STM and Open Access
Position, developments and the PEER Project

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Agenda

• Introduction – STM
• Business Models, “Zeitgeist”
• European developments
  – Legislative developments
  – Mandates
  – Collaborative approaches
• PEER
• Conclusions
What is “stm”?

• International trade association for research and professional publishers
  – The Voice of Research Publishing for 40 Years

• Members include
  – Learned societies, University presses, Commercial publishers

• Members publish
  – two-thirds of all journal articles
  – tens of thousands of books and reference works
STM Publishing Overview

• 2000+ publishers

• 20-25,000 journals

• 1.5 million papers/year

• 1.2 million authors/year

• 10+ m readers

• About US$7.7 billion annual turnover journals

• Global

• Thousands of sub disciplines served
  – Incl. social sciences

• Institutionally based
  – Universities
  – Medical schools
  – Research organisations
  – Government laboratories
  – Corporations
Four Key Questions- Journal publishing

• Research behaviour
  – Will researchers still communicate and be evaluated by journal publication?

• Technology
  – Will tools develop that make the current journal obsolete?

• Business models
  – Will there be any viable business models to sustain publishing operations with net returns?

• Zeitgeist
  – Will public (political) attitudes regarding internet make publishing impossible?
QUESTION : BUSINESS MODELS

Will there be any viable business models to sustain publishing operations with net returns?
Open Access

• Definition
  – Availability of electronic content to readers without any payment

• Variations
  – *What* is made free
  – *When* and *where* it is made free
  – *How* it is made free (business model)
Stages of Publication

Public Investment

Publisher Investment

<table>
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<tr>
<th>Stage One</th>
<th>Stage Two</th>
<th>Stage Three</th>
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<tbody>
<tr>
<td>Primary Outputs of Research: • raw data • Draft for submission to a journal</td>
<td>Author’s draft incorporating peer review enhancements and imprimatur of journal</td>
<td>Final published article on journal website: version of record with copyediting, typesetting, full citability, cross-referencing, interlinking with other articles, supplementary data</td>
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Business Model Options

• Supply or demand-side user payment
  1. Authors pay
  2. Authors’ institutions pay
  3. Authors’ granting bodies pay
  4. Readers pay
  5. Readers’ agents (library) pay
  6. National authorities pay

  2% of papers
  98% of papers

• Third party tolls and tariffs
  – Advertising
  – Telecommunication access charges

  ~5% of papers

• Sponsorship
  – Charities, foundations, companies, government

• Rental or timeshare: DeepDyve

  ~3% of papers
Open Access Types

- **PAY TO PUBLISH OA “GOLD”**
  - final published articles (stage 3)
  - free upon publication on publisher’s website
  - pay-to-publish model

- **DELAYED OA “DELAYED”**
  - final published articles (stage 3)
  - free some time after publication on publisher’s website
  - existing model

- **SELF ARCHIVING OA “GREEN”**
  - peer reviewed author mss (stage 2)
  - systematic/self-archiving with a variable or embargo on institutional or subject repositories
  - no model

- **PRE-PRINT SERVERS**
  - pre-prints (Stage 1)
  - free upon deposit on pre-print server
  - no model

**Advantages:**
- Scales with research growth
- Gets research funds used for publication costs

**Disadvantages:**
- Cost to publish
- Corporate free riders

**Advantages:**
- No new model required

**Disadvantages:**
- Won’t work for all
- Some evidence of cancellations

**Advantages:**
- Ok when unsystematic

**Disadvantages:**
- Parasitic, nobody-pays model when systematic

**Advantages:**
- No threat to journals

**Disadvantages:**
- Not favoured outside of physics
Article usage over time: first 5 years only

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<th>Years since publication</th>
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<th>Maths</th>
<th>Chem</th>
<th>Life Rapid</th>
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Cumulative percent of lifetime full text downloads

Source: ScienceDirect
Publishers & Open Access

- Goals are entirely compatible
  - OA maximum dissemination on www
  - Publishers maximum dissemination in an economically sustainable way

- Publishers are pragmatic about business models
  - What works, works
  - All models must support and maintain academic freedom and quality

- **All STM member publishers do some form of open access**
The Unfunded Mandate

• Mandated deposit of peer reviewed content after imposed embargo period
  – Compulsion
  – One size fits all
  – Length of embargo period

• The unfunded mandate is opposed by all STM publishers
  – Compulsion to deposit at very short embargo without any compensating payment
  – Endangers viability of journals, the branding they give articles, the information infrastructure
Will public (political) attitudes regarding the internet make publishing impossible?
Digital *is* Different!

**DOMAIN**

- Documents
  - Infinite reproducibility
  - Total changeability

- Attitudes
  - “e = free”
  - “yours = mine”
  - “public funding = public access”
  - “(intellectual) property = theft”

**CHALLENGES**

- Business models
- Copyright
- Authority/trust
- Copyright
- Business models
## Legislative Developments

E – Spanish Draft Science Law: contains §35 for Open Access with an embargo time of 12 months but agreement

[D – Germany – 3rd basked copyright]

## Mandates

**Requirement:**

EU – ERC; 6 months embargo time; peer-reviewed publication (author accepted manuscript)

S – Swedish Research Council: 6 months embargo time; version – not precisely defined

**Recommendations (best efforts):**

EU – Open Access Pilot Project under FP7; 6 months resp. 12 months embargo time depending on discipline; applies to 20% of FP7 funds; peer-reviewed manuscript (author accepted version)

EU Member States – Many national funding organizations, universities, research performing organisations recommend Open Access publishing with various embargo times, but not less than 12 months

## Collaborative Approaches

D – GWK commissioned HGF to develop framework concept for information infrastructure; working group for OA

F – GFII working group; issued a joined paper and propose recommendations

## Southern Europe:

SE – 13/14th May 2010 Alhambra declaration on OA; very general statement; can be found under:

http://oaseminar.fecyt.es/Publico/AlhambraDeclaration/index.aspx
The PEER Project

PEER has been set up to monitor the effects of systematic archiving of ‘stage two’ research outputs: the version of the author’s manuscript accepted for publication (NISO - Accepted Manuscript)

- Publishers and research/library/repository community collaborate
- Develop an “observatory” to monitor the impact of systematically depositing stage-two outputs on a large scale (max. 50-60,000 articles)
- Gather hard evidence to inform future policies
- Project duration 3 years – 09/2008 – 09/2011

Supported by the EC eContentplus programme
Current Situation and Key Problems & Issues

Current Situation:

- Rapid growth of institutional repositories
- Individual funding agency mandates
- Publisher experimentation
- Lack of agreement on evidence to date

Key Problems and Issues:

- Impact of systematically archiving stage-two outputs is not clear
  - on journals and business models
  - on wider ecology of scientific research
- Varying policies are confusing for authors and readers
- Lack of understanding and trust between publishers and research community
PEER Consortium
Participating Publishers/Repositories
Research Oversight Group (ROG)
Peer Advisory Board

• **PEER consortium (5 exec.members)** – STM (Coordinator); ESF; UGOE; MPG, INRIA plus 2 tech. Partners (SURF &UBIEL).


• **6 Repositories** — PubMan (MPG), UGOE, HAL, BIPrints (UBIEL), Ukaunas, Ulib Debrecen plus LTP archive (e-depot KB NL)

• **ROG** - Justus Haucap (D), Henk Moed (NL), Carol Tenopir (US)

• **PEER Advisory Board** - Funders (4), Librarians (4), Researchers (4), Publishers (5)
Project focus during Period 1 = 09/2008 – 08/2009
Achievements in Period 1

Focus Period 1
• Establishing the ‘PEER Observatory’ & supporting project infrastructure
• Commissioning usage, behavioural & economic research
• Raising awareness of PEER within stakeholder communities

Achievements
• Project infrastructure in place
• Submitted data made available to research teams
• Research teams selected, and started their work
  – Behavioural
  – Usage
  – Economic
• Presentations, Papers, Talks, ….
Behavioural research team & objectives

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.
• Understand the role repositories play for authors in the context of journal publishing.
• Understand the role repositories play for users in context of accessing journal articles.
Usage research team & objectives

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;
• Track trends, develop indicators and explain patterns of usage for repositories and journals.
Economic research team & objectives

ASK Bocconi Group, Italy

Objectives:
• Research questions to be finalised
Conclusions

• Library integration in institutional information infrastructure
• Develop traditional publishing systems in coexistence with self-archiving
• Proactive role in engaging academic community
• Online support services in the face of future challenges
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Final Conclusions

- STM Publishers are not against Open Access but do have concerns about „Unfunded Mandates“ (Green OA)

- STM publishers are business model neutral

- PEER project will deliver evidence based data which can be used in future discussions
Questions; Comments; etc?

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