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PEER D1.4 Final Report on the Research Process

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PEER

Final Report on the Research Process

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[1] OJ L 79, 24.3.2005, p. 1.

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2 Research Quality – Report

We report on the PEER Project research process. The PEER Project built an observatory with publishers and repositories that made available a critical mass of Green OA content. Research on usage, behaviour and economics was commissioned to external research teams.

PEER progress reports as well as annual reports already contain a wealth of information. This report summarizes systematically the efforts at ensuring research quality.

With regard to research quality, the main actors were:

1. PEER Executive
    - International Association of Scientific, Technical and Medical Publishers
    - European Science Foundation
    - Göttingen State and University Library
    - Max Planck Society
    - Inria (Institut National de Recherche en Information et en Automatique)

2. Research Oversight Group[2]
    - Carol Tenopir, Professor of Information Sciences, University of Tennessee. Prof. Tenopir has received the International Information Industry Lifetime Achievement Award.
    - Cherifa Boukacem, University Claude Bernard Lyon 1. Dr Boukacem-Zeghmouri is member of the GERIICO and ELICO research groups.
    - Tomas Baiget, Professor of the online "Master on Digital Documentation" of the Pompeu Fabra University, member of the Statistical Institute of Catalonia, Barcelona and founder and publisher of the scientific journal "El Profesional de la Información"

3. Research Teams
    - Usage Research: CIBER Research Ltd., Newbury, UK
    - Behavioural Research: Department of Information Science and LISU at Loughborough University, UK
    - Economics Research: ASK Research Centre, Bocconi University, Milan, Italy

4. Industry Research Advisor (Mayur Amin, Elsevier)

5. PEER Research Manager (Chris Armbruster, STM)

The members of the Research Oversight Group and the Industry Research Advisor were requested to sign ‘Conflict of Interest’ statements so that any prior relations with research teams applying to undertake the PEER studies were transparent and to

[2] From 2008 to 2010, Justus Haucap (University of Erlangen) and Henk Moed (Leiden University) were members of the ROG. After accepting new positions in 2010, both resigned and were replaced by Cherifa Boukacem and Tomas Baiget.

ensure that no conflicts of interest exist in relation to the selected research teams. The same procedure was followed by members of the PEER Executive.

In reviewing research quality, two perspectives may be pursued. Firstly, one may look at the phases of the research process to understand the ongoing effort to ensure research quality. Secondly, one may elaborate systematically on key dimensions correlated to research quality.

3 Two phases of research quality management

The two phases of research indicated in the PEER project plan and description of work are the

a. Design and tendering of the research
b. Research conducted by selected teams

In the first phase, the PEER Research Manager delineated the principal research questions and most suitable methodology for usage, behavioural and economic research. The Research Oversight Group vetted the design. Subsequently, the calls for tender were developed and approved by the PEER Executive. The calls for tender were circulated widely. Applications received were scrutinized and ranked by the Research Oversight Group, and subsequently the PEER Executive appointed the research teams.

In the second phase, the selected teams were carrying out the usage, behavioural and economic research - supported and monitored by the Research Manager. Support centred on arranging access to participating publishers and repositories (this was much supported also by the PEER Project Manager), on adapting the research design as the project progressed, on discussions of interim findings and so on. Monitoring was about ensuring the delivery of high-quality results in a timely manner. Any deliverable was evaluated by the Research Oversight Group, in the usual manner of a peer review, resulting in a request by the PEER Executive to the research team for revisions. Final acceptance of the deliverables was subject to approval by the PEER Executive.

What this description of the two phases of the PEER Research process shows is that there was a clear delineation of roles between the main actors in a highly appropriate manner that ensured the following:

- Research design as well as deliverables were subject to thorough peer review by the international experts of the Research Oversight Group;
- Decisions of the PEER Executive were always informed by peer review;
- Research teams could count on ongoing support from the PEER Project;
- Progress and the delivery of results was monitored continuously;
- Deliverables were vetted thoroughly and revisions by the research teams requested.

4 Two dimensions of research quality

Two dimensions of research quality can be delimited, namely

a. Quality assurance mechanisms
b. Research team independence

The PEER Project took care over research quality assurance. Most important was installing a Research Oversight Group that was independent and composed of international experts. Principally, the following quality assurance mechanisms were deployed:

- The research questions and methodology were vetted by the Research Oversight Group;
- The calls for tender were circulated publicly to invite research teams to apply from any EU member state;
- All applications were reviewed and ranked by the Research Oversight Group;
- The selected research teams were requested to review the research questions and methodology, which formed part of the research contract;
- The PEER Research Manager and the research teams meet frequently for progress updates;
- All research teams were invited to a join meeting for presentations in front of each other, to facilitate interaction among research teams;
- Mid-term, all research teams were requested to present in front of the Research Oversight Group as well as the PEER Advisory Board;
- All deliverables were peer reviewed by the Research Oversight Group and returned to the research teams for revisions and improvements;
- The PEER Executive thoroughly vetted all deliverables before final acceptance.

While seeking quality assurance, the PEER Project also safeguarded research team independence. Independence means that the research team has control over the course of the enquiry. The following mechanisms safeguarded research team independence:

- Within the frame of the PEER design, research teams had control over research question order, methodological detail and their preferred course of action;
- At no point did the PEER Executive seek to direct the research;
- Research teams reported results to the Research Oversight Group in the first instance, and their reviews subsequently informed decisions by the PEER Executive;
- At no point did the PEER Executive seek to co-write deliverables or presentations;
- Research teams are free to report the results of their research in the academic journal of their choice, subject only to formal approval by the PEER Executive.