

Royal Society response to Research Councils UK's consultation on access to research outputs

Summary

- The draft proposals on access to research outputs¹ released by Research Councils UK (RC UK) raise a whole range of issues about the future of scholarly publishing and have significant implications for the method and level of funding of Science Engineering and Technology in the UK.
- We welcome the fact that RC UK has now opened up this issue to wider consultation.
- We agree with the four principles that RC UK outlines in its document: accessibility to publicly-funded research; rigorous quality assurance through peer review; efficient and cost-effective mechanisms for publication and access to research results; and long-term preservation and accessibility of research outputs.
- We do not believe that this proposal is the best way of achieving these objectives.
- The use of institutional repositories is being encouraged despite evidence that they are not yet adequately funded and apparently with no assessment as to whether they are more cost effective than subject-based repositories (or for that matter the traditional system of publishing).
- Despite acknowledging the many uncertainties around the author-pays model, RC UK is planning to provide funds for its grant holders to publish in open access journals.
- In the absence of any research into the long-term impacts of mandated self-archiving, RC UK is proposing a policy that may drive existing journals out of business without a viable alternative.

Scientific publishing and the Royal Society

As the UK's national academy of sciences, an experienced publisher and a recipient of public money from Parliament to support research, we have a particular interest in the access to research outputs. The Royal Society supports the widest possible practicable dissemination of scientific knowledge. We believe that publishers have an important role in establishing the best way of expanding access commensurate with continuing viability. Subscription-based publishers such as ourselves are taking steps to increase the availability of the papers that they publish. We (along with the majority of the world's Scientific Academies) support, and have implemented, the recommendations of the InterAcademy Panel² that electronic access to journals should be free of charge on publication to scientists in developing countries and within one year to the rest of the world.

The use of repositories

From October 2005 RC UK proposes to place a copy of papers arising from work funded by the Research Councils in an institutional or subject repository at the earliest opportunity (subject to the copyright or licensing arrangements of the journal and providing a suitable repository exists).

It is not cost neutral to set up and maintain such repositories. RC UK clearly favours institutional repositories because of their proximity to the authors, their value as source of information for the Research Assessment Exercise and presumably because the infrastructure (libraries) is already in place at institutions. However, as RC UK themselves acknowledge, the Joint Information Systems Committee (a Government-funded advisory

body that has undertaken research into institutional repositories) has stated that extra funding will be needed to ensure the viability of institutional repositories. RC UK does not address this issue, merely stating that 'e-print repository management is part of a changing function and responsibilities of institutions employing researchers'. It would seem that RC UK is encouraging researchers to submit to institutional repositories without being assured that they are adequately funded, without considering whether a smaller number of subject repositories would be more cost effective for the UK as a whole, nor whether the additional money will be forthcoming from the public purse.

As it becomes easier to search for and access research outputs (eg using Google Scholar) the likelihood of specialists and non-specialists accessing multiple versions of a research paper is more likely. While RC UK recognises the importance of ensuring that the distinction between pre and post prints is clear to all users, it is evident that such a system has not yet been developed. We think it would be advisable for RC UK to be confident that a common and recognisable standard exists before obliging researchers to use repositories.

There is a clear risk that in the medium to long-term the increased use of repositories will undermine the traditional subscription-based model of scientific journal publishing. Researchers are less likely to request a journal if they can access its outputs before, on, or soon after the publication date. As a result librarians are less likely to renew journal subscriptions, particularly if they are being required to fund repositories from their limited budgets. As a result, some journals will be unlikely to survive. As we outline in the next section, and RC UK itself acknowledges, the sustainability of the current alternative to subscription-based journals (the author-pays journals) is unproven.

The loss of subscription-based journals published by Learned Societies would be of particular concern. The Learned Society publishers operate on a not-for-profit basis. In contrast to the commercial publishers, any surplus generated through this not-for-profit publishing is used to directly support the UK scientific community (and the wider public) through the many activities of the Learned Societies. In addition to supporting and funding scientists and engineers, these activities include science communication and public dialogue programmes, the promotion of science education and interactions with industry. A number of the smaller Learned Societies would be unlikely to survive without their publishing income and even the larger Societies (such as the Royal Society) would be forced to reduce the scale of their activities.

Author pays journals

We welcome the fact that RC UK, in common with many other organisations, acknowledges the uncertainties about the sustainability and viability of author-pays journals. We also have concerns that author-pays journals will mean that: the overall cost to the science base will be greater than under the subscription model; some authors will be unable to publish in certain journals due to lack of funds; the quality of publications may be reduced as publishers bow to commercial pressures to reduce the rejection rate of papers; and it will not be possible to cross-subsidise minority interest publications³. We are surprised and disappointed that RC UK has made no attempt to address any of these concerns but is prepared to provide the resources for its grant holders to publish in these journals.

RC UK will be requiring authors to justify the cost-effectiveness of publishing in author-pays journals in their grant application. However, it is difficult to see how the Research Councils can judge cost-effectiveness at all, let alone when the true comparison is between an author-pays model and library subscriptions. The introduction of Full Economic Costs (FEC) provides a mechanism for grant holders to apply for author pays charges. However, it is not clear to us where the additional funding is coming from and whether this additional cost has been included in the calculation of the budget required to fund FECs. We recommend that the Research Councils record their spend on open-access fees and make this figure publicly available so that it can be monitored by those who are interested in the cost-effectiveness of this publishing model.

Evaluation of the impact of this policy

RC UK plans to review the development of e-print repositories and its requirement that researchers deposit their publications within repositories. It would have been advisable if the proposed criteria for this review (including details of the information that RC UK plans to collect and a definition of what would constitute success or failure of this policy) had been included in the consultation document.

Conclusion

We believe that the implementation of these proposals is premature. They risk compromising RC UK's principle of rigorous quality assurance through peer review and the principle of efficient and cost effective models and mechanisms for publication and access to research. RC UK is ignoring the evidence in its own draft policy document that institutional repositories are not yet adequately funded and that the long-term viability of author-pays journals is as yet unproven. It also makes it clear that common and recognisable standards of quality assurance for documents in institutional repositories have not yet been developed.

We strongly recommend that, prior to implementation, RC UK verifies that its policy on access to research outputs is: sustainable; represents an effective use of public funds; and will not undermine the traditional model of peer reviewed scientific publications before a viable alternative exists. This will require RC UK to work more effectively with the organisations and individuals that have expertise in this area than it has done in the past. The Royal Society is willing to contribute to a more considered initiative on access to research outputs.

¹ RC UK (2005) RCUK *Position statement on access to research outputs*. www.rcuk.ac.uk/access/index.asp

² InterAcademy Panel (2003) *Statement on Access to Scientific Information* (www.interacademies.net)

³ Royal Society (2004) *Response to the House of Commons Science and Technology Committee Inquiry into scientific publications*. 04/04 www.royalsoc.ac.uk/document.asp?tip=0&id=1349

Any inquiries about this document should be sent to:

Dr Rachel Quinn, The Royal Society, 6-9 Carlton House Terrace SW1Y 5AG, United Kingdom

E-mail: rachel.quinn@royalsoc.ac.uk Tel: +44 (0)20 7451 2546 Fax: +44 (0)20 7451 2692