On the Open Access Strategy of the Max Planck Society

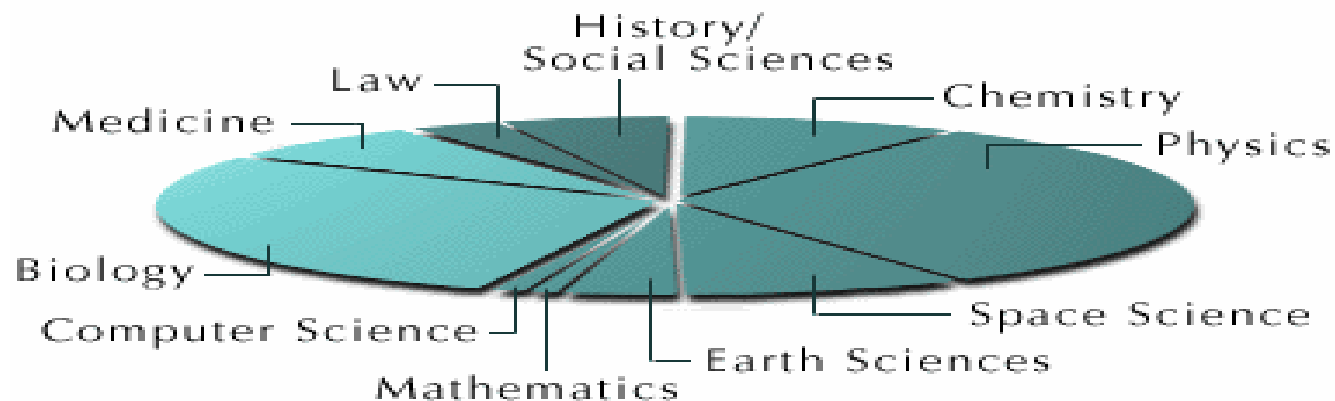**MAX-PLANCK-GESELLSCHAFT**

Theresa Velden

Heinz Nixdorf Center for Information Management

in the Max Planck Society

OAI3 Workshop, CERN

12-14 Feb 2004

Max Planck Society for the Advancement of Science

- 80 Institutes (D, NL, I), publicly funded, not for profit

- basic research in wide range of research fields, complementary to universities, new, emerging areas of research, interdisciplinary

~ 70 branch libraries, between < 1 and ~ 25 staff

no central library unit, administrative position at headquarter (contracting)

Heinz Nixdorf Center for Information Management in the Max Planck Society

- Founded in 2001, situated in Garching/Munich

- **Mission**
  - o Innovate Management of Scientific Information in MPS
  - o Enable Institutes and Society to shape future of scholarly communication

- **Scientific Advisory Board:** ~ 8 directors/senior scientists

- **First projects 2002/2003**

- Max Planck Virtual Library http://vlib.mpg.de
- Institutional Repository http://edoc.mpg.de
- Pilot projects: Primary Source Collections (History of Science, History of Art)
- Living Reviews Journal Family http://www.livingreviews.org and ePublishing Tools http://www.zim.mpg.de/projects/

- **Strategic Focus: Open Access Development**

Open Access to Research Results

- Immediate unconditional electronic access to data, objects and primary scientific literature (papers/books) of scholarly interest (incl. artifacts of cultural heritage)

- Standard interfaces, formats that support integration in third party services, discipline specific knowledge spaces etc.

- Achieved by a suitable regulation of copyright/license agreements and by stable boundary conditions.

- Requires
  - sustainable technical infrastructure
  - transparent quality control mechanism
  - innovative business models
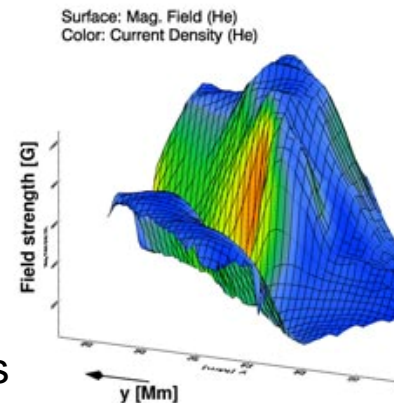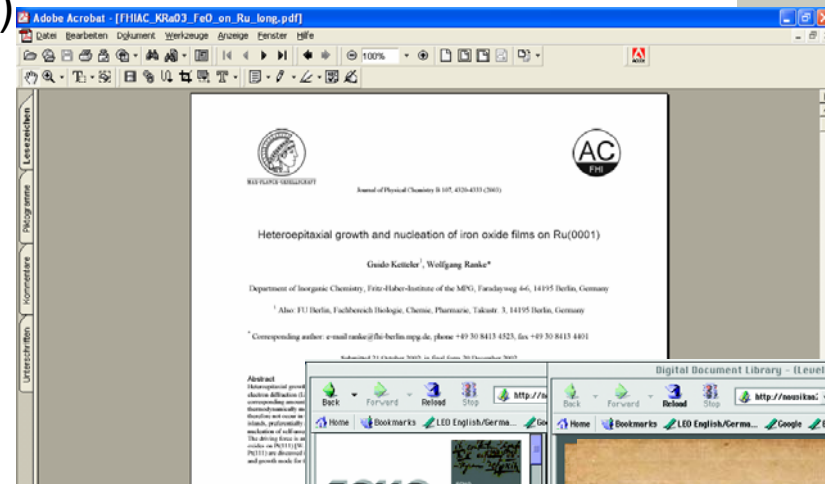
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Towards open access as a universal principle for scholarly activities

The Berlin Declaration on **Open Access to Knowledge in Science and Humanities**, 22 October 2003

Major national and international organisations of science and culture consider their mission only half complete if the information they produce is not made freely available to society.

"The Internet has fundamentally changed the practical and economic realities of distributing scientific knowledge and cultural heritage. For the first time ever, the Internet now offers the chance to constitute a global and interactive representation of human knowledge, including cultural heritage and the guarantee of worldwide access."

The Berlin Declaration on Open Access

"In order to realize the vision of a global and accessible representation of knowledge, the future Web has to be sustainable, interactive, and transparent. Content and software tools must be openly accessible and compatible."

[...]

"Our organizations are interested in the further promotion of the new open access paradigm to gain the most benefit for science and society."

Signatories of the Berlin Declaration

- Max Planck Society
- German Research Foundation (DFG)
- Fraunhofer Society
- Leibniz Association
- Helmholtz Association
- Deutscher Wissenschaftsrat
- Association of Universities and other Higher Education Institutions in Germany
- Berlin-Brandenburg Academy of Sciences and Humanities
- Staatliche Kunstsammlungen Dresden
- Deutscher Bibliotheksverband
- Deutsche Initiative für Netzwerkinformation (DINI)
- Centre National de la Recherche Scientifique (CNRS)
- Institut National de la Santé et de la Recherche Médicale
- National Hellenic Research Foundation
- Fund for Scientific Research - Flanders
- Minister of Education Cultura y Deportes Gobierno de Canarias
- FWF Austrian Science Fund
- Norwegian Institute of Palaeography and Historical Philology
- Istituto e Museo di Storia della Scienza Florence
- Central European University Budapest
- Academia Europaea
- Open Society Institute (OSI)
- Chinese Academy of Science
- ...

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Why act now? New Opportunities

- Journal crisis is symptom for an outdated and inadequate system (organization, business model) of dissemination and scholarly communication in the era of Internet and emerging eScience

- Distributed work in Science and Humanities requires unlimited (restricted) access to data and information.

- Interactive scholarly communication and evaluation increase efficiency of knowledge generation.

- Unrestricted access to comprehensive data and information in the era increases quality control

- Unrestricted access fosters emerging of science and excellency of science

Open Access is a Challenge

• Open Access is only useful when it is user-oriented; This orientation and the user awareness are very differently developed in the present initial stage of transformation of the science dissemination scene.

• The transition will take a significant time and involve transformations in the traditional library/scientific information provision system.

• MPG will take on the challenge and implement the changes after suitable deliberation internally to become a showcase for other national and international organisations.

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How do we get there?

- Create awareness
  - o Scientists, Politics, Public.
- Build global network/alliance of research and funding organizations committed to Open Access
- Promote paradigm of open access as universal for scholarly activities.
- Create content standards: define scholarly concern and quality standards (evaluation practices)
- Integrate publishers and service providers in our new environment
- Create technical and institutional infrastructure

Open Access requires a long-term committment

Open Access is a MPG strategy

- The MPG has decided to go for a pro-active policy in open access and to contribute to the international efforts: Initiation of Berlin Declaration ob Open Access to Knowledge in Science and Humanities

- MPG seeks to support this initiative both with internal actions and external networking – in 2004 follow-up meeting to Berlin Conference will get together signatories of Berlin declaration to work on implementation

- The MPG has recognized that this requires continuous and strategic efforts, a clear decision-making policy, sufficient resources and constant monitoring/adaptation to the development/needs emerging from the scientific communities
  - Steering committee (chair: vice president)
  - Funding efforts for technical (and organizational) open access enabling infrastructure

Implementation at institutional level

• Adopt organization-wide publishing policy that enforces open access principle
  - o Find ways to supports researchers to enter only open access compliant copyright agreements with publishers

• Encourage and support publication in OA journals
  - o Funds for up-front publication costs (page charges) or institutional membership (e.g. BioMed Central, PLoS)
  - o Evaluation criteria: abandon journal impact factors, intrinsic quality for publication (e.g. best 5 works)

• Capture and disseminate research output of Institution
  - o New tasks for information professionals/libraries, re-organization of work flows
  - o Sustainable backend for open access material, institutional portal
  - o Interfaces for integration

• Create model solutions that realize benefits of open access for scholarly communication and research practice
  - o Cuneiform Library
  - o Living Reviews Journal Family

First step… MPG eDoc-Server

- Institutional repository for Max Planck Society (MPS)
- eDoc-Server http://edoc.mpg.de
- introduced in October 2002 (pilot institutes)
- in 2003: Annual Yearbook Campaign (MPG reporting)
  - o all 80 Institutes registered
  - o about 50% in continuous use
  - o ~ 20 000 records, several thousand full texts

First step… MPG eDoc-Server

• standard functionality: web-based submission or batch upload of metadata files, versioning, workflow for quality control and release, management of access levels (to full text)

• emphasis on (publication) data re-use and integration (with MPS Virtual Library, formatted lists in rtf, pdf, HTML, integration in remote web pages, data export in Endnote, RIS, BibTeX, XML, OAI Interface)

• local collection management and quality control; local librarians as moderators and eDoc managers; Institutes determine submission policy
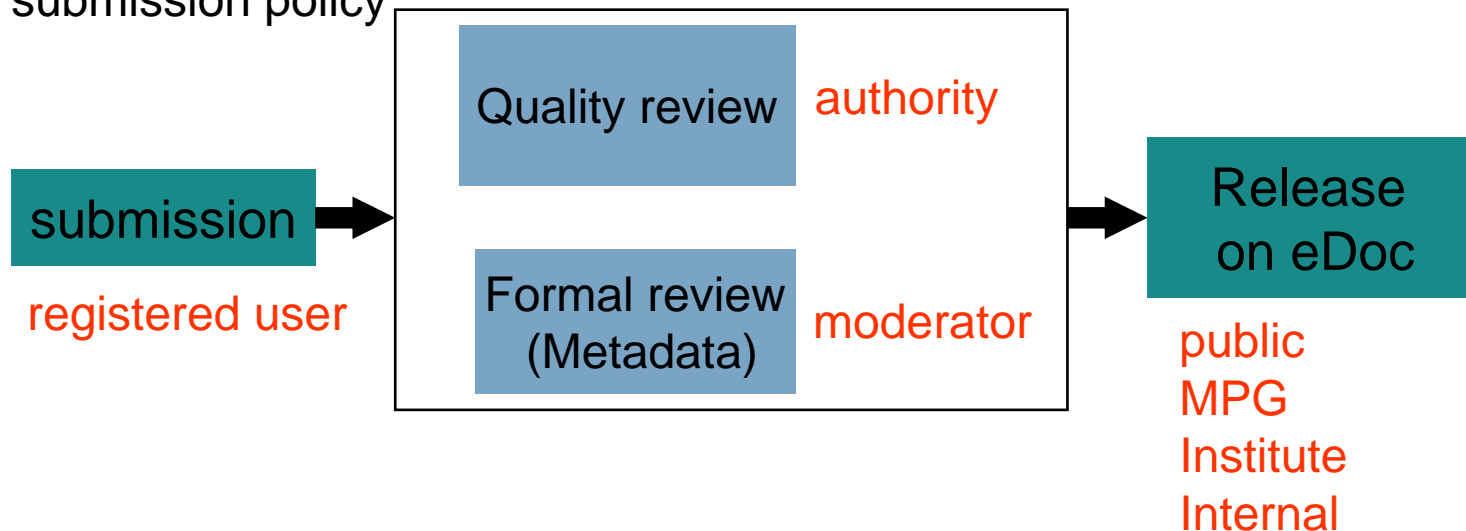
submission

registered user

Quality review   authority

Formal review (Metadata)   moderator

Release on eDoc

public
MPG
Institute
Internal

Open Access Platform

- Institutional repository successfully introduced as central service in organization-wide workflow
  - has been politically enforced by Berlin Declaration
  - planned promotion and open access campaign within MPS
  - further institutional enforcement (incentives) to implement open access policy needed

From institutional repository to open access platform…

- Goal: Capture external content for integration in Digital Library Services and expose research output of the MPS and feed into digital networks and scholarly communication services

- i.e. move from insular institutional repository system to modular, integrated technical system that provides sustainable and scalable central infrastructure with interfaces for local (global), discipline specific extensions

- build sustainable technical infrastructure in cooperation with national service center: FIZ Karlsruhe which has capability of long-term commitment to such an infrastructure and offering as a service to a wide range of institutions and organizations

Open Access Platform

• Storage Backend (sustainable, durable, open, long-term availability)

    o Capture e-documents as complex digital objects

    o Up-and download facilities for collection building

    o Interfaces for external applications (e.g. for zooming, annotating images)

• Open Access Portal

    o Web-based comprehensive access to MPS output (publications, working material, digital collections, ejournals, primary data) and open source sw tools

    o Technical interfaces for dissemination and integration in research specific knowledge spaces, virtual collections or expert data bases

System Overview

Library Portal, Catalogues, Open Access Portal

Digital object identifier, automatic locator

External provider

External provider

External provider

OAI Interface

Upload Interfaces

Institutional repository

E-doc,

250 subject collections

Yearbook

Export Interfaces

Primary Source collection

Primary Source collection

Primary Source collection

External Applications

Storage backend

Long-term Archive, Backup, Migration
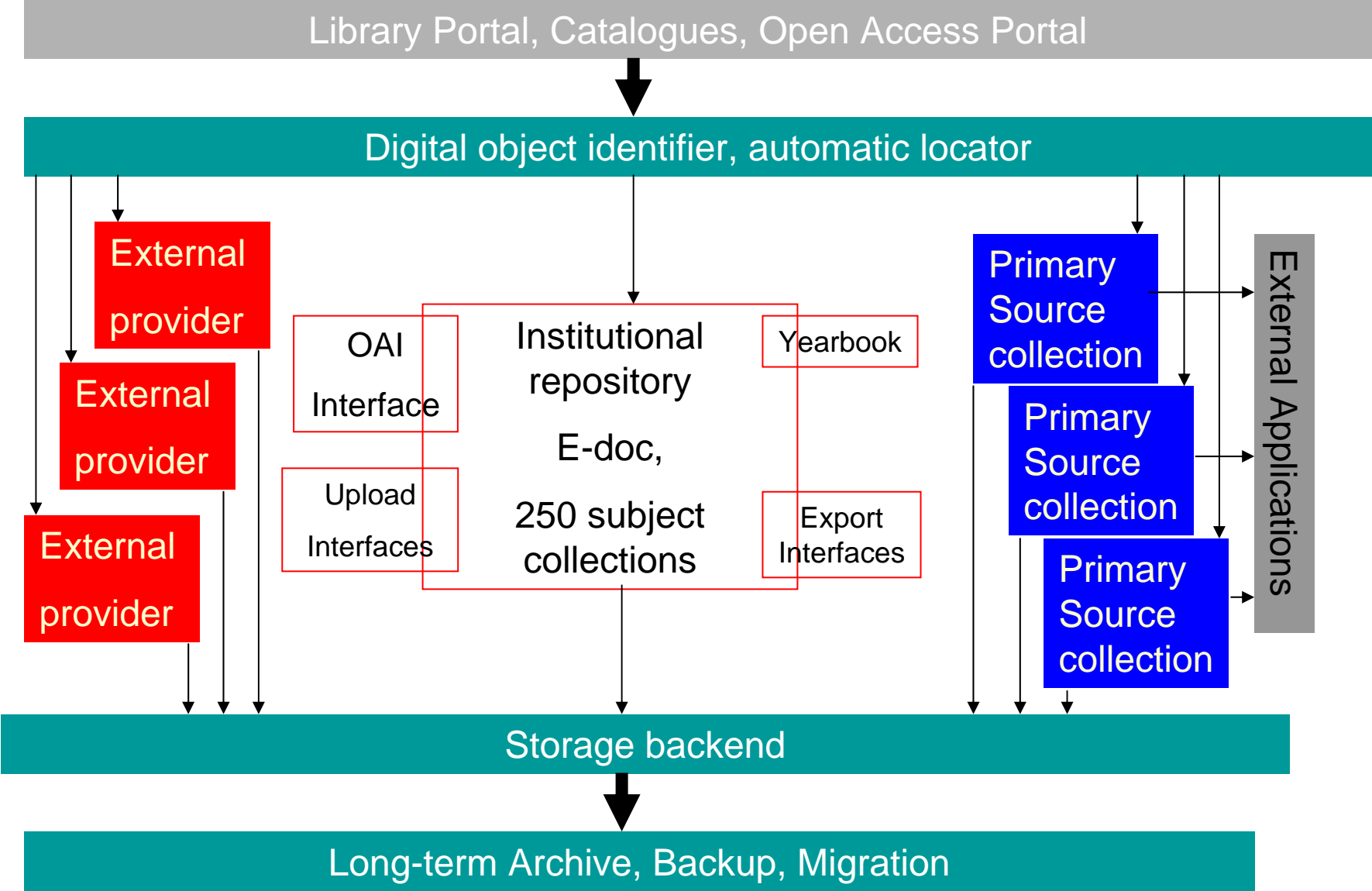
Conclusion

Berlin Declaration aims at acceptance of paradigm of open access as a universal principle for scholarly activities

Governments, universities, research institutions, funding agencies, foundations, libraries, museums, archives, learned societies and professional associations are invited to join the present signatories.

Please contact:
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Realization requires

• sustainable service infrastructure and long term commitment of players

• far reaching organizational, socio-economic changes (copyright, role of information professionals, business models)

Only at beginning […] absorbing and distilling disruptive new technology takes decades (generations in case of the printing press), 20-30 years transformation process

Rick Luce, Library Without Walls, LANL

(Berlin Oct 2003)

Thank You.

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