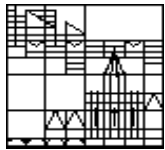# Access models for public sector information

Rainer Kuhlen
Information Science - University of Konstanz
Germany

International Symposium Access to and Ownership of Public Sector Information

Austrian Academy of Sciences – Wien
December 7th, 2001

Basic questions

International Symposium Access to and Ownership of Public Secor Information – Dec. 13, 2001
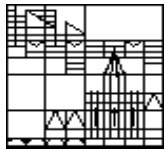
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Basic questions

> ➢ Why has interest in all topics related to access to knowledge and information increased dramatically in the last few years?

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New public interest in rights on access to knowledge and information

Knowledge and information access topics used to be of very limited public interest
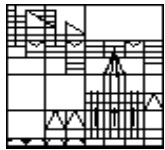
This has changed in the last few years due to the ongoing **informatization** and **commercialization** of all aspects of life, including the intellectual world

Alarmed by spectacular events such as

Why has interest in all topics related to access to knowledge and information increased dramatically?

> ➢ **napsterization** of knowledge
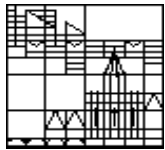> ➢ **venterization** of knowledge

the public and their interest groups are becoming more and more aware that topics such as property and exploitation of knowledge and free or restricted/ controlled access information **are central to the future of the information society.**

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Basic questions

> ➤ What does **access** mean?
> ➤ Why is access of central **political concern** and in the center of many **international conventions**/ recommendations/ charters?

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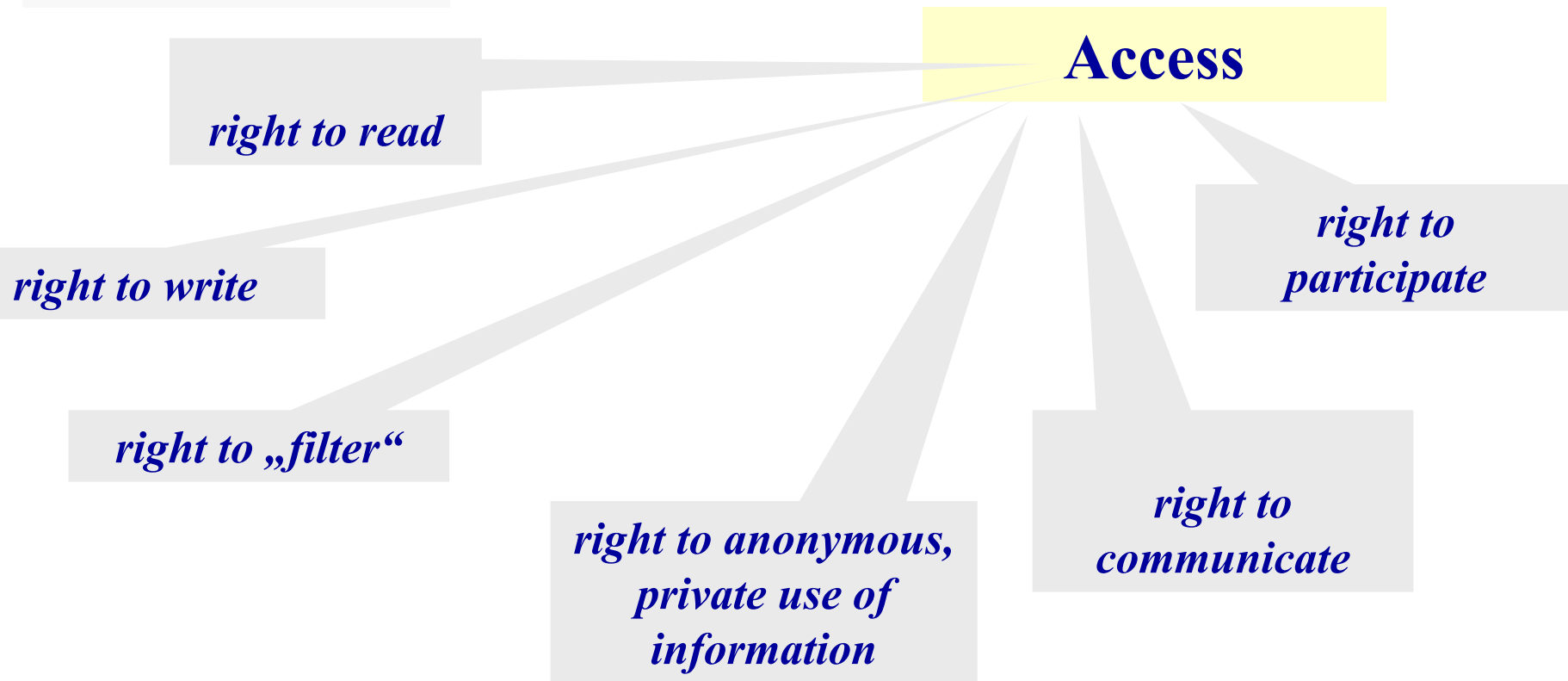
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Access models for public sector information

Access – a set of rights

What does access mean?

Access

right to read

right to write

right to "filter"

right to anonymous, private use of information

right to communicate

right to participate

Basic questions

➢ Why is the topic of ownership (free or controlled access) of knowledge and information so **controversial**?

➢ What are the basic **interest groups** dealing with knowledge and information?

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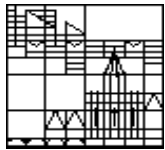
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Many (conflicting) interest groups related to access

Why is the topic of ownership (free or controlled access) of knowledge and information so controversial?

Associations for the protection of authors´ rights

Authors/Artists/ Performers

Information economy organizations

National and supranational (regulation) institutions

Intermediaries (libraries, information centers) and their professional associations
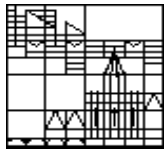
Internet service/content provider

ICT/Software-Industry (e.g. DRM)

Internet grassroot movements, NGOs

Users of information products, general public

Basic questions

> ➢ What are current restrictions on free access to knowledge and information?

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Access models for public sector information

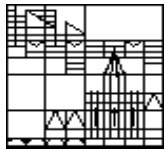## Access control – a set of restrictions

What are current restrictions on free access to knowledge and information?

- ➢ commercialization (priority of private against public use of knowledge and information)
- ➢ interaction control („surveillance imperative")
- ➢ zoning (access restrictions: password, authentification, software control, licensing, marketable information, ...)
- ➢ loss of privacy and anonymity
- ➢ legal restrictions (enforcement of copyright, reduce of „exemptions")
- ➢ rating, filtering, blocking (open and hidden; active and passive)
- ➢ loss of information/media competence („informationelle Bildung")
- ➢ loss of information common sense, information autonomy („informationelle Urteilskraft")
- ➢ tendency towards homogenization of cultural and linguistic diversity

Basic questions

➢ What does public (sector) information mean?

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Access models for public sector information

Information and public

What does public (sector) information mean?

➢ Information is **public in principle** („information will be free")
➢ Information is used for **public interests**
  ➢Science
  ➢Education
  ➢Culture
  ➢Politics/administration
  ➢Media/communication
➢ Public information as a **resource** for the production of **commercial goods**
➢ Public information as a **means of and requirement for democratic participation**

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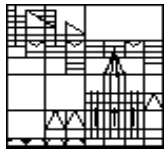*Information Engineering - Department of Computer and Information Science at the University of Constance*   *Rainer Kuhlen - Professor for Information Science*
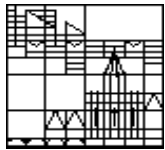
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Models

Models

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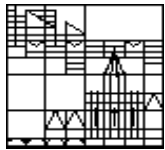# Access models for public sector information

Models

- Access – „regulated" by law
- Access – „regulated" by market and organizational principles
- Access – „regulated" by „code" (software)
- Access – „regulated" by international conventions (ethics, norms)

with reference to Lawrence Lessig

Access – „regulated" by law

Access models for public sector information

Hierarchy of values

The **hierarchy of values** – i.e. freedom of information/universal access is of higher value than commercial exploitation of copyrighted knowledge – is currently **reversed** in most international legal agreements.

Example: **EU Directive on copyright** - 2001

„Copyright and related rights play an important role in this context [*the existence of an internal market for new products and services*] as they protect and stimulate the development and marketing of new products and services and the creation and exploitation of their creative content."
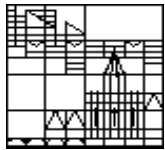
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International legal framework

➤ **Berne Convention** for the protection of literary and artistic works (1886 – last amended in 1979)

➤ The **GATT** Agreement on Trade- Related Aspects of Intellectual Property Rights (**TRIPS**) (Marrakech in 1994)

World Intellectual Property Organisation (**WIPO**) in December 1996 led to the reformulation of the Revised Bern Convention through the adoption of two new Treaties:

➤ WIPO Copyright Treaty
➤ WIPO Performances and Phonograms Treaty

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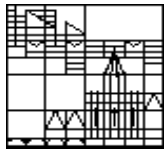
Access models for public sector information

American – European legal situation

➢ The Digital Millenium Copyright Act of 1998 (**DMCA**) [implemented the two WIPO Copyright Treaties from 1996]

➢ **Directive 2001/29/EC** of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society

  [to be implemented as national European laws within 18 months]

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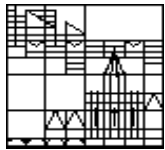
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Exceptions or limitations to copyright (**Directive 2001/29/EC**)

(b) in respect of reproductions on any medium made by a **natural person for private use** and for ends that are **neither directly nor indirectly commercial**, on condition that the **rightholders receive fair compensation** which takes account of the application or non-application of technological measures ... to the work or subject-matter concerned

(c) in respect of specific acts of reproduction made by **publicly accessible libraries**, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage

a) use for the **sole purpose of illustration for teaching or scientific research**, as long as the source, including the author's name, is indicated, unless this turns out to be impossible and to the extent justified by the non-commercial purpose to be achieved

European Copyright User Platform (ECUP) for public sector information

Users	National library	University Library	Public Library	Other libraries (company, school, etc.)
Library staff	**allowed:**digitisation permanent electronic storage, indexing, one archival copy	**allowed:** digitisation permanent electronic storage, indexing, one archival copy	**allowed:** digitisation permanent electronic storage, indexing, one archival copy	**allowed:** digitisation permanent electronic storage, indexing, one archival copy
Members of the institution on site	**allowed**:viewing full text, copying a limited number of pages electronic or paper	**allowed:** viewing full text, copying a limited number of pages electronic or paper	**allowed:** viewing full text, copying a limited number of pages electronic or paper	**allowed:** viewing full text, copying a limited number of pages electronic or paper
Registered walk-in users by open registration	**allowed:** viewing full text, copying a limited number of pages electronic or paper	**allowed:** viewing full text, copying a limited number of pages electronic or paper	**allowed:** viewing full text, copying a limited number of pages electronic or paper	
Unregistered walk-in users			**allowed:** viewing full text, copying a limited number of pages on paper	
Remote access by registered users	**negotiable:** viewing full text, copying electronically or on paper, EDD	**negotiable:**viewing full text, copying electronically or on paper, EDD	**negotiable:**viewing full text, copying electronically or on paper, EDD	**negotiable:**viewing full text, copying electronically or on paper, EDD
Remote access by unregistered user	**no access at all**	**no access at all**	**no access at all**	**no access at all**

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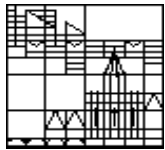
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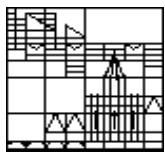
Market and organizational principles

Napsterization and venterization

Access models for public sector information

Napsterization

from the perspective of the **information economy**

„ **Napsterization**" (quasi synonym with „piracy") is a polemic term which implies a direct **violation not only of existing laws** but also of **generally accepted ethical principles**, such as the right of intellectual property - one of the foundations of modern societies.

By-passing commonly accepted principles of trade with goods of any kind, including intellectual goods, i.e.

➢ to buy the product or
➢ to obtain a license for its usage
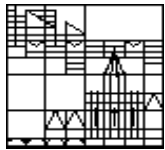
Ambivalence of napsterization

It is considered **unethical** to transform old principles and legal constraints (established in completely different media contexts) to **new media environments** for the production, the distribution and usage of knowledge

from the perspective of „**napsterizers**" or from the „**hacker world**"

New **ways** of dealing with knowledge and information are developing in electronic spaces and along with them **new ethical principles,** which ultimately will influence the legal framework.

More and more people consider **information sharing and free person-to-person-exchange** of knowledge more appropriate to electronic environments rather than **exclusive proprietary rights** and intensified **control of rights** on intellectual „property"

nsfer **old business models,** duction and the distribution of y **high,** to the new electronic ecreasing almost towards **zero**.
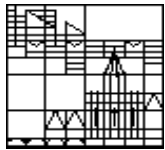
Venterization

„Venterization" refers in the first instance to the objectives and the practice of the **Celera Genomics** company founded by **Craig Venter,** where **knowledge** from deciphering the human genom is transformed into commercially exploitable **information products.**

What is generally considered **public** knowledge (about humans in general) has become **privately** adopted and controlled knowledge.

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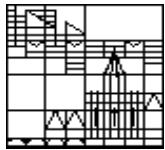
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Venterization

„Venterization" in general means the perfectionized process of private appropriation and control of knowledge and information

through technical measures such as **Digital Rights Management (DRM**), which threaten restrict open access and to weaken existing principles and practices of private/personal use and of fair use (exemptions from copyright).

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Napsterization - an alternative access model?
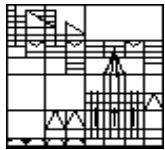
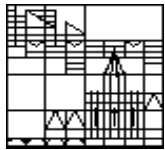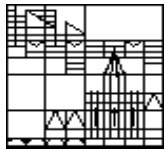# Access models for public sector information

Napsterization - an alternative model?

➢ Is napsterization – beyond being blamed as piracy - a **new organizational model** for the production, distribution and usage of knowledge and information (products) which is based on the principles of **information sharing** and **distributed person-to-person information work**, and therefore seems more appropriate for the electronic environment?

➢ Is napsterization thus a reaction to the **discrepancy** between existing „venterizing" forms for the production and the distribution of knowledge on one hand and the potentials of the new media environment on the other?

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Napsterization – some applications of a new access model

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Napsterization – some applications of a new model

> ➤ Napster
> ➤ DVD - CSS
> ➤ eBooks
> ➤ napsterization in education
> ➤ napsterization in science

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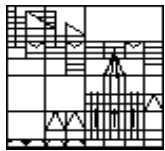*Information Engineering - Department of Computer and Information Science at the University of Constance*   *Rainer Kuhlen - Professor for Information Science*

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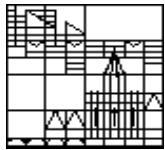
Access models in science – self-organization

➢ Publication and distribution by science itself (**Direct publication)**

➢ **(Pre-Print) Server** (arXiv.org e-Print archive; CERN Document Server-CDS)

➢ Licensing for publication (**open publication license)**

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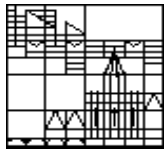
Access models in science – self-organization

➢ Open Archive Initiative (**OAI**) – Metadata structures

➢ **Public Library of Science – SPARC-Returning Science to Scientists**

The Public Library of Science is a non-profit organization of scientists committed to ma-king the world's scientific and medical literature freely acc-essible to scientists and to the public around the worldhttp://www.publiclibraryofscience.org/

SPARC, first organized by the Association of Research Libraries in North America is, an initiative to introduce competition, change and alternative strategies into the marketplace.
http://www.sparceurope.org/

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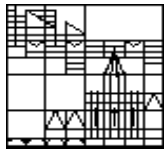# Access models for public sector information

Consequences

which options?

It is better to accept the principles of

➢ *information sharing*

➢ distributed (**person-to-person**) information work

➢ licensing of information (**open publication license**)

➢ **pricing for information**

rather than to continue the information „war" between „napsterizers" and „venterizers"

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Access – „regulated" by „code" (software)

Access control through technical measures

Digital Rights Management
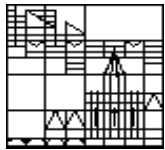
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Segmentation – access control through DRM

DRM – developed in the context of electronic publishing - a new segment of document and content management

DRM corresponds to the need/demand of the publishing/media/content industry to protect copyrighted material from free copying and unpermitted or unauthorized use of any digital material.
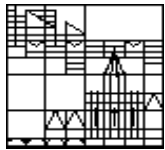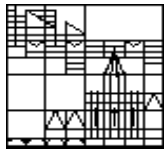
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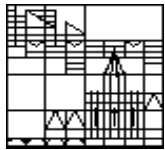## Segmentation – access control through DRM

Procedures of DRM- technology are based on the principle of **licensing information** products rather than buying them.

- ➢ restricted (defined) number of people or computers or software
- ➢ restricted (defined) number of objects or parts of them
- ➢ restricted reading, copying, or processing
- ➢ restricted time segments or occasions of access
- ➢ lending control over information objects (super distribution)

The partitioning of the Internet into user **zones** (via password, licenses, certificates, etc.) - **information haves and information have nots** – is rapidly increasing.

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Access – „regulated" by international declarations, recommendations, conventions (ethics, norms)

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Access models for public sector information

Granting access to information (for all)

➢ Universal Declaration of Human Rights (1948)
➢ renewed in the United Nations Millennium Declaration from 2000
➢ Okinawa Charter on Global Information Society (2000)
➢ European Union Charter of Fundamental Rights from 2000
➢ Convention for the Protection of Human Rights and Fundamental Freedoms of the Council of Europe (1950)
➢ renewed and updated 1998
➢ and many others

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.
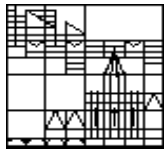
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Access models for public sector information

UNESCO emphasis on the access challenge

- ➢ Statement of the 2nd UNESCO INFOethics Congress ´98
- ➢ The report on the INFOethics conference 2000, in particular on Theme A, The role of public authorities in access to information
- ➢ Information for all Programme (INFA) – a new intergovernmental programme (accepted in 2001; official start in 2002)
- ➢ raft recommendation concerning the promotion and use of multilingualism and universal access to cyberspace (as presented to the UNESCO General Conference 2001, but not adopted)
- ➢ Universal declaration on cultural diversity (as presented to the UNESCO General Conference 2001, and, in this case, adopted by the conference)
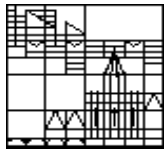
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Access models for public sector information

Statement of the 2nd UNESCO INFOethics Congress ´98

We recommend that UNESCO, in cooperation with UN and other international organizations, should

1. promote and defend **freedom of expression** and privacy protection in cyberspace as well as in traditional media

2. support all measures to **overcome barriers** between the information rich and the information poor

3. promote and extend **access to the public domain** of information and communication

8. support **cultural diversity and multilingualism** in cyberspace and take measures which allow every individual, every culture and every language to contribute to and benefit from the new store of world knowledge.
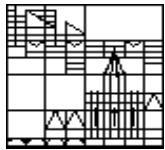
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Access models for public sector information
Report of the 3rd UNESCO INFOethics Congress 2000

"**Public authorities** (which include central and local governments) are currently the most significant **source of public sector information** and have a critical role to play in facilitating access to it. Public sector information forms part of our "intellectual commons". It is critical for research, education, innovation, social and economic inclusion and is an essential foundation for an informed, participatory and global society.

Such information is akin to a "**global public goods** "and therefore should be presumed to be **publicly available** (that is, as in the "public domain") …

rather than allowing exclusivity (in terms of the **control of the information**) or private interests, to prevail in the management of this resource."

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Access models for public sector information

Report of the 3rd UNESCO INFOethics Congress 2000

"Governments need to demonstrate leadership by making **governmental and other official information (subject to exceptions to protect national interests) available** electronically to their citizens."

Governments "should, in particular, provide **critical public sector information to their citizens**, such as information on their rights and entitlements, on laws and regulations, on health and on the government's obligations to its citizens.

They should also **promote the development of services and content** which reflect local culture, values, history, language and heritage."
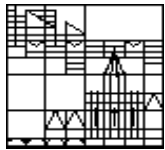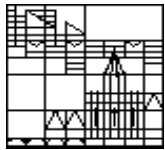
Access models for public sector information

Report of the 3rd UNESCO INFOethics Congress 2000

As far as the realization of these objectives is concerned, UNESCO relies on

 "**partnerships between the public and private sectors** to find means of funding or providing incentives for knowledge-creation.
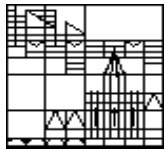
Where such partnerships include public funding, public authorities should ensure that knowledge components which have the characteristics of a "**global public good**" are subsequently made publicly available so as to **balance the public's interest in access with the private sector interests** in commercialising the knowledge".

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Access models for public sector information

UNESCO Information for All (INFA) - Recommendations

➢ Move towards a redefinition of the **role of information institutions**
➢ Extend the **role of established professional and institutional infrastructures** such as libraries, archives, community centres etc.
➢ Promote the creation of new information institutions, particularly **local gateways to information**
➢ …
➢ Promote the **creation of digital content** by information institutions
➢ …
➢ Promote **co-operation** between public information institutions and the private sector (in particular content providers)
➢ …

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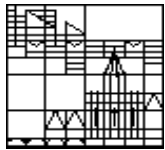
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Access models for public sector information

UNESCO Information for All (INFA) – measures and actions

➢ Support the creation of **public gateways to information,** particularly in developing countries

➢ Support the **networking of institutions** to provide access to information resources

➢ Support the digitization of information, particularly **indigenous knowledge useful to local communities**

➢ Foster **cooperation with the information industry** to develop formulas for providing equitable access for economically disadvantaged users

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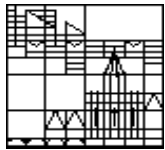*Information Engineering - Department of Computer and Information Science at the University of Constance*   *Rainer Kuhlen - Professor for Information Science*

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Access models for public sector information

The Recommendation even tries to establish a "**right of universal access .. to public domain information".**

All member states should establish "repositories of information and knowledge in the public domain which constitute the common heritage of humanity and should be **freely accessible by all**."

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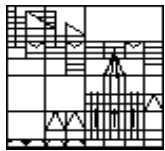*Information Engineering - Department of Computer and Information Science at the University of Constance*　　*Rainer Kuhlen - Professor for Information Science*

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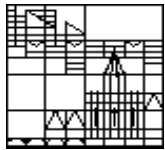# Access models for public sector information

The demand for "a **new fair balance** between the interests of authors and publishers and those of the public concerning free access to information" [M28] was not accepted by the majority of the members.

And the request that "Member States and UNESCO should defend the **principle of universal access against attempts to strengthen intellectual property rights** through technological means such as digital rights management" was obviously against current world-wide trends in legislation.

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Consequences

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Access models for public sector information

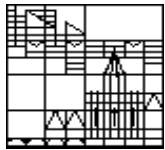## Knowledge and information in the focus of public interest

New models for organizing knowledge and information in general, in particular organizing **access to information** and establishing new models for providing the public access to public information and overcoming or, at least, **weakening some of the barriers** which threaten free access are more urgently needed than ever.

These models clearly need to be based on a **fair compromise and a new balance between public and private interests**.

Access models for public sector information

Knowledge and information in the focus of public interest

Required are, for example,

➤ proposals to achieve and secure free access to information, such as **cooperation/partnership** between private and public interest groups,

➤ **infra-/metastructure services** such as **public portals**

➤ genuine **public information services**

➤ provision of **direct access to public information** without commercial intermediaries (e.g. direct publication of **scientific and curricular material** in academic environments) and

➤ **exemptions** from commercial control and private (copyright) rights.

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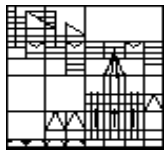
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The floor is open for discussion