The PEER Project: Observing the Impact of Green Open Access

CERN workshop on Innovations in Scholarly Communication (OIA7)

Barbara Kalumenos

Christoph Bruch
The PEER project is about the green road to Open Access, also called self-archiving.
Agenda

• Overview (4-8)

• The PEER Observatory (9-14)

• Challenges and Solutions - Publishers (15-18)

• Research Projects (19-25)
Project Overview

• Duration
  – 09/2008–05/2012 (3 years plus 9 months extension)

• Budget/Funding
  – 4.2 Mio €; 50 % by the European Union (eContentplus programme)

• Project partners
  – STM (coordination), ESF, UGOE, MPG/MPDL, INRIA
  – Technical partners: U. Bielefeld, SURF, KB Netherlands (long-term archiving)
  – 12 publishers
  – 6 repositories

• Contact / Website
  – peer@stm-assoc.org / http://www.peerproject.eu
Current Situation

- Rapid growth of institutional repositories
- Individual funding agency mandates
- Publisher experimentation: allowing self-archiving
Current Situation

Number of Open Access Repositories

- Registry of Open Access Repositories
- Open DOAR

Publisher's allowing green Open Access policies (RoMEO)

- RoMEO green (Can archive pre-print and post-print)
- RoMEO blue (Can archive post-print (ie final draft post-refereeing))
- RoMEO yellow (Can archive pre-print (ie pre-refereeing))
- RoMEO white (Archiving not formally supported)
Agreement and Disagreement

There is agreement between publishing and research communities that access to the results of publicly funded research is important to maximize its use and impact.

However, they hold different views on:
- whether mandated deposit in open access repositories is necessary
- the embargo periods that would be appropriate.
- the impact this may have on journals
Project objectives

• **PEER has been set up to monitor the effects of systematic archiving of ‘stage two’ research outputs**

• Large-scale ‘experiment‘ regarding deposit of author manuscripts: in an ‘observatory’ of OA repositories

• Research studies to gather hard evidence to inform future policies
  – Usage Research -> Availability, usage
  – Behavioural Research -> Author behaviour
  – Economic Research -> Costs, viability

• Collaborative project of diverse stakeholder group
  – Publishers, research community and library/repository community
PEER Observatory

• The observatory consists of the
  – PEER depot
  – PEER repositories

• The depot
  – Acts as a „Clearing House”
  – Processes deposits
  – is a Dark archive
  – Distributes content to participating repositories
  – Hosted at INRIA

• The PEER repositories
  – provide the usage data need by our research partner CIBER

• Content inflow
  – 241 journals from four broad areas; selecting process
  – ~48,000 articles processed; ~14,000 EU deposits with embargo expired
  – 2 ways of articles deposit: publisher-assisted / author self archiving
The PEER Observatory

Develop an “observatory” to monitor the impact of systematically depositing stage-two outputs on a large scale.

The PEER Observatory

- Eligible Journals
  - Manuscripts 50% Deposit
  - Manuscripts 50% inform

Metadata + Manuscripts 100% Transfer

PEER Depot
  - EU Filter

Authors
  - Deposit Manuscript

Deposit
  - Central Deposit Interface

LTP
  - KBedepot

PEER Repositories
  - UGOE
  - SSOAR
  - MPG
  - HAL
  - ULD
  - TCD

Publishers & PEER
  - Selected

Metadata 100% Transfer

PEER – Publishing and the Ecology of European Research 10 www.peerproject.eu
Publisher deposits (cumulated)

Total amount of publisher provided content (~48,000 in June 2011)
EU-Deposits processed (cumulated)
SSOAR is a subject repository accepting only a part of the PEER depot content.
Invited Europe based "PEER authors" to participate in survey for **behavioural research**

Deliver usage data (log files) for **usage research**

Were queried for **economic research**
Challenges and solutions (1)

Challenges

• Ensuring journal validity
  – Correct article type and matching metadata
  – All mandatory metadata (publication date!) received

• Metadata delivery in several batches
  – Article metadata are incomplete at acceptance time; Publication date unknown, DOI not attributed
  – Extraction of only „EU“ authored manuscripts not possible at acceptance stage

Solutions

• Checking mechanisms
  – Document kept until metadata completion

• Article kept until metadata completion
  – Metadata are accepted in either one step (on publication) or two passes (on acceptance and on publication)
  – Extraction done at PEER Depot
Challenges and solutions (2)

Challenges

• Author accepted manuscripts in a variety of file formats

• Different metadata formats
  – NLM2.x, NLM 3.0, ScholarOne, proprietary

• Metadata delivered within PDF document

• Non publisher related technical challenges
  – Author authentication, embargo management, file formats/metadata required by repositories

Solutions

• Only one file format allowed – PDF

• Mapped into single TEI structure

• Extraction done at PEER Depot (GroBID)

• Changes, adjustments at publishers
Challenges and Solutions – Publishers

• Arrangement of data transfer
  – Face to face meetings; first year of project (every 2 months), included technical representatives of PEER
  – Collective teleconferences
  – Publisher specific communications with PEER project manager

• STM - publisher cooperation
  – Quarterly strategic publisher meetings (face to face or telco)
    • report on progress
    • request for additional content
      – Additional journals
      – More back content (=embargo period expired)
      – Reduced embargo periods

• Technicalities
  – Some publishers amended their workflows to extract „accepted manuscripts“ & matching metadata; provided additional elements; transformed files to PDF
Achievements to date

• Functioning collaborative infrastructure
  – Linking repositories and publishers
  – Organising the transformation and flow of content
  – Metadata curation (quality control, embargo management etc.)
  – Usage data being collected from repositories and publishers

• Substantial quantities of content visible in repositories
  Appointment and first results from all three research teams
PEER research projects

• Usage research
  – CIBER group, University College London, UK
  – Objectives:
    • Determine usage trends at publishers and repositories;
    • Understand source and nature of use of deposited manuscripts in repositories;

• Economic research
  – ASK, Bocconi University, Italy
  – Objectives
    • Analyze the overall effects of large-scale Green OA on the economics of scholarly communication.
    • Investigate the cost of the large-scale deposit of stage-two research outputs; including the economic efficiency or cost of the process of deposit.

• Behavioural research
  – Department of Information Science and LISU at Loughborough University, UK
  – Objectives
    • Track trends and explain patterns of author and user behaviour in the context of so called Green Open Access.
Behavioural research: Survey

- Electronic survey of researchers conducted in Summer 2009.

- Invitations were distributed via the 12 publishers participating in the PEER Observatory.

- Distribution was restricted to EU-based corresponding authors, who had manuscripts published in those journals included in the PEER Observatory and the control group since the beginning of 2008.

- Non-EU respondents were filtered out from the responses in the analysis.

(Fry, et al., 2009)
Baseline survey: Understanding of Open Access

More than two-thirds of respondents indicated that they understood open access to mean free electronic access to the full text of articles (30)

(Fry, et al., 2009)
Baseline survey: Preference for subject repositories

When considering placing material in publicly available repositories, do you have a preference for the type of repository?

- I prefer to put material on my personal or departmental website
- I prefer not to do this at all
- Other
- No preference
- Institutional
- Subject-based

(Fry, et al., 2009)
Baseline survey: Suitable subject repository available?

- Only 37% of responding authors think there is a subject repository suitable for their work available even though 46% favoured deposit in such a repository.

Are there any subject-based publicly available repository(ies) suitable for your research?

(Fry, et al., 2009)
Baseline survey: Copyright concerns main problem

What reservations do you have about placing your peer-reviewed journal articles in publicly available repositories? (please rate on a scale 1-5, 1 = very important and 5 = not important at all)

- Although I want to do it, I always forget about it
- Do not consider open access to be beneficial to my research
- The process takes too long/is too complicated
- Do not consider it to be my responsibility
- Other
- Lack of awareness of what is an open access repository
- Concerns about plagiarism/how my material will be used by readers
- Do not know how to deposit material in a repository
- Not comfortable with depositing a peer-reviewed version of my paper which has not been properly edited by the publisher
- Do not know of a repository suitable for my research material
- Concerns about infringing embargo periods imposed by publishers
- Reluctant to put my research publications in a repository where other materials have not been peer-reviewed
- Concerns about infringing copyright

(Fry, et al., 2009)
Thank you for your attention!

Questions?

Visit www.peerproject.eu

or

e-mail: peer@stm-assoc.org
Sources

• Fry, Jenny et al. (IX. 2009): PEER Behavioural Research: Authors and Users vis-à-vis Journals and Repositories. Baseline report.