



OECD and the Building of Scientific Communities

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Outline

1. The OECD mechanism

- OECD goals in science policy
- Science and Technology Policy
- Information, Computer and Communications Policy
- Can they contribute to an “information commons”?

2. Current focus:

- Research Exemption
- Digital Content
- Int’l S&T Co-operation for SD
- Data Access

3. Moving forward

1. The OECD Mechanism

- Think-tank and policy co-ordination mechanism
- Governments of advanced economies thinking together on common policy challenges
 - Committee for Scientific and Technological Policy
 - Committee for Information Computer and Communications Policy
- Work Programme: Fact-based, forward-looking policy development
 - Comparable indicators
 - Economic analysis, Policy analysis
 - Peer reviews and persuasion
 - Recommendations, Guidelines: non-binding soft law
 - Binding Conventions, Codes
- Dialogue: Networks of [science] policy makers and practitioners

OECD Goals in Science Policy

- Maximising the contribution of science to economic growth and social development, while
- Sustaining and developing the science base
 - in the long-term...
 - by developing factual knowledge and understanding of policy issues,
 - assisting international networks of science policy makers and users from advanced economies, and
 - leveraging the results through “outreach”

The Committee for Scientific and Technological Policy

- Working Parties
 - Technology and Innovation Policy
 - Steering and Funding Research Institutions
 - Biotechnology
 - The Global Science Forum
 - Science and Technology Indicators
- Contributes to:
 - Growth Studies
 - Globalisation and Structural Adjustment
 - Intellectual Assets and Value Creation
 - OECD Country Reviews
- “Outreach”
 - Observers
 - Development and global community
- Usually meets at “senior official” level; sometimes Ministerial level

The Committee for Information, Computer and Communications Policy

- Working Parties
 - Telecommunications and Information Services Policy
 - The Information Economy
 - Information Security and Privacy
 - Information Society Indicators
- Contributes to:
 - Growth Studies
 - Globalisation and Structural Adjustment
 - Intellectual Assets and Value Creation
 - OECD Country Reviews
- “Outreach”
 - Observers
 - Development and global community / WSIS
- Meets at “senior official” level

How could they contribute to a Global Information Commons for e-Science?

Committee for Scientific and Technological Policy

- Themes:
 - Globalisation of Research
 - International Science and Technology Co-operation
 - Science, Innovation and IPR
- Specific Projects
 - The Global Research Village
 - Neuroinformatics; GBIF; Biological Resources Centres; Grid Technology, ...
 - Ministerial Declaration on International S&T Co-operation for Sustainable Development
 - Ministerial Declaration on Access to Research Data from Public funding

Committee for Information, Computer and Communications Policy

- Theme: Access, ...
- Projects
 - Monitoring and evaluating developments in data processing, storage and communication
 - Digital Broadband content (esp. Scientific Publishing and Public Sector Information)

2. Current focus

- Research Exemption
- Digital Content
- Int'l S&T Co-operation for SD
- Data Access

Research Use of Patented Knowledge

● The Problem

- Researchers have **different means** to make use of patented inventions (e.g. licensing).
- Unauthorised uses may face infringement actions, unless the use of the patented invention falls within the scope of a ‘research or experimental use exemption’.

● Changing environment:

- Proliferation of patents for research tools
- Increased commercialisation of inventions resulting from public research
- Stronger enforcement of patent rights
- Concerns about the possibility of not getting licenses at reasonable conditions to access fundamental inventions for research
- Concerns of globalisation leading to forum shopping for litigation

Research Exemption

The scope of research use exemptions...

- tends to be ill-defined in patent laws and may differ across countries. They have not caused significant controversy until recently, but debate has started to grow around them.
- Concerns about narrowing scope of research use exemptions in the United States following the 2002 US Court decision in *Madey v Duke*
- Recent initiatives to examine and assess the scope of research exemptions in patent law taken in some countries (Switzerland, Australia, Japan, United States)

OECD Process

- Organisation of a network of national experts
- Development of the study through 2005
- Workshop, beginning of 2006
- Final report, end of 2006

Digital Broadband Content

- The 2004 OECD Recommendation on Broadband Development.
 - Calls on regulatory frameworks that balance the interests of suppliers and users, in the protection of IPRs, and digital rights management without disadvantaging innovative e-business models.
- Examine sectors where digital content is transforming access, value chains and business models :
 - Stocktaking studies of *scientific publishing*, music, online computer and video games and mobile content services, etc.
 - To further identify analytical, policy and measurement issues (including issues like open access, digital rights management, etc.)
- Work on *public sector content / information* ongoing

See www.oecd.org/sti/digitalcontent for more info.

Project on Scientific Publishing

- Scientific publishing: an important factor in efficiency and costs of R&D and access and use of knowledge
- Opportunities from fast developing ICTs and applications in both research and science and in scientific publishing
- **Objective:** Analyse how broadband and ICTs change the scientific publishing landscape.
- **Scope of study:** Scientific and scholarly publishing, journals, monographs, databases, academic / professional publishing, etc.
- **New business models:**
 - Bundling subscriptions and site licensing -- subscribers pay to access a bundle of titles (the“Big Deal”)
 - Open access publishing - supply-side author or institutional support contribute some / all of publication costs
 - Open access archives and repositories -- organisations support institutional repositories, subject archives for their communities
- **Implications for** research funding, research evaluation, skills, infrastructure, standards and interoperability.

Project on Public Sector Information

Objective

- Demonstrate the economic potential of public sector information and content and analyse ground rules for access to public sector content

Outline

- Taxonomy of public information and content resources
- Public sector information as an economic asset
- Sector analyses (including geographical information but also public sector content like museums / public broadcasters)
- Preliminary public sector information policy issues
 - Determination of information made accessible and issues relating to IPR
 - Availability of data in digital, high-quality form (metadata-enriched)
 - Roles of public and private bodies in commercial exploitation
 - Transparency of activities, of licensing conditions, of pricing and available information
 - Pricing of public sector information (free dissemination, (partial) cost recovery and profit pricing Marginal cost pricing.
 - Potential need for International co-operation and co-ordination

Int'l S&T Co-operation for Sustainable Development

- This activity aims to build upon the consensus of the World Summit on Sustainable Development on the key role of science and technology in sustainable development
- OECD Ministerial Declaration in 2004
- Seeks to foster capacity building and facilitate effective diffusion of scientific knowledge and technology.
- Includes a Workshop to be held in South Africa on 21-22 November 2005 with focus on
 - Water availability, accessibility and management and
 - Energy efficiency (incl. in the context of climate change).
- How to improve international co-operation:
 - Raising the issues in S&T policy and ODA
 - North-south co-operation is a two-way street

Data Access – origins of OECD initiative

- “Global Research Village” III. (Amsterdam, 2000);
- OECD Report on Promoting Access to Public Research Data for Scientific, Economic, and Social Development (Arzberger)
- Recognition of benefits to research and innovation as well as to economic development of the enhanced access to research data, including the developing world research community.
- Developments in digital data processing, storage and communication offers opportunities for data sharing
- OECD Declaration on Access to Research Data from Public Funding adopted in January 2004 and the Recommendation to propose Principles and Guidelines on Access to Research Data from Public Funding
- Follow up by CSTP Expert Group

Data Access: aims and issues in drafting guidelines

- Aims:
 - Facilitate international access to digital research data gathered using *public* funds (i.e. for “common good”)
 - Adopt guidelines that are useful to governments and research institutions as well as data management institutions
- Issues
 - “publicly funded” research increasingly difficult to define (increasing co-funding with private sector).
 - Benefits and costs of open access differs according to fields of research
 - Exclude: trade secret or confidential information protected under law; personal information (e.g. identifiable medical); security-sensitive.

Data Access: What kind of guidelines?

- Guidelines:
 - Statement of objectives; definitions of data covered, access, access regimes; scope; Principles; Recommendation (non-binding)
- Principles:
 - “Openness”, “Transparency”, “Responsibility”, Protection of IPR, Interoperability, quality and security, “accountability”, etc..
- Member countries instruct the OECD to promote the implementation of the guidelines
 - Future influence on mandate, programme of work, etc.

3. Moving forward

- Form consortium
- Identify roles
- Obtain commitment
- World Summit on the Information Society (Tunis, 16-18 Nov. 2005, plus “side-events”)
- Follow up mechanism



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www.oecd.org/sti