Government approach of pursuing a level playing field. We do not believe that any Government funded bodies are promoting author-pays publishing at the expense of subscription-based STM publishing. However, some bodies have acknowledged the potential of author-pays models, and their suitability

for some researchers who would prefer to use such a method of publication. This is in broad agreement with overall Government thinking on this issue.

For example, it has been claimed that the stance adopted by the Food Standards Agency is inconsistent with the overall Government approach. However, this is not evident in their approach which is publicly available on their web site. Its Advisory Committee on Research has said that the electronic publication of Agency-funded research could be particularly useful in some areas where the Agency wishes to ensure rapid publication of research findings but where the work is not addressing a topic viewed as a publishing priority by a major journal. The essential requirement is that any publication, whether author-pays or subscription-pays, must be peer-reviewed.

75. Institutional repositories should be a key component of any long-term strategy to ensure the preservation of digital publications. (Paragraph 193)

The Government's view is that a distinction is to be drawn between the two purposes of (a) making published material available quickly and freely, and (b) preserving and curating material in the long term. These purposes are distinct but overlapping: (a) is suited to repositories, whereas (b) is typically a function carried out by national archives. Repositories could well play an important role in long-term preservation and curation, but it is too early to establish the extent or effectiveness of such a role, and how such decentralised, networked services might interface with larger, centralised players such as the British Library.

The JISC has recently commenced funding for a number of projects to support digital preservation and asset management in universities which will explicitly address preservation and archiving issues for institutional repositories and test collaborative models. These projects will involve a range of university computing science and library departments and partners such as the British Library and the National Archives.

76. The British Library has a crucial role to play in the preservation of digital publications, both strategically and practically. This is an expensive process. Whilst the publication of this Report is too late to have any influence on funding decisions made as part of the 2004 Spending Review, we strongly support the British Library's call for extra funding in recognition of the work that it has carried out in this capacity. Failure of the Government to give adequate funding to the British Library could result in the loss of a substantial proportion of the UK's scientific record. (Paragraph 196)

The Government notes the Committee's support for the British Library's bid for funding from the 2004 Spending Review. The Library's bid is being considered by DCMS, and an announcement of allocations will be made in Autumn 2004.

77. It is vital that work on regulations for the legal deposit of non-print publications begins as soon as possible. We cannot understand why DCMS has not yet established the Legal Deposit Advisory Panel. We recommend that they appoint the panel and begin preliminary work on the regulations at official level immediately. (Paragraph 199)

During the passage of the Legal Deposit Libraries Bill, the Government gave a commitment to set up an independent body, the Legal Deposit Advisory Panel and to consult on its

establishment. Work to establish the Panel is already well underway, and a public consultation exercise will be launched in November 2004. We expect the Panel to be established by Spring 2005. Publishers and libraries are being kept informed of progress through the Joint Committee on Legal Deposit.

Regulations under the Legal Deposit Libraries Act 2003 may not be made unless the Secretary of State has consulted the legal deposit libraries, publishers and the devolved administrations. In addition, Ministers have made assurances to the publishing and library communities that no regulations will be made without consideration of the recommendations of the Legal Deposit Advisory Panel. In order to facilitate progress, the Joint Committee on Legal Deposit is currently looking at areas in which regulations may be made, and it has set up working groups on e-journals, on off-line material and on territoriality. This will undoubtedly help future deliberations of the Advisory Panel.

78. We recommend that the first task of the Advisory Panel is to establish definitions of a digital publication and a UK publication that are flexible enough to capture material from a range of sources in a range of formats. (Paragraph 200)

The Legal Deposit Libraries Act 2003 (the 2003 act) is framework legislation which allows for the incremental introduction of secondary legislation covering the collection of non-print material as it evolves and changes. The difficulties of defining digital products and establishing territoriality were extensively debated during the passage of the Bill. It was agreed that the 2003 Act should be implemented incrementally, starting with items that were more easily identifiable, such as off-line material and e-journals, which are currently being deposited under the voluntary scheme. An early task of the Legal Deposit Advisory Panel is likely to be consideration of the definition of a UK publication. However, it will be for the Panel to set the agenda for its meetings.

79. The existence of a secure network between the legal deposit libraries would create greater efficiencies in the deposit system and would have the potential to increase access to deposited material. We recommend that provisions for such a network are made in the regulations with these two aims in mind. The deposit libraries should be funded to establish the network. (Paragraph 201)

The Regulatory Impact Assessment undertaken for the Legal Deposit Libraries Act 2003 proposed a secure network between the legal deposit libraries as the most efficient means of depositing non-print material. Careful consideration would need to be given to how a secure network would work and its costs before it could be set up. In doing so, regard would have to be given to the Legal Deposit Libraries Act 2003, section 7, which places restrictions on activities in relation to non-print publications to safeguard the interests of publishers and authors. Under the 2003 Act the Secretary of State may make regulations permitting "relevant persons" to carry out these activities. However, the Secretary of State may not make these regulations unless she considers that they would not unreasonably prejudice the interests of publishers. It would also be necessary therefore to negotiate with the publishing community so that they can be assured that adequate safeguards are in place. The cost of developing and providing a secure network was included in the British Library's 2004 spending review bid. DCMS will announce spending review allocations in Autumn 2004.

80. We recommend that the regulations make provision for the deposit libraries to deliver digital articles remotely to desktops on the same payment basis as Document Supply. (Paragraph 202)

The supply of non-print publications deposited under the Legal Deposit Libraries Act 2003 to remote desktops for payment will not be permitted because of the restrictions contained in section 7 of the 2003 Act.

81. Gaps of up to 60% in the deposit of electronically-delivered publications, including STM journals, represent a significant breach in the intellectual record. It is imperative that work on recovering and purchasing the missing items begins immediately. The six deposit libraries will need additional funding to do this. (Paragraph 203)

The British Library is already taking a more proactive approach to claiming offline material under the voluntary deposit scheme. This includes recovering items already published, as well as increasing the proportion of material deposited in the future. The Library is also considering what priority should be given to the acquisition of online material not currently covered by the voluntary schemes. It will be for the British Library's Board to take a view on the level of investment in this activity.

The perception that the RAE rewards publication in journals with high impact factors is affecting decisions made by authors about where to publish. We urge HEFCE to remind RAE panels that they are obliged to assess the quality of the content of individual articles, not the reputation of the journal in which they are published. (Paragraph 210)

We understand that this issue will be covered in guidance to the assessment panels for the 2008 RAE, which is due to be published around the end of this year. It is anticipated that, in keeping with established practice in previous exercises, panels will not use journal impact factors as a leading indicator of quality for published research and there will certainly be no mechanistic link between medium of publication and quality assessment. It must be recognised however that, as in previous exercises, some panels will neither be able to read all of the works cited in the submissions that they assess nor consider that they need to do so to reach robust quality judgements at the level of the academic department. Especially in disciplines where there is a clear shared view as to which are the leading high quality journals, the panels might reasonably conclude that they do not need read all cited works appearing in these journals but should give greater emphasis to reading and assessing work published in new or unfamiliar media.

Glossary of Terms

AGORA	Access to Global Online Resource in Agriculture
AHRB	Arts and Humanities Research Board
ALPSP	Association of Learned and Professional Society Publishers
CCLRC	Council for the Central Laboratory of the Research Councils
DCMS	Department for Culture, Media and Sport
DFID	Department for International Development
DoH	Department of Health
DTI	Department of Trade and Industry
ESRC	Economic and Social Research Council
FAIR	Focus on Access to Institutional Resources
FAO	Food and Agriculture Organisation
HEFCE	Higher Education Funding Council
HEI	Higher Education Institutes
HEPI	Higher Education Policy Institute
HESA	Higher Education Statistics Agency
HINARI	Health InterNetwork Access to Research Initiative
JISC	Joint Information Systems Committee
MLA	Museums, Libraries and Archives Council
MRC	Medical Research Council
NERC	Natural Environment Research Council
OECD	Organisation for Economic Cooperation and Development
OST	Office of Science and Technology
PA	Publishers Association
RCUK	Research Councils UK
RLN	Research Libraries Network
SCONUL	Society of College, National and University Libraries
WHO	World Health Organisation

ANNEX B

Practices and principles concerning publication in a learned journal of primary research supported by public funding²⁶***1. Introduction***

This document broadly describes the current practices and underlying principles associated with publication of an article written as the primary record of research supported by a significant level of UK public funding. "Publication" is taken to mean "first" publication in a recognised learned UK journal, following the full "peer review" and editing process. Publication involves licensing or assigning the exclusive right to reproduce and communicate the definitive version to the public, although the author often retains certain rights (see Section 4).

This document is not intended to be prescriptive as to the business model used for publication but rather to identify practices for UK authors and publishers to ensure an appropriate balance between access to and use of such articles and the maintenance of appropriate and sustainable business models. Considerations will be identified below that could be covered in any agreement between an author and a publisher. It is neutral on whether to assign copyright or to license the right to publish. The issue here is to clarify how the legitimate needs of both the author and the publisher may be met.

2. Terms and definitions

The term "Work" is used here to mean the article in all its stages, from the form submitted to a publisher through to the definitive version published as a "sworn statement of science". "Preprint" means the Work before it has been peer reviewed, edited or prepared for publication by a publisher. "Postprint" means the Work in its form accepted for publication in which the author has incorporated into the text the outcome of peer review. There may be a further version, the "Definitive Version", which will include further editorial refinement and preparations made by the publisher in producing the final version for publication. Some publishers will not distinguish significantly between the Postprint stage and the Definitive Version stage, and there is as yet no objective consensus on the definition of these terms used to describe the stages of publication in the digital environment. Furthermore, some publishers make distinctions between "personal versions" of articles (author's versions in formats such as Word), however revised and updated, and "final published versions" which are or are essentially identical to the versions actually published in the learned journal. We offer these definitions here in order to avoid misunderstandings, while recognising that other perfectly valid definitions may also be in use.

Most publishers will require for their business models a "Publication Right" from authors meaning the exclusive right (with the possibility of certain rights being retained by the author as described in Section 4) to reproduce and communicate to the public the Work in full or in part and to publish the Work throughout the world in any format and in all

26 Paper jointly drafted by PA and ALPSP dated 27 July 2004 submitted to Lord Sainsbury.

languages, often for a long term (in many cases for the full term of copyright). This will include without limitation the right to publish the Work in printed form, electronic form, other data storage media, transmission over the Internet, via other communication networks and in any other electronic form including future technologies, and to authorise others to do the same or to make subsidiary products such as translations.

While some publishers require only the licensing of an exclusive Publication Right, many continue to seek the assignment from authors of full copyright. Copyright transfer eliminates any ambiguity in the administration of rights relating to the Work such as rights in technologies that are developed in the future (for example something like the development of the Internet) in negotiating subsidiary licences, for example dealing with aggregators or authorising translations, or in dealing on an author's behalf with plagiarists, moral rights, or copyright infringement. There is little difference between copyright assignment and an exclusive licence provided that authors and their institutions retain similar usage rights.

The principles set out here are of course subject to the policies associated with intellectual property of institutions employing research authors and in certain instances to the policies of the learned societies who may be the ultimate owners of journals published on their behalf by their publishing partner.

3. *Why use a publisher?*

A publisher who is well-organised and committed to the field will bring the following benefits to the author and to those funding the research:

- iii. Ensure that the Work is subject to peer review to establish quality. If accepted the Work will be edited to publication standard and produced to a professional standard for timely publication. The publisher will keep the author informed of progress.
- iv. Maximise distribution of and access to the Work within the boundaries of copyright protection and the publisher's business model.
- v. Identify the author as such wherever the Work is published.
- vi. Defend the Work against plagiarism and copyright infringement.
- vii. Administer permissions and deal with licensing issues.
- viii. Guarantee integrity and provide a permanent, secure and definitive record of the Work as a "sworn statement of science".
- ix. Undertake the technical measures necessary to facilitate discovery by search engines, organise CrossRef registration to facilitate cross-linking from citations in other publications, and arrange coverage by appropriate abstracting and indexing services.
- x. Ensure continuing availability of the work.

4. *What rights might be retained by authors?*

The retention of all or most of the rights noted below may provide significant benefits for authors and the public. Many of these rights are currently permitted by UK publishing agreements. Some publishers make distinctions between preprint versions and later versions or between personal versions and published versions. Some make distinctions between personal and non-commercial use and commercial use.

- i. Patent rights, trademark rights or rights to any process or procedure described.
- ii. The right to share with colleagues a “Preprint” of the Work as submitted for publication.
- iii. The right to share the Work for the author's lecture or classroom purposes with full bibliographic citation to the published version, provided that such copies are not offered for sale or distributed outside the institution.
- iv. The right to include the Work with full bibliographic citation in a thesis or dissertation.
- v. The right to present the Work with full bibliographic citation at a conference and to distribute copies to the delegates attending.
- vi. The right to use all or part of the Work without modification and with full bibliographic citation in subsequent publications by the author and in compilations of the author's works.
- vii. The right to expand the Work into book-length form.

5. *Do publishers permit authors to disseminate or post their own Work?*

Notwithstanding their exclusive right to publish, a publisher may permit an author to disseminate the Work by the following means, depending on their current business model:

- i. To post a “Preprint” (but see Note 1) on the author's own website and/or their employer's institutional or corporate intranet or institutional repository (see Notes 2 & 3).
- ii. To post at an agreed interval after the time of publication some version of a “Postprint” (but see Note 1) of the Work in its accepted form after peer review on the author's own website and/or on their employer's institutional or corporate intranet or institutional repository (see Note 2 & 3), but not for sale or systematic retrieval and/or distribution by ,or facilitated by a third party, subject to an accompanying acknowledgement provided by the publisher (see Note 7).

6. *Would commercial use require written permission from the publisher?*

Other uses of the Work apart from some or all of those itemised above, particularly any use for commercial purposes, would generally require the written permission of the publisher. Examples might include:

- i. Inclusion in a course pack or other compilation for onward sale.
- ii. Distribution via an aggregator or conference organiser.
- iii. Any other distribution or reuse to the commercial benefit of the author, the author's institution, or a third party.

Notes

- i. The format in which a "Preprint" or "Postprint" may be posted, the method by which this should be produced, the timing of posting in relation to publication and any linkage to the definitive version of the Work in its published form should be agreed between the author and the publisher.
- ii. The metadata and linkage of the version held on an Institutional Repository should be agreed between the author and the publisher.
- iii. The term institutional repository accepts the potential for cross searching via the Internet, and hence that material placed in such a repository is in effect fully publicly accessible.
- iv. If the Work has been produced within the scope of an author's employment, the employer may use all or part of the Work internally within the institution or company.
- v. If the author is a UK Crown servant and a Work is made in that capacity, the Work must be submitted for clearance by the Permanent Head of the Department concerned.
- vi. An example of the Preprint acknowledgement would be: "This is a preprint of an article accepted for publication in [JOURNAL TITLE] © [year of publication] [copyright owner as specified]. [JOURNAL TITLE] is available online at: www.link.com".
- vii. An example of the Postprint acknowledgement would be: "This is an author-produced electronic version of an article accepted for publication in [JOURNAL TITLE] The definitive publisher authenticated version [complete citation information] is available online at: www.link.com".

26 October 2006

Appendix 2

Response from the Office of Fair Trading (OFT)

The OFT welcomes the Science and Technology Committee's Report, which highlights and develops concerns identified in our 2002 review.

The OFT also welcomes, especially given the international nature of the market, that the European Commission is now conducting a study of the market, and we await the findings with interest. We have made the Commission aware of our interest in the market and our

previous work on it. We also note that other research is under way, for example the British Academy study of electronic resources for research in the humanities and social sciences.

In view of these studies, the international nature of the issues, and competing resource commitments, the OFT does not believe that it would be appropriate for it to commit to biennial reporting on the market for STM journals as proposed by the Committee. However the OFT will certainly continue to monitor market developments in addition, of course, to applying merger and other competition law as evolving circumstances warrant.

7 September 2004

Appendix 3

Response from the Consortium of University Research Libraries (CURL) and the Society of College, National and University Libraries (SCONUL)

Introduction

1. CURL and SCONUL welcome the publication of the Science and Technology Committee Report and strongly support the general thrust of its recommendations. We believe the recommendations have the potential to make a significant contribution to the development of the UK knowledge economy by improving research communication, enhancing knowledge transfer and increasing public access to scientific information. The joint CURL/SCONUL Communications Group and member institutions of CURL and SCONUL are keen to work with Government and other key stakeholders over the coming months to implement the Report's recommendations.

The joint CURL/SCONUL position

2. This response to the Select Committee Report on scientific publications (Scientific publications: free for all? HC399-1) is issued jointly by the Consortium of University Research Libraries (CURL) and the Society of College, National and University Libraries (SCONUL).

3. We have summarised our comments below under a number of key headings. We have concentrated on the recommendations which we believe are most likely to lead to major improvements in the impact and effective dissemination of scientific research results.

Access to information

4. We believe that publicly-funded research should be publicly available. We see our role within our organisations, nationally and internationally, as encouraging and facilitating the widest possible access to relevant information for research, learning and teaching in UK universities and elsewhere. We therefore support general recommendations in the Report that relate to the aim of making scientific information more easily accessible (for example 2, 7, 8, 10, 11). We also endorse the view that this is an international concern, noting that the Committee's Report has generated great interest worldwide, and that there is an

opportunity, if recommendations are implemented quickly, for the UK to exercise a leadership role, and at the same time increase the impact of UK research (3, 53).

The scientific journals market

5. We share the Committee's unease at the current workings of the journals market, and support recommendations on profit margins (17, 26), bundling of subscriptions (20-22), and transparency of costs (27-28). In particular, we support the recommendation (33) that the Office of Fair Trading conduct a biennial review of the state of this idiosyncratic market, with special reference to the impact of mergers and acquisitions, and of bundling deals. We agree that it may be necessary to look again at the available methodologies and statistics for measuring trends in journal prices (16). We are keen to work with the OFT and other stakeholders on this issue.

Institutional repositories

6. Self-archiving in institutional, or subject, repositories is one important route towards opening up access to the UK research output (42-58). Recommendation 44 (making the deposit of articles resulting from Government-funded research mandatory) is particularly important and welcome. We believe this recommendation would cost very little to implement and it would transform the availability of scientific literature in the UK. Universities and research institutions would quickly see the benefits, and the minority of publishers that do not permit this at present would find it prudent to change their policy, given the international spread of similar arrangements (for example, current discussions involving the National Institutes for Health in the USA).

7. We welcome the recommendations relating to institutional repository initiatives such as SHERPA. In particular, we welcome the recognition of the requirement for further funding (43, 55) and the need for co-ordination and standardisation (56). The exact form to be taken by a repository co-ordinating body will require detailed discussion among relevant stakeholders (including JISC and the Research Libraries Network). We believe that the expanded digital repositories programme being sponsored by JISC in the coming months could provide a basis for such co-ordination. Many CURL and SCOUNL member institutions have already set up institutional repositories or are committed to doing so, and would welcome further co-ordinated initiatives of this sort to help ensure that local developments move forward in line with a coherent national strategy.

Intellectual property rights (including copyright)

8. Universities are taking a greater interest in the broad question of intellectual property rights (including copyright), and we welcome the Committee's contribution to this issue (49-51). Restrictions on copyright should not be allowed to inhibit researchers from self-archiving their research papers and other research output. Exclusive rights do not need to be transferred to publishers in order for them to publish a paper. We support the recommendation (50) that Government funders should mandate their funded researchers to retain copyright (or, we suggest, should at least not allow them to transfer exclusive rights to publishers). Some publishers already do not require exclusive rights to be

transferred to them and operate like this without any practical problems. We therefore recommend that Government should implement such a policy without delay.

Open-access journals

9. Another additional and important route towards increased availability of research output lies in open-access journals funded by publication charges. We recognise that these cannot be promoted in the same way as institutional repositories. It is not feasible or sensible for funders to require researchers to publish only in open-access journals. There would need to be a massive rise in the number of open-access journals before such a move could be envisaged. Nevertheless, we believe that the development of open-access publishing should be encouraged. We, like the Committee, support initiatives from organisations such as JISC to pump-prime open-access journals (70) whilst recognising that this must be a transitional stage. We welcome recommendation 64 in particular, encouraging the Research Councils and other research sponsors to set up funds that can be drawn on for publication charges. As publishers change their business models, such charges should come to be seen as a normal part of the costs of carrying out and disseminating research. In this context, we support the commissioning of independent research on publication costs (60). We also support the Committee's view that peer-review is an essential feature of scientific publishing and should not be compromised as business models change (66).

Learned societies

10. We recognise the importance of the role played by learned societies within the scholarly communication process, and understand that some societies have concerns relating to open-access publishing (69). Others are already pushing forward in this direction and should be encouraged to share good practice. We would welcome continuing open dialogue with society publishers, as well as increased resources from JISC to enable transition funding, as mentioned in the previous paragraph. We also recommend that a study be undertaken to map and evaluate the options for learned societies in an open-access publishing environment.

Free rider issue

11. CURL and SCOUNL note the "free rider" issue (68) and suggest that a study be undertaken to ascertain the significance of commercial and industrial subscriptions to the turnover of commercial publishers. CURL and SCOUNL also note that the DTI has established an Academic Publications Forum in the wake of the publication of the Report and suggest that this new body could be tasked with undertaking this activity. The results of the work should then be fed into the ongoing debate about the viability of open-access publishing models.

VAT

12. We welcome the Committee's recognition of the anomaly resulting from differential VAT rates (30-31). We strongly support the exemption of educational institutions, including their libraries, from liability to VAT on digital publications (31). Like the

Committee, we see no obstacle in principle—nor indeed in law—to applying the zero rate in the UK to digital publications, since the VAT Act refers in Group 3 to “newspapers, journals and periodicals” without reference to their format. We agree that a change in the way VAT is applied is an urgent need, and we favour exemption for educational institutions as the solution most likely to be quickly implemented.

Library budgets

13. We welcome the recommendation that the Funding Councils commission a study on library funding (35), and establish a code of good practice (36). However, we would observe that although budget increases are important, and indeed necessary in order to provide the level of information service required within our universities, we do not believe that the level of library budgets is the root cause of the present scientific publications crisis. US university libraries, for example, are on average very much better funded than their UK equivalents, but still strongly advocate the implementation of major changes in scientific publishing. Addressing the issue of inadequate library budgets should not be seen as an alternative to addressing the fundamental structural problems in scientific publishing dealt with in this Report.

British Library (and other legal deposit libraries)

14. We strongly endorse the Report's recognition of the importance of the role of the British Library, and of the other legal deposit libraries, relating to document delivery (5), repository provision (46), and particularly digital preservation (76-81).

Research Libraries Network

15. We look forward to the launch of the Research Libraries Network as a stimulus towards increasing co-ordination and provision in the area of scholarly communication and publishing.

Research Assessment Exercise

16. The Report's final recommendation relates to the RAE (should be 83, but omitted from the list of recommendations). We share the Committee's view that it would be very helpful for the Funding Councils to remind panels that it is the quality of the individual article that is important in assessment, not the impact factor of the journal where it is published. Even more importantly, documentation and publicity should make this clear at the 'research grass-roots' level, as the perception is widespread that the journal's impact factor is what counts in determining RAE outcomes, even when panels may in fact be correctly carrying out current RAE policy.

Conclusion

17. CURL and SCONUL welcome the publication of the Science and Technology Committee Report and are keen to work with Government and other stakeholders to implement the Report's recommendations. We look forward to building on work already

carried out by CURL, SCONUL, and their member institutions (as well as other agencies) in order to enhance this important component of the developing UK Information Society.

11 October 2004

Appendix 4

Response from Securing a Hybrid Environment for Research Preservation and Access (SHERPA) Project

The SHERPA Project welcomes the publication of the Science and Technology Committee Report and urges the government to implement its key recommendations.

The Report provides a thorough and incisive analysis of the current problems associated with the scientific publishing market. In particular, it shows how normal price competition does not operate amongst journal publishers compared with most other markets. It highlights a number of systemic problems in the publishing process which mean that significant changes are required.

SHERPA supports the view of the committee that publicly-funded research should be widely available to researchers (recommendation 8) and members of the public (recommendation 11). Like the Committee, it sees open-access and dissemination of content as having the potential to make scientific communication more efficient and effective. Open-access publishing and open-access repositories are identified as important developments to ensure that society gets value for money from its investment in scientific research.

SHERPA welcomes the Report's emphasis on the importance of institutional repositories (recommendations 42 - 58). It supports the recommendation that public research funders (such as the Research Councils) should mandate the depositing of papers produced as a result of public funding in open-access repositories (recommendation 44). Such a policy is likely to lead to rapid and major improvements in scientific communication in a highly cost-effective way.

SHERPA also welcomes the Committee's recommendation that Government should fund the establishment of a network of interoperable repositories building on work already carried out and that this development should be sponsored by a central co-ordinating body based on SHERPA (recommendation 55). SHERPA would welcome the opportunity to be involved in this important work and is happy to discuss with key stakeholders how this might be best achieved. Key technical capabilities are already in place such that significant advances could be made relatively quickly and with reasonable levels of funding. As the Report states, what is needed now is a joined-up Government strategy (recommendation 48) which can facilitate the modernisation of scientific publishing and access to research results.

The Report's emphasis on the importance of copyright is welcomed by SHERPA. The current practice of transferring exclusive rights to publishers is one which is not conducive to the widest access to research results and is unnecessary even with current publishing models. SHERPA welcomes the Report's recommendation that Government funders

should specify that the copyright of research output cannot be transferred to publishers (recommendation 50).

Peer review is identified by the report as a critically important part of scientific publishing. SHERPA shares this view and supports the recommendation that repositories should identify ways to indicate quality more clearly (recommendation 54).

The Report finds that institutional repositories have the potential to play an important role not only in the dissemination of scientific content but also its preservation for the future (recommendation 75). This mirrors the importance given to preservation by the SHERPA project. Further work in the area of digital preservation needs to be carried out as a matter of urgency with the appropriate stakeholders.

SHERPA hopes that the Committee's Report will encourage the significant changes which are necessary in the scientific publishing environment. SHERPA is keen to play its part working with other stakeholders, in improving the publishing system for the benefit of the research community in particular and society in general.

14 October 2004

Appendix 5

Response from Research Councils UK (RCUK)

1. Research Councils UK (RCUK) is a strategic partnership set up to champion the research supported by the seven UK Research Councils. Through RCUK, the Research Councils are working together with the Arts and Humanities Research Board (AHRB) to create a common framework for research, training and knowledge transfer. RCUK was launched on 1 May 2002 and further details are available at www.rcuk.ac.uk.
2. This response is submitted by Research Councils UK on behalf of all the Research Councils and AHRB, and represents our independent views. It does not include or necessarily reflect the views of the Office of Science and Technology (OST).
3. RCUK welcomes the Select Committee's Report on scientific publications. The Report is a welcome and important contribution to the debate about the evolving scholarly publications environment, and Research Councils note in particular its breadth and vision.
4. RCUK contributed to the Government's Response to the Report. Research Councils would nonetheless like to take the opportunity to state that, at present, their collective view on many of the issues covered in the report has yet to be finalised. As Professor John Wood indicated in his letter of 26 May to the Committee, RCUK intends to set out a cross-Research Council policy on publication of and access to research outputs. Once it is formally approved by the RCUK Executive Group, it is anticipated that this policy will help to influence the development of the scholarly publications environment in the UK and possibly beyond.
5. The RCUK policy is currently in early draft form and is the subject of extensive consultation with significant players, notably publishers, the librarian community (including the British Library), academics and project leaders with a particular interest in

the relevant issues, learned societies, Government Departments (including OST), as well as key organisations such as JISC and UUK. RCUK had anticipated the policy to be finalised at the end of 2004. It now seems likely that this will not happen until early in the New Year.

6. The RCUK policy will serve the interests and address the information needs of the UK research community; as such, it will be based on the principles outlined in the annex to Professor Wood's letter of 26 May. It will notably cover the following broad issues:

- communication, access and availability, with some emphasis on the possible role of institutional and other repositories;
- quality assurance and peer review;
- cost-effectiveness;
- long-term preservation and curation, and how this complements communication, access and availability; and
- the position of learned societies.

7. Aside from the immediate issue of formulating the RCUK policy, it should also be emphasised that RCUK is a full partner in the newly-formed Research Libraries Network. Consequently, and in that context, Research Councils will play a role in developing UK strategy for research information resources.

8. This note does not respond to the individual recommendations in the Committee's Report; the RCUK policy will address the points of the Report most relevant to RCUK and will serve to illustrate the importance that Research Councils attach to the dissemination and preservation of the information outputs of research.

26 October 2004

Appendix 6

Response from the Joint Information Systems Committee (JISC)

Executive Summary

1. The Joint Information Systems Committee (JISC) welcomes the timely and helpful Report of the House of Commons Science and Technology Committee "Scientific publications: free for all?" (HC399-1).²⁷ The Report contains many conclusions and recommendations of importance to the JISC in carrying forward its strategic objectives.

2. The JISC has a remit to ensure joined-up thinking across the boundaries of research, learning and teaching, and the administration functions within institutions to avoid multiple solutions being adopted. JISC's vision is to enable the seamless linking of e-

²⁷ The JISC is funded by the UK Higher and Further Education funding bodies to provide world-class leadership in the innovative use of information and communications technology to support education and research.

research, e-learning, digital library and management information resources, through the co-ordination of technical architectures and standards.

3. A number of the Report's conclusions and recommendations are in line with existing and future JISC programmes to improve access to resources and help to confirm the direction of much of JISC's current activity. Nine of the eighty-two recommendations in the Report mention the JISC specifically and many more mention JISC funded initiatives such as SHERPA or the e-prints.org software which have been at the forefront of institutional repository development in the UK.^{28,29} The JISC has already identified the need for change in the scientific publishing model in order to improve access and has been funding projects and reports to stimulate change.

4. Many of the recommendations in the Report directed specifically at the JISC relate to the model for the purchase of subscriptions and authentication mechanisms. The tenor of the relevant sections in the Report is to encourage the JISC and universities to press for better pricing and licensing terms from publishers. In this respect the Report can be read as supportive of the JISC's work. The Report does, however, present a challenge to move to even more effective national co-ordination of purchasing of academic content.

5. A number of other recommendations in the Report relate to institutional repositories but do not directly refer to JISC's involvement in repositories which is at least as important as its journal negotiation role. Repositories are being adopted by institutions to store learning and teaching and administrative data in addition to journals and other research resources. The JISC supports the sector in providing infrastructure services and in some cases national repositories and data stores where community content can be stored, shared and used. JISC also funds significant development work to explore some of the technical and organisational issues that surround the provision of content of all types. The recommendations in the Report fully endorse the kinds of activities that JISC is funding in this area. There are likely to be a complex cross-hatch of subject and institutional repositories in the future and the JISC will seek to ensure that development work is funded to make the cross-hatch as easy as possible for users to migrate from one to the other.

6. This document responds to the relevant conclusions and recommendations and identifies the main actions the JISC intends to take in support of the report. These can be summarised across four themes:

- i. Common approaches across a range of communities;
- ii. A coherent supporting infrastructure;
- iii. Processes to join up the "lifecycle" of knowledge;
- iv. New publishing models and supporting activities.

7. The JISC has set aside sufficient core funding to deliver the actions identified. However, it should be emphasised that additional government funding for digital preservation,

28 Securing a Hybrid Environment for Research Preservation and Access – the project is working to establish 'e-print archives' using eprints.org software, which comply with relevant international standards for metadata harvesting and which will be freely available to use.

29 A JISC funded project to create open source software for building institutional archives.

institutional repositories, and the exploration of new business models would be necessary if the Select Committee Report's recommendations are to be implemented in full.

JISC Actions

8. The relevant actions that the JISC has identified and intends to address are outlined below.

Common approaches across a range of communities

Common Information Environment

For some time, the JISC has been involved in a collaboration with key public sector content providers in the UK to implement the concept of a "Common Information Environment" (<http://www.jisc.ac.uk/cie/>). Organisations in different sectors are making significant amounts of online content available to their respective communities — in health, education, museums, archives, research, public libraries, and so on. However, the barriers between sectors mean that not all this content is accessible to all who might need it or want it. Too much remains hidden amongst the low-quality information that clutters the web and behind technical, commercial and administrative barriers. There is a pressing need for an initiative which will join these efforts together, one that will genuinely repay the significant investment that is currently being made across a range of sectors. Overcoming these barriers will require concerted action on the part of all organisations in the field. It will take time and it will not be easy. But the vision of a common information environment is a good starting point. We believe that if the UK is to remain at the forefront of educational and technological progress, and if each individual is to access the information they need, a Common Information Environment is required which will provide full access to the rich information and the exciting possibilities that the web has to offer to each and every one of us. **The JISC intends to invest additional funding, from within its core budget, in order to accelerate this initiative.**

Scholarly Communications Group

A key performance indicator in JISC's Strategy is to develop an overview of the barriers to effective scholarly communication and the emerging behaviours and different activities being funded worldwide to improve the position. The JISC's Scholarly Communications Group (<http://www.jisc.ac.uk/jcie/scg>) has been in operation since December 2000. Its role is to look across the relevant activities within JISC's portfolio and bring them together in a coherent way. The Group's mission is to make a leading contribution to the investigation and implementation of sustainable and cost-effective emerging behaviours across the various aspects of the scholarly communications process. It does this on behalf of the UK educational and research communities and in collaboration with relevant national and international partners. To date, the Group has addressed this mission by commissioning work to highlight key issues that require further investigation and activity. However, it is clear that further co-ordination and international collaboration is required. **The JISC intends to review the terms of reference and membership of the Scholarly Communications Group and increase**

its budget, from within JISC core funding, in order to accelerate developments and initiate an advocacy and supporting studies programme.

A coherent supporting infrastructure

Institutional Repositories

It should be noted that the JISC sees a wider role for institutional repositories than just journals or research resources generally. Learning objects and other materials have similar requirements, particularly as considerable economies of scale can be achieved by using common infrastructure within an organisation. The JISC intends to continue to lead institutional repository developments in UK post-16 institutions and has core funding and short-term capital funding set aside to address the institutional repositories agenda across research, learning and teaching and libraries (up to £3 million per annum).

To date, the JISC has provided support to universities and colleges for the creation of repositories through the FAIR Programme.³⁰ Projects funded (including SHERPA) are already committed to making their experience of repository development available to all UK universities and colleges. The provision of institutional repositories is a complex issue, involving cultural change, technical capability and capacity. The JISC has developed an understanding of the associated issues and is already taking forward activity that supports the report's recommendations in this area.

Since the publication of the report, the JISC has established a new Digital Repositories Programme to build on some of the outputs from the FAIR Programme and to accelerate the development of institutional repositories, through the provision of software, models and infrastructure, and the dissemination of best practice. The Programme will explore the most appropriate relationships between national, subject and institutional repositories, what kinds of functions should be provided by each, and what types of materials should be stored and by whom. Continuation funding has already been agreed for the eprints.org repository software for further maintenance and technical development work to support the needs of a much larger and more diverse user community. To inform the Repositories Programme, the JISC has recently funded a study that has reported on the options for delivery and access for Eprints and Open Access Journals. A second study has also been commissioned to obtain a current view on technologies and institutional practice in repositories and perform a gap analysis. The review will report in December, at which point the JISC will issue an invitation to universities and colleges in January 2005 to bid for targeted funding in this area, based on the outcomes of the review. **The funding available to JISC is not sufficient to allow all institutions to establish and maintain repositories, where appropriate or to establish a coherent "network of institutional repositories," as recommended in the report. JISC is funding the development of an infrastructure to allow the content held within the repositories to be shared and discovered, and to share good practice.**

30 http://www.jisc.ac.uk/index.cfm?name=programme_fair The FAIR Programme is looking at the submission and disclosure of research materials to investigate the technical, organisational, and cultural issues surrounding the sharing of institutional resources and assets.

Significant additional funding will be required from government for a sustainable initiative on a larger scale.

Digital Preservation

The long-term preservation of repository content which may include publications and other materials—particularly content for which a university or college is unable to take responsibility—is a serious concern. Long-term preservation is also a complex challenge which is difficult for any one institution to address alone. Collaboration across different organisations in this area is therefore essential. The JISC funds a Digital Curation Centre for e-science data and co-funds archives in the arts and humanities and social sciences with the respective Research Councils.³¹ The JISC has also been working closely with British Library and other institutions on organisational and technical problems to be overcome in the preservation of all electronic content, including establishing a Digital Preservation Coalition.³² The JISC has also recently launched a new preservation programme which is funding a number of projects to support digital preservation and asset management in universities and colleges which will explicitly address preservation and archiving issues for institutional repositories and test collaborative models.³³ These projects will involve a range of university computing science and library departments and partners such as the British Library and the National Archives. **The JISC intends to further explore how the HE Funding Bodies, the JISC, the National Libraries and the Research Councils, through the RLN, can work together to develop a sustainable infrastructure supporting digital preservation of a range of research materials. However, significant additional government funding would be required if a robust digital preservation infrastructure is to exist in the UK. The JISC would also be keen to work with the British Library, the Research Councils and others to establish who should be responsible for the national repository safety net which could provide a “back-up service” for the institutional repositories, and explore the links to digital preservation.**

Joining up processes across the ‘lifecycle’ of knowledge

Linking Research Data and Learning

More exploration is required to look at the content “lifecycle” for research data and e-prints. An example of existing work is the JISC-funded eBank UK project (<http://www.ukoln.ac.uk/projects/ebank-uk/>). The project is looking at the entire “lifecycle” of knowledge, from raw data to the published article. The project has demonstrated how to link research data with other derived information, such as e-prints, in the subject of chemistry. The project has harvested metadata both from e-

31 <http://www.dcc.ac.uk/> The Digital Curation Centre will support expertise and practice in data curation and preservation to ensure that there is continuing access to data of scholarly interest. The initial focus will be on research data, but the intention is to also address the preservation needs of e-learning and scholarly communication in the future.

32 <http://www.dpconline.org/graphics/index.html> The Digital Preservation Coalition was established to address the urgent challenges of securing the preservation of digital resources in the UK and to work with others internationally to secure our global digital memory and knowledge base

33 http://www.jisc.ac.uk/index.cfm?name=programme_preservation

print archives and research data from institutional “e-data repositories.” The availability of original data, together with the ability to track its use in subsequent research work, scholarly publications or learning materials will have a significant impact on access to research outputs and on the validation process. The project has generated a lot of interest, both in the UK and internationally. The JISC has recently extended the project in order to seek consensus within the community on the development of a generic data model and metadata schema for scientific data and to assess the pedagogical benefits of access to primary e-research data within associated e-learning materials in the taught postgraduate curriculum in chemistry. It will also investigate the expansion of the eBank service in other sub-disciplines of chemistry and the physical sciences and test the feasibility of implementing eBank in the related domain area of the biosciences. **The JISC intends to expand this area of activity, from within its core funding, as a further way of improving access to research resources and improving the scholarly communication process.**

New publishing models and supporting activities

Open Access Journals

The JISC is committed to exploring alternative models of publishing to promote wider access to research outputs. The JISC is funding a study of the advantages and disadvantages of a range of different publishing models and has recently extended its agreement with BioMedCentral, the Open Access Publisher, which gives all UK universities membership and allows staff to publish their work in BioMed Central's growing number of Open Access journals without incurring a direct article-processing charge. The JISC is also supporting four publishers wishing to move to the Open Access model through short term pump-priming through its Open Access initiative and has recently launched a new phase of support for publishers who wish to transition to Open Access (http://www.jisc.ac.uk/index.cfm?name=funding_open_access2). **However, in order to explore a range of business models and make a significant impact, the initiative would need to be expanded to a much larger scale. The JISC does not have sufficient funding to pump-prime such an initiative on a large scale. Additional funding would therefore be required from Government.**

Journal Procurement

The JISC undertakes central journal procurement through an initiative known as “NESLi 2” (<http://www.nesli2.ac.uk/>). The JISC intends to continue with this approach and to press for better pricing and licensing terms from publishers. The initiative will also continue to explore new licensing models with publishers and a study has recently been commissioned to investigate the benefits and disadvantages of a range of business models. The Report does, however, present a challenge to move to even more effective national co-ordination of purchasing of academic content, through collaboration with regional purchasing consortia. The NESLi model has received much interest and emulation internationally and the JISC also intends to pursue greater international liaison to bring together international policies and approaches to journal procurement. The national journal procurement approach adopted in the UK through NESLi could be more powerful if negotiations were undertaken for the whole academic community rather than those institutions willing to subscribe. However, there is not sufficient

funding available to JISC to undertake national journal procurements in this way. **The JISC intends to liaise with international journal procurement bodies and regional purchasing consortia to explore collaborative opportunities. In light of the Report, the JISC also intends to undertake an awareness programme regarding the licensing terms of JISC agreements, in order to improve the community's understanding of the flexibility provided in the licence terms.**

Content Procurement Company

The JISC strategy for 2004 – 2006 includes a priority to create and maintain sustainable procurement and delivery services for on line content. In response to this, the JISC is exploring the establishment of a Content Procurement Company to address the challenge presented in the Report for even more effective national co-ordination of purchasing of academic content. Such a company would be able to negotiate access to online content on behalf of all higher and further education institutions through JISC as well as on behalf of other organisations such as the Research Libraries Network, NHS or the Museums Libraries and Archives Commission. This central negotiation will bring the benefit of terms and conditions of use that would not be possible if agreements were negotiated individually by institutions or organisations and much reduced subscription charges for access to content. **The JISC aims to have the Company established and ready for operation by 1 August 2005. The Company will be funded from within JISC's existing budget to negotiate on behalf of higher and further education institutions, though will require additional funding to extend its remit to negotiate on behalf of other public sector organisations.**

9. The above areas represent a considerable set of activities that the JISC intends to undertake and which will help to implement some of the key recommendations in the Report. These can be accommodated within JISC's core budget and fits well with the JISC's remit. However, for the Report's recommendations to be implemented fully, significant additional Government funding would be required for key areas such as institutional repositories, digital preservation and the further exploration and pump-priming of new publishing models. If Government funding is made available, the JISC sees itself as the appropriate body to continue to lead such initiatives, in collaboration with other relevant bodies, given its existing remit and involvement in these areas.

10. The remainder of this response seeks to draw attention to all JISC's relevant activities in the context of the recommendations in the Report of the House of Commons Science and Technology Committee *Scientific publications: free for all?* It is divided into two parts: Open Access and repository issues; and licensing issues.

Open Access & Repository Issues

11. **Recommendations 3, 53 & 74** concern the need for the UK to act in an international context. The JISC has supported change in scholarly publishing in close collaboration with organisations in other countries. As the Report indicates, there is an opportunity for the UK to take the lead, although the window of opportunity is narrow given the progress being made in other countries. The benefits from the new publishing model are being felt across the world, and in particular, developing countries can benefit from greater accessibility to UK research. In particular the JISC is working with organizations in the

United States, Australia, and the Netherlands to learn from their progress in this area and to deal with issues that cut across national boundaries together. The JISC is also taking forward developments in standards to support a national infrastructure of repositories in partnership with international standards making bodies. **The JISC welcomes the recommendations in the Report for discussion and action at an international level.**

12. Recommendation 7 concerns the principle that primary research data be made available and concludes “that the Research Councils consider providing funds to enable researchers to publish their primary data alongside their research findings, where appropriate”. The JISC vision for repositories is of a wide range of content to support both teaching and research. As part of this vision the JISC is exploring models where repositories of raw data can be linked to research papers. The JISC works closely with the Research Councils and jointly hosts some of the primary data already supported by Research Council funds, through services in the social sciences and in the arts and humanities. The institutional repositories created through the JISC-funded FAIR Programme already contain many types of academic material including e-prints and primary research data which would prove useful to researchers. The FAIR Programme, through projects like E-prints UK is also developing infrastructure to allow all e-prints stored in institutional repositories to be located irrespective of their location. Crucially all the JISC activity in this area is standards based so that interoperability between different data and information is enabled.

13. Recommendation 43 and 55 respectively conclude that “the requirement for universities to disseminate their research as widely as possible be written into their charters. In addition, SHERPA should be funded by DfES to allow it to make grants available to all research institutions for the establishment and maintenance of repositories” “Government appoints and funds a central body, based on SHERPA, to co-ordinate the implementation of a network of institutional repositories”. The JISC has provided support to universities and colleges for the creation of repositories through the FAIR Programme, and projects funded under this Programme (including SHERPA) are already committed to making their experience of repository development available to all UK universities and colleges. The SHERPA Project aims to create a substantial corpus of research papers from several of the leading research institutions in the UK by establishing e-print archives. Other projects in the programme including TARDIS, based at the University of Southampton, have also used funding to develop institutional repositories and have gained much useful intelligence for the community during this process. The JISC is actively pursuing ways in which institutional repositories can be developed further and plans to support universities in providing best practice; software; models and infrastructure to support institutional repositories that hold research outputs. An important example of ongoing work is the study that has recently reported on a delivery and access model for Eprints and Open Access Journals. It should be noted that the JISC sees a wider role for institutional repositories for example for learning objects and other materials; particularly as considerable economies of scale can be achieved by using common infrastructure within an organisation. The JISC is liaising with other countries on these issues as part of its active international collaboration and is also working with other UK government agencies to pursue this agenda. Already JISC is preparing to build on some of the FAIR programme outputs including SHERPA’s – for example the need to maintain a rights database and to develop advocacy materials to support submission to institutional repositories. The

provision of institutional repositories is a complex issue and it involves cultural change, technical capability and capacity. The JISC has developed an understanding of the associated issues and plans to take forward activity that supports this recommendation and the needs of academic institutions. This will include a major new digital repositories programme from January 2005. To ensure that institutional repositories are sustainable and that they complement the publishing industry, work is required to develop sound business models for the repositories. **The JISC welcomes the recommendations to establish further repositories and given its existing role in this area across learning, teaching and research, sees itself as the central body to co-ordinate the implementation of a network of institutional repositories.**

14. **Recommendation 44** concerns the need to motivate academic authors to self-archive in institutional repositories and recommends that “the Research Councils and other Government funders mandate their funded researchers to deposit a copy of all their articles in a repository”. The experience of repositories developed through JISC funding has been that cultural rather than technical problems are the greatest future barrier inhibiting the growth of institutional repositories. In particular it has been difficult to persuade academic authors to deposit journal articles in a repository without support from funding agencies. The JISC funded projects have helped build a body of experience on ways in which author deposit can be motivated, but the lessons from the JISC funded work can contribute to the understanding of this issue and the JISC would be happy to cooperate with other bodies in setting policy in this area.

15. **Recommendation 46, 75, and 76** respectively concern the roles of the British Library and institutional repositories in digital preservation: “the DCMS provides funds for the British Library to maintain a central online repository and ensure the preservation of digital publications”; “failure to give adequate funding to the BL could result in the loss of a substantial proportion of the UK’s scientific record”, and “Institutional repositories should be a key component of any long-term strategy to ensure the preservation of digital publications”. The long-term preservation of repository content which may include publications and other materials—particularly content for which a university or college is unable to take responsibility—is a serious concern. Long-term preservation is also a complex challenge which is difficult for any one institution to address alone. Collaboration across different organizations in this area is therefore essential. The JISC has been working closely with British Library and other institutions on organisational and technical problems to be overcome in the preservation of all electronic content but more funding is required. The JISC has recently commenced funding for a number of projects to support digital preservation and asset management in universities and colleges which will explicitly address preservation and archiving issues for institutional repositories and test collaborative models. These projects will involve a range of university computing science and library departments and partners such as the British Library and the National Archives. **The JISC welcomes these recommendations and is interested in further exploring how the HE Funding Bodies, the JISC, the National Libraries and the Research Councils, through the RLN, can work together to develop a sustainable infrastructure supporting digital preservation of a range of research materials.**

16. **Recommendation 48** concludes that “Government must adopt a joined-up approach. DTI, OST, DfES and DCMS should work together to create a strategy for the implementation of institutional repositories”. At present there is no national co-ordination

between repositories outside the FAIR Programme, a situation which may result in the use of incompatible software and uneven standards in the sharing of content. As the Report recognises, the content in repositories has a national as well as a local value. The JISC plays a key role in defining standards for the provision, storage and use of digital information within the academic sector and one of the main focus of its repository activity is to provide specifications and functional requirements for repositories at a local, regional, national and international level and for wide ranging resources. The JISC believes that the work that it has initiated to develop and implement a coherent standards framework could usefully be built upon in this context. Part of this activity will be taken forward in the JISC Digital Repositories Programme from January 2005. **The JISC welcomes this recommendation and would welcome the opportunity to contribute its experience in repository development to the formation of a national strategy.**

17. **Recommendations 49-51** rightly identify the important role copyright ownership plays in either aiding or hindering access to published research. “The issue of copyright is crucial to the success of self-archiving. Provided that it can be established that such a policy would not have a disproportionately negative impact, Research Councils and other Government funders should mandate their funded researchers to retain the copyright on their research articles, licensing it to publishers for the purposes of publication”. The JISC funded the RoMEO project which has received international recognition for its work on documenting authors agreements and permissions for institutional archiving across a range of leading publishers. The JISC also funds a Legal Information Service and has commissioned several reports on copyright, and is supporting international initiatives—such as the work of the Zwolle Group—to encourage fairer copyright management for academic content. The JISC is about to embark on the production of best practice and development of infrastructure to support copyright practices within the scholarly communication process with particular attention to author, publisher and academic institution relationships. This work should report within the year. The JISC would welcome greater understanding by the academic institutions of copyright issues.

18. **Recommendation 64** concludes “that the Research Councils each establish a fund to which their funded researchers can apply should they wish to publish their articles using the author-pays model”. In its strategy the JISC has taken a holistic view of information creation and access, so that the publication activity is seen as part of the research process. Given the high cost of purchasing subscriptions under the present model, the author-pays model warrants further investigation.

19. **Recommendation 69:** the academic community values the contribution made to research and teaching by the learned societies and the JISC would not wish to see that contribution weakened through a change in the journals business model. As the Report recognises, the JISC has already made money available to assist some learned society publishers who wish to explore open access publishing to transfer their journals from a subscription to an open access model. **The JISC intends to continue to provide support to those electing to explore this model and to continue to review other journal business models.**

20. **Recommendation 70** supports further experimentation with the author-pays publishing model and recommends that “in the short term Government may need to provide limited financial assistance to encourage publishers and institutions to take part in

what, for them, may be an expensive process. We applaud the JISC for providing funding for this purpose so far and hope that it will continue to do so". Over several years the JISC has discussed with publishers the viability of an "author-pays" publishing model. Publishers have been reluctant to release the information about their costs necessary to evaluate viability and this will be a crucial factor in the success or otherwise of the "comprehensive independent study" recommended in paragraph 150. The JISC is committed to a three-year programme of short-term funding to Open Access publishers. The JISC will award this funding on an annual basis to the publisher or publishers who meet the required criteria.

Licensing Issues

21. Today, one in five publications is accessible on line and more than 1,000 titles are listed in the "Directory of Open Access Journals". Over the last ten years, however, the average annual increase in the prices of scientific reviews has approached 10%, a figure well in excess of GDP increases and the average inflation rate. University libraries have therefore seen their purchasing power decline since their budgets cannot keep pace with price increases. There are, moreover, opportunities for archiving and communication via the Internet.

22. **Recommendation 6** concerns purchasing models based upon access for a limited number of simultaneous users and recommends that the JISC "strongly argues the case against such restrictive practices when it negotiates the terms for the next national site licence with publishers". Although this practice is standard for some publishers, the JISC never agrees to it. No JISC agreement is restricted to a number of simultaneous users. The preferred model is that of a common national licence, providing unlimited access to all registered users of libraries in all universities and colleges able to take up the deals negotiated by the JISC. **The JISC welcomes this recommendation as an endorsement of its approach in negotiating with publishers on this issue.**

23. **Recommendation 9** concerns the use of the same journal content by both university and NHS staff and recommends "that the JISC and the NHS work together to implement joint procurement procedures that reflect the close working patterns of NHS and the higher education sector and represent value for money for both". The JISC and the NHS are already working together to implement joint procurement procedures. Some content has already been purchased through joint negotiations and discussions. The JISC is leading a group that includes representatives from the NHS England, NHS Scotland, NHS Wales, and NHS Northern Ireland to procure jointly content for the HE and NHS communities. The group is currently in discussions with publishers regarding a joint procurement for an exemplar agreement. The process is being designed to develop a roadmap for future joint procurements. **The JISC welcomes this recommendation as encouragement to develop initiatives already underway.**

24. **Recommendation 10** concerns the reproduction of digital copies of content needed for teaching purposes and recommends "that future licensing deals negotiated by the JISC explicitly include provisions to enable journal articles, whether print or digital, to be used for teaching purposes". Publishers have used the Copyright Licensing Agency both to control the volume of copying and to secure additional revenue from the academic community. The procedures involved and the cost to universities and colleges have

restricted the amount of copying—particularly of digital content—academic staff have wished to do in order to improve the effectiveness of their teaching. JISC's Model Licence already ensures that electronic resources can be fully utilised in learning and teaching. The relevant clauses allow for “use and manipulation of copyright material” while protecting that material from abuse. This means for example, that (providing it is properly attributed) a lecturer can copy and paste text from a journal article into a teaching material. However, the lecturer may not amend the published text, and it is quite reasonable that publishers restrict such amendments of copyright material. A restriction in the JISC Model Licence states “For the avoidance of doubt, no alteration of the words or their order is permitted”. **The JISC welcomes this recommendation as strengthening its negotiating position.**

25. **Recommendation 13** concerns the lesser access anybody who is not a student or member of staff of a university or college has to digital journals compared to access to printed content. The recommendation is “*that the next national site licence negotiated by the JISC explicitly provides for all library users without an Athens password to access the digital journals stocked by their library*”. The JISC Model Licence already provides for all library users, with or without an Athens password. The licence refers to users in two categories, Authorised Users and Walk-in Users.

- a The licence defines “Authorised Users” as the current members of the staff of the institution (whether on a permanent, temporary, contract or visiting basis) and individuals who are currently studying at the institution. Users in this category are issued with individual Athens usernames and passwords. This means that they can gain access to electronic resources via the internet at any time and from any location; in other words they do not need to be on library premises and are not limited to library opening hours.
- b The licence also contains a definition of “Walk-in Users”, covering all other permitted users of the library. The licence permits these users to access electronic journals and other electronic resources from workstations on the library premises. The Athens system is sufficiently flexible to permit this without Walk-in Users needing to be issued with an individual username or password.

Thus far from being more restrictive, Athens authentication widens access to electronic resources for Authorised Users (who represent by far the majority of the library's registered users), while offering Walk-in Users exactly the same level of access to electronic materials as they have to traditional print publications, i.e. access on library premises. For these reasons the JISC always urges publishers to comply with the Athens standard. **The JISC welcomes this recommendation as strengthening its negotiating position and will raise awareness within institutions to ensure they fully understand the terms of the JISC model licence in this regard.**

26. **Recommendation 16** arose from publishers' evidence to the Science and Technology Committee regarding the price per article in bundled deals. The recommendation is “*that the JISC develop an independent set of measures, agreed by subscribers and publishers alike, to monitor trends in journal pricing. This will help exert pressure on the publishing industry to self-regulate more effectively and will give libraries and other users greater knowledge when they are deciding which subscriptions to take*”. Few publishers are willing to offer less than 7-8% increases and there are some instances of up to an 18% increase in subscription

charges. The current journal price statistics, collected by the Library and Information Statistics Unit at Loughborough University, only give overall percentage increases. The JISC is currently funding two studies that will help clarify this complex situation:

- a The Analysis of Usage Statistics study: to provide the JISC and its NESLi2 Negotiating Agent with accurate data about the national use of electronic journals to inform future negotiations. The study will analyse in depth usage data from a representative sample of small, medium, large, and very large academic libraries to ensure a full picture. The study will cover a minimum of 3 publishers (and ideally 5) in order to provide sufficient comparative data particularly for negotiating purposes.
- b The Journals Business Models Study: to identify the existing business models used by scholarly publishers in the international market place and analyse the benefits and disadvantages (including cost issues) to the library community. Models to be analysed include: the big deal (which can be e only or electronic plus print); individual title licences; e-versions of titles held in print; subject clusters; core subscription plus pay per view; and pay per view only. The study will also identify other business models and analyse these in a similar way. This analysis will explore amongst other things both usage based charging models and open access initiatives.

The results of both these studies due to report in December 2004

27. **Recommendation 19** concerns continuing access to digital content after a subscription has been cancelled and recommends “that the JISC ensure that provision for continuing access in the event of cancellation to articles published during the subscription period is written into its next national licensing deal”. The JISC Model Licence provides for this. The clause in the Licence means that on cancellation the publisher will provide the subscribing institution with a copy of the relevant journals on CD-ROM or provide access via their own server. This clause also provides for a ‘third party’ to provide an archive of the material, although no such third party is yet in place to provide this service in the UK. It is always JISC policy to negotiate for archival access but some publishers refuse to sign up to this clause in the agreement, usually because they have a “moving wall”, which means they charge subscription fees for back files. Other publishers will concede to a CD-ROM copy archival copy, but not online access to backfiles. This is not an ideal solution because the CD-ROM format is an unstable medium for archiving and prone to corrupt and in order to facilitate access the library must mount the CD-ROM content on its local network. **The JISC welcomes this recommendation as strengthening its negotiating position but wishes to make two further points:**

- a The cost of maintaining ongoing internet access to content is very high. It is understandable that publishers are reluctant to freely provide this service to non-paying customers. Central funding for a third party to host and deliver archival copies of cancelled backfiles would alleviate this problem. The JISC is also funding the evaluation of the LOCKSS Programme as a viable solution for local archiving. LOCKSS creates low-cost, persistent digital “caches” of authoritative versions of electronic content. The LOCKSS software enables institutions to collect locally, store, preserve, and archive authorised content thus safeguarding their community's access to that content.

- b The Select Committee Report does not highlight the other problem regarding cancellations, which is that publishers restrict the number of titles that an institution may cancel. Cancellation is often restricted to a very small percentage of a bundle. Thus, publishers force institutions to continue print subscriptions to titles that are no longer relevant to their research or teaching. It is JISC policy to negotiate for higher cancellation levels – but the trend is for publishers to be reluctant to concede this point. Publishers do not allow cancellations where the “Big Deals” exist, because they fear that libraries will cancel large numbers of titles, and thereby gain “highly discounted” access to the same titles, under the “Big Deal” arrangement, which would result in a significant drop in revenue for publishers.

28. **Recommendation 20** that “Increasing usage rates do not equate to an increased ability for libraries to pay for journal bundles. The recent availability of usage statistics should not be used as a justification for publishers to raise their prices.” Most of the “Big Deals” offered by STM publishers use a charging model based on a library’s historic spend on printed journals, plus a supplementary charge for providing access to these journals in electronic format. Access to electronic titles not subscribed to in print is usually also covered by this supplementary charge. NESLi2 negotiations have demonstrated that some publishers are wishing to change their charging model so that prices charged to individual libraries more accurately reflect actual usage, rather than historic print spend. Publishers have been quoting instances where there has been significant use of previously unsubscribed titles as a justification of such an approach. The data they present tends not to include counterbalancing figures showing low or no-use titles. With the advent of electronic journals, libraries have the opportunity to obtain robust quantitative data about levels of periodical use and to analyse how far their investment represents value for money. Good analysis of such data could be a powerful tool in future negotiations with publishers when deals are to be renewed, and could help to inform thinking about viable alternative economic models for electronic journals. However, in-depth analysis of this data is time-consuming for individual libraries and may not be cost effective in the absence of useful benchmarks. A national overview is required to help inform future JISC negotiations on behalf of the community and assist institutions in assessing the value for money provided by such deals. It might also inform their purchasing decisions with respect to deals not currently covered by NESLi2 but of high importance to them. Thus, the JISC has funded an Analysis of Usage Statistics study referred to in 3.15.i due to report at the end of 2004. **The JISC agrees with this recommendation.**

29. **Recommendation 21** goes on to conclude that “Although libraries may aspire to provide access to every scientific journal, they cannot afford to do this. It is inevitable that difficult choices between a number of journals with lower usage rates and impact factors will have to be made. Nonetheless, these decisions should be made in response to local user needs rather than as a side effect of bundling.” The report goes on in chapter 5 to discuss the ways in which collaborative library procurement procedures at a national level can be tailored to accommodate local needs. The benefits of NESLi2 are not fully understood in this respect. In its first complete year NESLi2 negotiated agreements that provide for access to some 4500 journals – depending on options chosen by each institution. Calculating the savings that achieved through this initiative is not straightforward because publishers’ pricing policies vary considerably and therefore no one “savings model” can be used. The savings identified through NESLi2 directly relate to reductions achieved in the price of

journals. This saving does not include the other less tangible savings realised through the appointment of central agent to manage the process, such as a central point of information and communication, a help desk, a model contract, and central negotiations.

30. **Recommendation 22** concludes that: “Current levels of flexibility within the journal bundle do not present libraries with value for money. Whilst we accept that unbundling STM information carries risks for the main commercial publishers, only when flexible bundled deals are made available will libraries achieve value for money on their subscriptions. Furthermore, although we recognise that bundled deals may be advantageous to libraries in certain circumstances, we are concerned about the potential impact bundling may have on competition, given limited library budgets and sustained STM journal price growth”. The JISC funded studies referred to above will inform this debate, and provide the JISC with the information it needs to take a lead in shaping emerging business models that provide a viable alternative to the “bundled deals”. **The JISC fully concurs with this recommendation.**

31. **Recommendation 27** concerns transparency in publishers' costs, enabling publicly-funded organisations to know what elements a publisher has included in a cost calculation. The recommendation is: “*We urge the JISC and other buying bodies to press for greater transparency in this area*”. The JISC actively presses publishers to provide more information about their costs, to determine value for money. The NESLi2 Negotiating Agent always seeks to obtain, and thus pass on to educational institutions, full details of how a publisher has calculated its fees for electronic journals. The JISC has also been pressing publishers to relax confidentiality clauses in contracts so that we can know whether UK libraries are paying prices comparable to libraries in other countries. **The JISC welcomes the recommendation for greater transparency in prices quoted by publishers and looks forward to a positive response from publishers.**

32. **Recommendations 29-31** refer to the payment of VAT on electronic content “*We recommend that HM Customs and Excise exempt libraries from the VAT currently payable on digital publications whilst it negotiates for a more permanent solution within the EU*”. **The JISC agrees that the differential rate on VAT hinders the transition from print to electronic services.**

33. **Recommendation 40** points to the need for a common national strategy for the purchase of journal subscriptions and recommends “that the JISC negotiate with libraries, regional purchasing consortia and other national bodies responsible for procurement to agree a common strategy. Only by combining their resources will they be able to negotiate a licensing deal that secures national support and brings real benefits “.It should be noted that the NESLi2 agreements are for electronic journals, whereas the regional consortia tend to concentrate on print journals. Procurement for Libraries and the regional consortia strike deals predominantly with subscription agents (as opposed to publishers). The JISC agrees that the purchasing power of all institutions could combine to gain better terms for both print and electronic journals and that NESLi2 and the regional purchasing consortia should work more closely together. **The JISC agrees with this recommendation which links with the proposal already endorsed by the JISC for a Research Libraries Network.**

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