

INVITATION TO TENDER

10 September 2009

Economic Research: Deposit and Access at Journals and repositories

Deadline for proposals: 29 October 2009

Summary

PEER (Publishing and the Ecology of European Research) is a **pioneering collaboration between publishers, repositories and the research community, by which at least 16,000 peer reviewed manuscripts destined to become journal articles in ISI ranked journals will be made available for archiving every year for three years.** The aim is to investigate the effects of the large-scale deposit (so called Green Open Access) on reader access, author visibility, and journal viability.

At the heart of the project is research to gather evidence about the impact of systematic archiving of stage-two research outputs, i.e. the author's final peer-reviewed manuscript – in contradistinction to the working paper or pre-print (before any submission to a journal) and the final published version. There are three strands to this research: **behavioural, usage and economic.** PEER will fund this research.

This is an invitation to tender for a study that will **investigate economics in an empirical manner.** What can be said about the costs of depositing of stage-two outputs? How do different methods of deposit to repositories compare for cost? How do different methods of access to repositories and journals compare for cost? What can be said about the cost to scholars as well as to repositories and/or libraries? What is the (likely) economic impact on publishers? What are the total system costs immediately and in future? For the purpose of this study **access to data** of participating publishers and repositories **will be granted.**

The study will run from January 2010 to October 2010. Tenders are invited from suitably qualified organizations based within the European Union as well as elsewhere in the world, subject to the terms and conditions mentioned below.

Funding

1. Funding up to a maximum of EUR 50.000 (inclusive of VAT and expenses) is available for this study. A suitable profile of payments of the funding will be agreed with the successful bidder following the award of contract.

Background

2. The overall aim of PEER is to develop an **Observatory that will act as a controlled experiment** to compare an evolving scenario of large-scale and systematic archiving with the current situation of limited and sporadic archiving. From 2008 to 2011, at least 50,000 manuscripts will become available for archiving (so-called Green Open Access) and many more manuscripts might become available. Half of the peer-reviewed manuscripts will be **deposited by publishers** in repositories. For the other half, the

authors will be alerted to the possibility of self-archiving the manuscripts in repositories and encouraged to do so. This should raise awareness of the issue across Europe.

3. PEER is a consortium formed by the International Association of Scientific, Technical and Medical Publishers (STM), Fondation Européenne de la Science / European Science Foundation (ESF), Georg-August-Universität Göttingen (State and University Library), Max-Planck-Gesellschaft (MPG), Institut National de Recherche en Informatique et en Automatique (INRIA), with the technical partners SURF and Bielefeld University.
4. The **key issue** is: What will be the impact of archiving the stage-two research outputs in repositories, if implemented on a broad and systematic scale, on journals and on the wider ecology of scientific research in Europe? Stage-two research outputs are the authors' final manuscripts (after peer review) - the so-called Green Open Access policy. The impact on journal viability of the open access archiving of stage-two outputs (peer reviewed manuscript, also known as the author's final manuscript) has been the subject of lively debate among publishers, learned societies and proponents of Green Open Access.
5. The **proposed solution** is for publishers and the research community to collaborate in developing an "Observatory" that will enable them to monitor the impacts of the deposit of stage-two research outputs. The data provided by the Observatory can then be used to provide an evidence-based foundation for discussion on future policy. Significant about the PEER project is the cooperation of the various stakeholders in the scholarly publishing cycle without prejudice.
6. The study shall contribute to the **Observatory**.
7. PEER has the following **project objectives**:
 - a. Determine how the large-scale deposit of stage-two research outputs in repositories will affect journal viability;
 - b. Determine whether the large-scale deposit of stage-two research outputs in repositories increases access;
 - c. Determine how the large-scale deposit of stage-two outputs in repositories will affect article usage and citing behaviour;
 - d. Determine whether the large-scale deposit of stage-two research outputs in repositories will affect the broader ecology of European research;
 - e. Determine the factors affecting the readiness to deposit manuscripts in institutional and disciplinary repositories and measure the associated costs;
 - f. Develop a model to illustrate how traditional publishing systems can coexist with self-archiving.
8. **Participating publishers** have agreed to collectively contribute 200 to 300 journals from a wide range of types and subjects; setting, however, embargo times for each journal appropriate to the discipline and individual journal economics. The PEER project offers a number of **features** that bidders could utilise in the design of the study:
 - PEER is based on the selection of 200 to 300 ISI ranked journals, from which manuscripts are selected for deposit. Publishers hold a control group of equivalent journals from which no manuscripts will be deposited.
 - From journals selected for deposit, only the manuscripts with European based (lead) authors are selected for archiving, leaving all other articles/manuscripts as an alternate group.
 - Half of the manuscripts will be deposited directly by the publisher, but the other half will require action by the author before archiving.
 - Authors will be invited to deposit in repositories participating in the PEER project.

9. This study is expected to contribute to the following **outcomes**:
- Greater understanding by both publishers and the research community of the effects of large-scale deposit of stage-two research outputs in open access repositories, in particular of the access, use, and economics of journals, but also of the broader ecology of research in Europe;
 - Evidence-based guidance for the evolution of policy in this area;
 - A model illustrating the interaction of publishing systems, repositories and libraries to maximise potential benefits;
 - Trust and mutual understanding between the publisher and research communities to assist in the achievement of the ambitious development goals for science in the European Research Area.

Details of the study

10. The **objectives** of the economics research are to:
- Investigate the cost of the large scale deposit of stage-two research outputs (including the economic efficiency or cost of the process of deposit). PEER distinguishes between a) the manuscript is deposited by the publisher directly; and b) the manuscript is deposited by the author after being notified of this possibility (by the publisher). These scenarios should be investigated, but alternative models of assisted deposit and self-archiving may be considered for comparative purposes.
 - Understand the costs incurred by participating publishers and repositories (of the PEER Project). Access to interview partners and data (where available) will be granted.
 - Understand and compare access costs at journals and repositories. For publishers and repositories, cost per use (download) should be analyzed, but the research should include a perspective from users and libraries (e.g. costs of searching for and/or providing of information).
 - Understand, principally, for the deposit of so-called Stage 2 manuscripts the costs a) in time to depositors; b) for the set-up and the longer term to repositories and/or libraries; and c) to publisher when co-operating in the deposit process (e.g. direct or assisted deposit);
 - Analyse the overall effects of large scale deposit (Green OA) on the economics of scholarly communication. As several studies on the potential overall economic benefits (or non-benefits) of Open Access have already been commissioned by various stakeholders (e.g. see 14. below), this study should emphasize the internal or micro perspective, i.e. the costs and benefits to authors and users as well as publishers, repositories and institutions.
11. **Design of the study:** Bidders are encouraged to **develop the design most suitable** for the task, including new ideas and innovative methods. While PEER communicates to participating publishers and repositories that data on deposits, costs etc. are vital to the research commissioned here, it should not be assumed that all project partners have all of these data readily available. PEER is aware that this kind of research is not (yet) common. Accordingly, bidders should make plans, highlight opportunities and assess risks in obtaining information and data that are valid across publishers and repositories.
12. The design should include specific **research questions** that are to be addressed. The PEER consortium offers the following nonexclusive research questions as initial reference (but expects the bidders to make an effort to formulate a list independently):
- What are the expected fixed and variable system costs (or their range) of various forms of Stage 2 (green) open access to publishers and repositories?
 - What are the expected opportunity costs (or their range) in terms of revenue forgone by publishers?

- What are the expected costs (or their range) to authors and to other depositors?
- What are the costs of various routes of deposit to repositories, and how do this compare to the costs of various publishing models?

13. Description of work:

- Confirm contact person and data available from repositories and publishers;
- Secure the quality of data (for validity and reliability of later analysis) and discuss with PEER Project partners their understanding and accounting of 'cost';
- Develop a frame to understand costs and (in)efficiencies of the deposit process;
- Develop a frame to understand access costs for providers and users;
- Probe initial data for explanations and comparative analysis;
- Identify data that are difficult to explain (and resolve by means of further research, e.g. interviews);
- Consolidate analysis for different models of deposit and access;
- Move towards modelling the economics of scholarly communication for scenarios in which peer reviewed manuscripts are (or are not) deposited in repositories on a large (or small) scale.

14. Bidders are advised to consult the PEER Website, particularly for documents relating to the deposit process as well as ongoing behavioural and usage research. Furthermore, external projects that bidders might find useful to review, which have adopted more of a macro perspective and are therefore not to be replicated or extended, but complemented, are:

- Open Access – What are the economic benefits? A comparison of the United Kingdom, Netherlands and Denmark. By John Houghton. <http://www.knowledge-exchange.info/Default.aspx?ID=316>
- Activities, costs and funding flows in scholarly communication. By Research Information Network. <http://www.rin.ac.uk/costs-funding-flows>

Methodology

15. While for PEER the key issue is the impact on the ecology of (European) research, care should be taken in the design of the economics research to **deliver results that are of interest to the research community** in related fields such as the economics of scholarly communication, digital information and so on.

16. **Risks for the economics study** (e.g. given PEER's large number of participating publishers and repositories, confidentiality requirements) should be assessed and mitigating strategies proposed.

17. The main focus should be on **analysis and explanation**, not evaluation or recommendations. In the best scenario, data and analysis will be of real utility to publishers, repositories and research institutions in the sense of helping them to understand the potential costs and benefits of large-scale depositing in the short- and long-term.

18. It is envisaged that the study will be carried out in **five stages**:

- a. Interaction with participating repositories and publishers to clarify available data and possible interview partners;
- b. Background (state of the art, desk research): To be undertaken at the start of the project in a concise and timely manner;
- c. Research (design, raw data): Collection of data should be undertaken so that the complete and original record is available separately;
- d. Analysis (hypothesis, data, results): A scientific analysis is required, but it is not expected that policy recommendations will be derived;
- e. Reporting (on all of the above): A final report is required (see below).

19. It will be of fundamental importance to **understand the costs for the organizations involved in deposit and access, while not forgetting (opportunity) costs for users. Costs in time for authors and depositors should also be investigated, while not assuming a priori that the author is the depositor. Moreover, it should not be assumed that the meaning of cost is identical for publishers, repositories, libraries and researchers.** The research design thus requires readiness to engage with publishers, repositories and scholars.
20. Throughout the research stage it is essential that **a full and unadulterated record of all data is kept and stored.**

Outputs and Timetable

21. The output and timetable for this study (from January 2010 onwards) will be:
 - a. **Initial presentation:** report on state of the art (knowledge, method, theory); initial models and frames of analysis; initial data quality. Timing: 03/2010
 - b. **Final report:** The final report must include a report on the state of the art (knowledge, method, theory); the models, methods and comparisons deployed; a report on the data quality and any interviews; the analysis: and any further elements important to achieving the objectives of the research. It must include the final and complete set of raw research data. The final report should be submitted as a full draft and amended after review by PEER. Timing: 09/2010
22. One **aim of the Observatory is to integrate the results of the studies on behaviour, usage and economics**, which are to be utilised for building a model of the interaction between publishing systems, repositories and libraries in an effort to enhance the ecology of European research. A joint workshop of the research teams, expert groups and the PEER consortium will be scheduled mid-way in the project (22-24 March 2010). The research teams will be invited to comment on the model building (approx. May 2011).

Terms and conditions

23. STM is the leader of the PEER work package on economics research.
24. The research will be overseen by the **Observatory**, led by Chris Armbruster, Max Planck Digital Library, Max Planck Society. It is expected that the conducted research will lead to high-quality publications and may inspire further frontier research on the economics of digital scholarly communication.
25. Bidders should be aware that issues pertaining to data access, confidentiality of information and anonymity will arise in the course of the research. Handling of these issues will be specified in the contract.

Structure and format of proposal

26. **Tenders should be no more than 15 pages in extent**, plus CVs. They should include:
 - a. A description of the proposed work;
 - b. The proposed methodology for carrying out the study;
 - c. A detailed programme of the work to be undertaken, including the methodology and a work plan showing deliverables;
 - d. A summary of relevant experience to undertake this project and evidence of engagement with the stakeholder community;

- e. An assessment of the risks associated with the project and how these will be managed;
- f. The total cost and a breakdown of costs according to task, including a statement on VAT. Staff costs should be broken down into the estimated number of days to be contributed to the project by each person / percentage of FTE. Calculation of other costs, such as travel and subsistence; hardware and software (if applicable) should also be clarified. Any institutional contribution should be clearly identified (see the budget spreadsheet template attached);
- g. A covering letter from a senior member of the organisation (Head of Dept. or higher in the case of an HE institution) indicating support for the bid and strategic fit with the organisation/institution remit;
- h. Short CVs (one page max.) of key personnel proposed for this project, including relevant experience and qualifications.

27. Proposals should adhere to the following format, **with the headings listed below**:

- Concept and objectives
- Methodology
- Workplan (including timeline and deliverables)
- Risk assessment
- Management structure
- Participants
- Resources to be committed
- Expected results
- Contribution of outcome to PEER

Evaluation Criteria

28. Submitted proposals will be evaluated by PEER. The final decision on whom to award the contract is taken by the Executive of the PEER consortium. The following criteria will be used for evaluation:

- Knowledge and understanding of the area and related issues;
- Engagement with the community;
- Methodology;
- Innovativeness of approach and method;
- Potential to contribute to PEER objectives and outcomes;
- Project management and project plan;
- Relevant experience;
- Risk assessment & management;
- Value for money.

29. Tenders should demonstrate:

- Knowledge and understanding of the area of work, issues to be considered and the community to be surveyed;
- Methodologies to be adopted;
- Clear project management set up;
- Clear outputs and deliverables;
- An appropriate mix of skills for the project, including rationale for collaboration in the case of consortia bids;
- The risks associated with the project have been considered;
- An outline of the areas to be covered in the final report;
- Clear, easy to understand costs for the project, with a clear rationale provided.

Submitting a proposal

30. The deadline for receipt of submissions is 17:00 on Thursday, October 29, 2009. Late proposals will NOT be accepted. It is the responsibility of the bidder to ensure that the proposal has arrived by the deadline stated. **Bids must be submitted in a sealed envelope containing five paper copies of the proposal and at least one electronic copy of the bid** (stored on a machine readable device like a CD ROM or USB stick). All envelopes will be opened on 30 October 2009. Bidders should send the sealed envelope by registered mail, marked as "PEER economics," to the following address: Max Planck Digital Library, Invalidenstrasse 35, D-10115 Berlin.

Award of contract

31. It is anticipated that bidders will be notified of the outcome of this tender exercise on or before 15 December 2009.

32. PEER will expect to work with the successful bidder to agree the work plan. The kick-off meeting with the PEER consortium is anticipated for January 2010. The selected team will be introduced to the Research Oversight Group of the PEER project:

- Justus Haucap, Professor and Director of Düsseldorf Institute for Competition Economics. Prof. Haucap chairs the German Monopolies Commission;
- Henk Moed, Senior researcher at the Centre for Science and Technology Studies, Leiden University. Dr. Moed has been the recipient of the Derek de Solla Price Award;
- Carol Tenopir, Professor of Information Sciences, University of Tennessee. Prof. Tenopir has received the International Information Industry Lifetime Achievement Award.

33. PEER shall be under no obligation to accept the lowest, or any tender, and tenderers shall submit offers on the basis of so doing at no cost to PEER.

Further information

34. For enquiries regarding this study, including information on participating publishers and repositories, please contact the PEER Observatory: Chris Armbruster, Max Planck Digital Library, Max Planck Society. Email: armbruster-at-mpdl.mpg.de Tel: +4930 288867781

35. For enquiries regarding the bidding process, please contact Julia M Wallace, International Association of STM Publishers. Email Wallace@stm-assoc.org