

**SCHOLARLY PUBLISHING & ACADEMIC RESOURCES
COALITION – SPARC Europe**

Scholarly Communication – A Matter of Public Policy

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www.sparceurope.org

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SPARC Europe

Scholarly Publishing & Academic Resources Coalition

- Formed in 2002 following the success of SPARC (launched in 1998 by the US Association of Research Libraries)
- Encourages partnership between libraries, academics, societies and responsible publishers
- Originally focused on STM, but coverage expanding
- Has over 110 members in 14 countries
- By acting together the members can influence the future of scholarly publishing



Political Agents for Change

Scholarly Communication is being impacted by a number of public policy drivers;

- The 'knowledge economy' (e.g. the Lisbon agenda)
- Accountability and assessment – 'value for money'
- E-Science / E-Research
- Concerns regarding access to data and Public Sector Information
- Freedom of Information Culture
- Social agent – the 'Facebook Generation'



Political Imperative – Lisbon Agenda

In March 2000, the EU Heads of States and Governments agreed their aim to make the EU **‘the most competitive and dynamic knowledge-driven economy by 2010’**.

One of the key strategic means of achieving this goal was identified as **‘preparing the transition to a knowledge-based economy and society by better policies for the information society and R&D...’** and specifically increasing investment in R&D to **3% of GDP**

In a post-industrial economy there is increasing acknowledgement of the relationship between:

- Investment in R&D
- Access to knowledge
- Technology transfer
- Wealth creation



Accountability and Assessment – ‘Value for Money’

With increased spending on R&D and education comes increased desire for accountability and assessment of:

- Universities
- Departments
- Libraries
- Research Groups
- Individuals

And with more assessment comes a desire for more metrics of success:

- Number of citations
- Who is citing whom
- Downloads
- Patent registration
- Rate of technology transfer

And a desire to streamline the assessment process



E-Science / E-Research

‘Scientists developing collaboration technologies that go far beyond the capabilities of the Web

- To use remote computing resources
- To integrate, federate and analyse information from many disparate, distributed, data resources
- To access and control remote experimental equipment

Capability to access, move, manipulate and mine data is the central requirement of these new collaborative science applications’

Tony Hey

Successful E-Science needs:

- Resources to integrate, federate and analyse
- Interoperability
- Open access



Access to Data

Allowing data to be used, reused, repurposed, shared, mined, etc. makes it more valuable:

- Human Genome Project
- Clinical trials
- Weather and environmental data
- Chemical structures, etc. etc.

OECD

Science, Technology and Innovation for the 21st Century. Meeting of the OECD Committee for Scientific and Technological Policy at Ministerial Level, 29-30 January 2004, 'Declared their commitment to:

'Work towards the establishment of access regimes for digital research data from public funding in accordance with the following objectives and principles:

'Openness, Transparency, Legal conformity, Formal responsibility, Professionalism, Protection of intellectual property, **Interoperability,** Quality and security, Efficiency, Accountability.'

http://www.oecd.org/document/0,2340,en_2649_34487_25998799_1_1_1_1,00.html



The Revolution of the Internet

- Opportunities for **expanded access** and **new uses** offered by
 - ever-expanding networking
 - evolving digital publishing technologies and business models
- New dissemination methods
- Better ways to handle increasing volume of research generated
- 90% of journals now online



The Situation Today – Dissatisfaction at Many Levels

- Authors
 - Their work is not seen by all their peers – they do not get the recognition they desire
 - Despite the fact they often have to pay page charges, colour figure charges, reprint charges, etc.
 - Often the rights they have given up in exchange for publication mean there are things that they cannot do with their own work
- Readers
 - They cannot view all the research literature they need – they are less effective
- Libraries
 - Even libraries at the wealthiest institutions cannot satisfy the information needs of their users
- Funders
 - Want to see greater returns on their research investment
- Society
 - We all lose out if the communication channels are not optimal.



Open Access

What is it?

Call for *free, unrestricted access* on the public internet to the literature that scholars give to the world *without expectation of payment*.

Why?

Widen dissemination, accelerate research, enrich education, share learning among rich & poor nations, enhance return on taxpayer investment in research.

How?

Use existing funds to pay for *dissemination*, not *access*.



Budapest Open Access Initiative

Two complementary strategies:

- **Self-Archiving:** Scholars should be able to deposit their refereed journal articles in open electronic archives which conform to **Open Archives Initiative** standards
- **Open-Access Journals:** Journals will not charge subscriptions or fees for online access. Instead, they should look to other sources to fund peer-review and publication (e.g., publication charges)

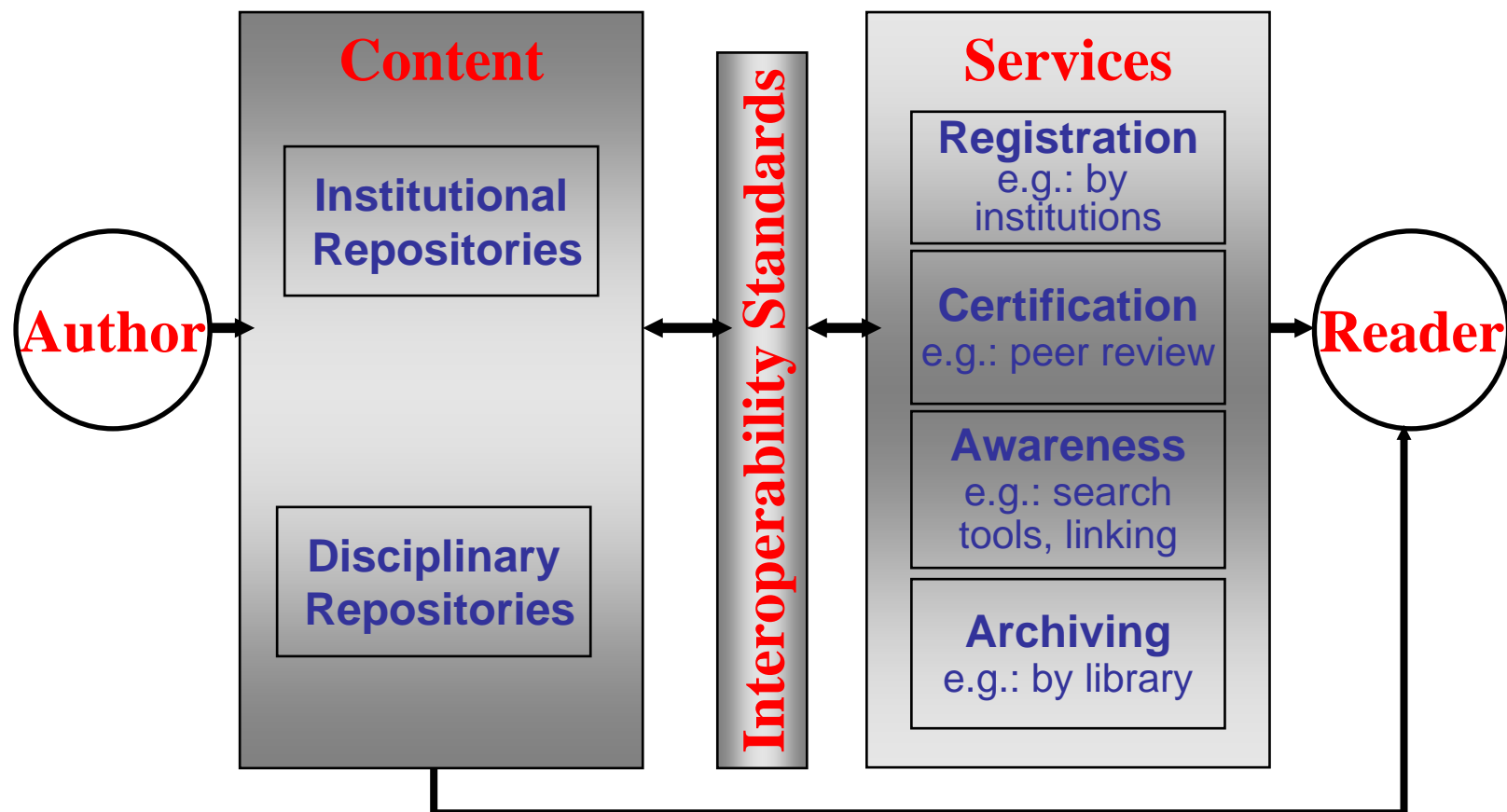
<http://www.soros.org/openaccess/>



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How the pieces work together



Theory Into Practice

- Institutional Repositories

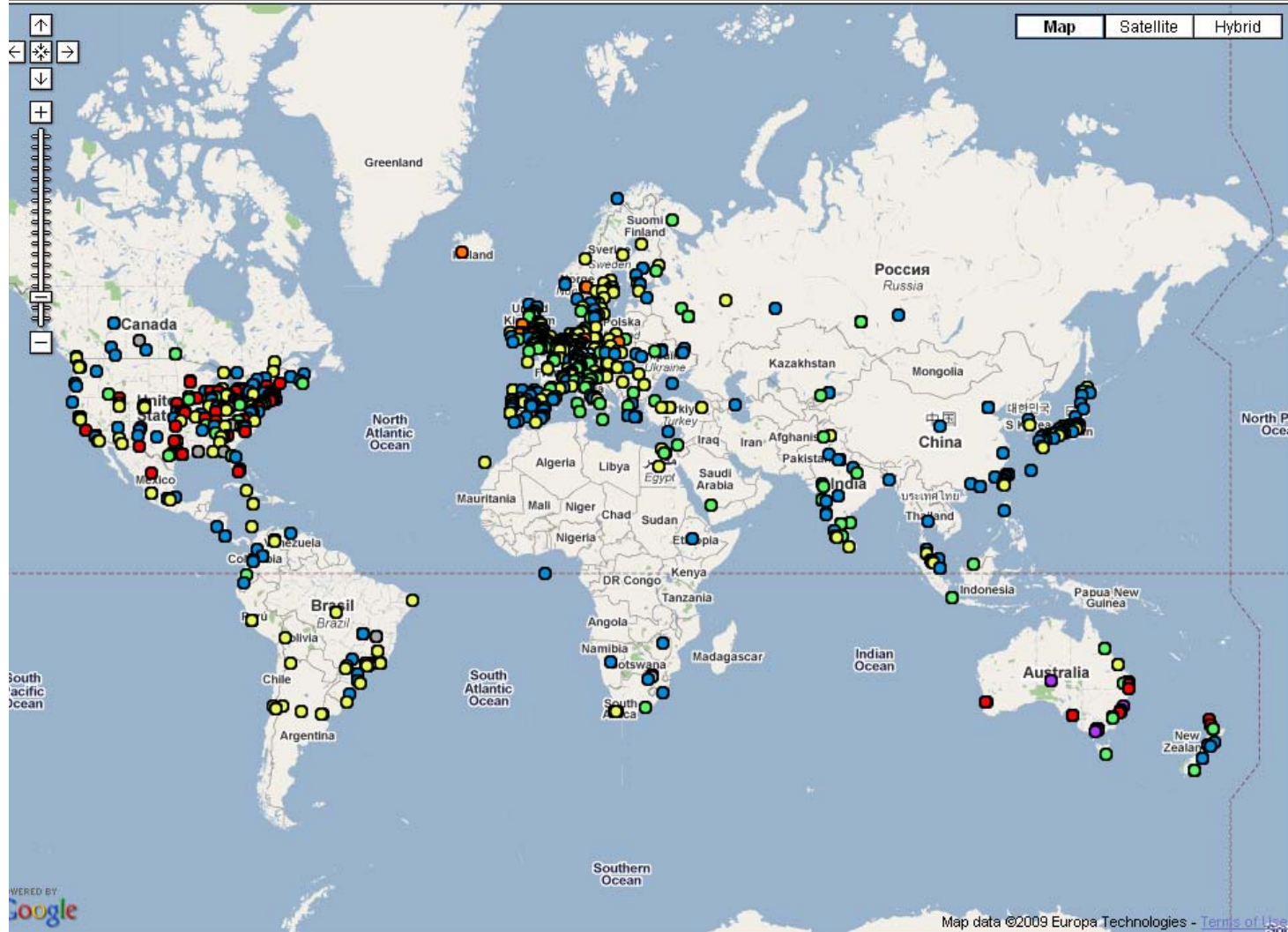
OpenDOAR (Directory of Open Access Repositories)

- An authoritative directory of academic open access repositories
- List of over 1450 repositories
- Can be used to search across content in all listed repositories
- Gives information on repository policies (copyright, re-used of material, preservation, etc.)

<http://www.opendoar.org/>



platform: All (1311)
 Country: All (1311)
 Registered between: January 1990 and July 2009
 filter results
 show all



Information bar

- DSpace (418)
- EPrints (311)
- BEPress (81)
- ETD-db (31)
- OPUS (25)
- Fedora (21)
- OpenRepository (13)
- Other repository (411) [\(Show all\)](#)

[Normal icons](#) | [Repository size icons](#)

There are **16,097,442** items held in the 1311 repositories on this map.

Download a map for [Google Earth](#):
>> [Google Earth map](#) <<

Data provided by: [ROAR](#) & [OpenDOAR](#)

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- [About the maps](#) -
- [Read the Repository map mashup blog](#) -
- [Incorrect or missing repository location?](#) -

Data last harvested: 03-Jul-2009 09:41

Theory Into Practice

- Open Access Journals

- Lund Directory of Open Access Journals (<http://www.doaj.org/>) – lists over 4350 peer-reviewed open access journals
- *PLoS Biology* (launched 2003), *PLoS Medicine* (2004), *PLoS Computational Biology*, *PLoS Genetics*, *PLoS Pathogens* (2005)
- *BioMed Central* (published over 55,000 papers)
- *Documenta Mathematica* (Ranked 24th of 214 mathematics journals listed by ISI)
- SPARC Europe has helped to launch the *Open Access Scholarly Publishers Association* (OASPA - <http://www.oaspa.org/>) to represent the interests of open access publishers



What Institutions Are Doing

Self-archiving:

- Set-up and maintain institutional repository.
- Help faculty deposit their research papers, new & old, digitizing if necessary.
- Implement open-access policies

Open-access journals:

- Help promote open access journals launched at their institution become known externally.
- Ensure scholars at their institution know how to find open access journals and archives in their fields.
- Create accounts to hold funds to pay for open access publication charges (where applicable)
- Engage with politicians and funding bodies to raise the issue of open access <http://www.createchange.org/>



Open Access Policies

As the public policy agenda develops we are seeing an increasing number of policies relating to open access from:

- Research groups
- Universities
- Research centers
- Funding bodies
- Governments
- National and international bodies



Berlin Declaration in Support of Open Access

- ‘Our mission of disseminating knowledge is only half complete if the information is not made widely and readily available to society.’
- Signatories should promote open access by
 - encouraging researchers/grant recipients to publish in open access.
 - encouraging the holders of cultural heritage to support open access by providing their resources on the Internet.
 - developing means to evaluate open access contributions and online-journals in order to maintain the standards of quality assurance and good scientific practice.
 - advocating that open access publication be recognized in promotion and tenure evaluation.
- Issued on 22nd October 2003
- 266 signatories world-wide, including funding bodies and institutions
- 21 from Spain

<http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>



Open Access Policies

The Wellcome Trust, UK

- From October 1 2006, it became a condition of funding that copy of any **original research paper** published in a peer-reviewed journal must be deposited into PubMed Central (PMC).
http://www.wellcome.ac.uk/doc_WTX022827.html

Research Councils, UK

- All seven UK research Councils require deposit of papers in freely accessible electronic repositories. http://www.sparceurope.org/press_release/RC%20OA%20policies%20v1.5.xls

National Institutes of Health (NIH), US

- The NIH is the world's largest non-military research funder, spending just under \$30 billion per year
- In December 2007 a provision directing the NIH to provide the public with open online access to findings from its funded research was passed into law.
- Now grant recipients are required to deposit electronic copies of their peer-reviewed manuscripts into PubMed Central no later than 12 months after publication in a journal.
- Approximately 80,000 papers each year could be made freely available as a result of the policy
<http://www.taxpayeraccess.org/media/release07-1226.html>



European Commission

Pilot Project

- EC pilot launched in August 2008 to give OA to results from approximately 20% of projects from the 7th Research Framework Programme (FP7) - especially in health, energy, environment, social sciences and information and communication technologies.
- Grantees required to:
 - deposit peer reviewed research articles or final manuscripts resulting from their FP7 projects into an online repository, with either six or twelve month embargo (depending on subject area).

The European Research Council (ERC)

- In December 2007 the ERC issued [Guidelines for Open Access](#) and the ERC Scientific Council has established the following interim position on open access:
 - All peer-reviewed publications from ERC-funded research projects be deposited on publication into an appropriate research repository where available and subsequently made Open Access within 6 months of publication.
 - The ERC is keenly aware of the desirability to shorten the period between publication and open access beyond the currently accepted standard of 6 months.



European Heads of Research Councils (EUROHORCs)

All the major public funding agencies in [23 European countries](#) are members of EUROHORCs

- In May 2008 the General Assembly of EUROHORCs agreed to [recommend](#) a minimal standard regarding Open Access to its Member Organisations. The proposed minimal standard is an *intermediate step* towards a system in which free access to all scientific information is guaranteed without jeopardizing the system of peer review, quality control, and long-term preservation. **It encourages its members to reduce embargo time to not more than six months and later to zero.**

Recommendations for Member Organisations (MOs) of EUROHORCs

- All MOs of EUROHORCs should sign the Berlin Declaration on Open Access (2003). It is strongly recommended that when ever possible they adopt the EURAB recommendations or at least a weaker version of it by excluding a compulsory limitation of the embargo time to 6 months or less.
- The overwhelming majority of scientific journal support self-archiving already, but only a very small minority of scientists make use of this possibility. Thus, all scientists, either funded by or doing research for MOs, should be informed about the already existing mechanisms for Open Access and strongly advised to make use of them.



Self-Archiving Policies

Research Organisations:

- CERN – Requires researchers to deposit papers in the CERN repository
- CNRS (Centre National de la recherche scientifique)

Institutions:

- Stanford University – School of Education
- MIT
- Harvard University – Three faculty, including Arts and Science
- Five Australian Universities - Charles Sturt University, Macquarie University, Queensland University of Technology, Victoria University, University of Tasmania: School of Computing
- University College London
- Queensland University of Technology
- Bielefeld University
- University of Hamburg
- Universidade do Minho
- University of Southampton

<http://www.eprints.org/signup/fulllist.php>



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Recommendations for University Leadership

- Universities should develop institutional policies and strategies that foster the availability of their quality-controlled research results for the broadest possible range of users, maximising their visibility, accessibility and scientific impact.
- The basic approach ...should be the creation of an institutional repository or participation in a shared repository..
- **University institutional policies should require that their researchers deposit (self-archive) their scientific publications in their institutional repository upon acceptance for publication.** Permissible embargoes should apply only to the date of open access provision and not the date of deposit.
- ...It should be the responsibility of the university to inform their faculty researchers about IPR and copyright management...
- University institutional policies should explore also how resources could be found and made available to researchers for author fees to support the emerging "author pays model" of open access.

http://www.eua.be/fileadmin/user_upload/files/Policy_Positions/Recommendations_Open_Access_adopted_by_the_EUA_Council_on_26th_of_March_2008_final.pdf



Open Access – A Policy Issue

- We see a growing consensus between funders and university administrators on the need for OA mandates
- Funders see dissemination as part of the research process and publication costs as research costs
- Administrators see repositories as a key tool to support research and learning
- This leads to a growth in the number of OA mandates being adopted
- Already, the mandates in place will result in a significant number of papers being made OA over the next few years.
- We are fast approaching the point where it will be unusual for any leading institution or funder *not to* have a mandate!
- These policies and high-level support will underpin work on institutional repositories



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Open Access – Appealing to All the Major Stakeholders

- To the funders of researcher – both as a public service and as an increased return on their investment in research
- To the authors – as it gives wider **dissemination** and **impact**
- To readers – as it gives them access to all primary literature, making the most important ‘research tool’ more powerful
- To editors and reviewers – as they feel their work is more valued



Open Access – Appealing to All the Major Stakeholders

- To the libraries – as it allows them to meet the information needs of their users
- To the institutions – as it increases their **presence and prestige**
- To small and society publishers – as it gives them a survival strategy and fits with their central remit



A Changing Environment

“It is one of the noblest duties of a university to advance knowledge, and to diffuse it not merely among those who can attend the daily lectures-- but far and wide. ”

Daniel Coit Gilman, First President, Johns Hopkins University, 1878 (on the university press)

“ An old tradition and a new technology have converged to make possible an unprecedented public good. ”

Budapest Open Access Initiative, Feb. 14, 2002

