# Open Access – What is it?

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#### **Definition**

- "Open Access (OA) is free online availability of digital contents" (Wikipedia)
- *OA literature* is digital, free of charge, immediate and permanent online access to the full text of **research articles** for anyone, webwide made possible by consent of author and copyright holder
- OA is compatible with
  - peer review
  - publishing in non-OA journals
- OA is not free to produce
  - There is much debate about the economics of funding
  - Business models depend on the way OA is delivered (see below)
- International statements on OA
  - Budapest Open Archive Initiative (2002)
  - Berlin Declaration (2003) (signed e.g. by Helmholtz Gemeinschaft)



# Legal Basis

The legal basis of OA is usually the consent of the copyright holder

- OA is no abolition, reform, or infringement of copyright law. OA does not require that copyright holders waive all the rights and assign their work to the public domain
- Consent to OA may be expressed by using e.g. one of the Creative Commons licenses (see <a href="http://creativecommons.org/licenses/by-nc-sa/2.5/">http://creativecommons.org/licenses/by-nc-sa/2.5/</a>)
  - This includes: Unrestricted reading, downloading, copying, sharing, storing, printing, searching, linking, and crawling of the full-text of the work.
    - Most authors retain the right to block the distribution of mangled or misattributed copies
  - Essentially, these conditions block plagiarism, misrepresentation,..., and authorize all the uses required by legitimate scholarship
- NB: For copyrighted works, OA is always voluntary (http://www.earlham.edu/~peters/fos/overview.htm)



#### Motivation

The "taxpayer argument for open access"

If the research papers based on taxpayer-funded research are locked away in conventional journals that require payments for access, then taxpayers will end up paying twice for the same research

- Objection: Tax payer may use a library
  - ☐ This is free access to a paid copy (library gets paid by tax-payer as well)
- Objection: Why OA only for research papers?
  - □ OA should at least be used for research papers
- Objection: Journal charges for value it adds
  - ☐ True, but tax payer already paid for primary value. Access to primary value should not be held hostage to secondary expenses



### Motivation For Authors (Researchers)

(see e.g. Wikipedia)

The published article is the report of the work **researchers** have done and got paid for, not a commercial gain

- OA gives authors a worldwide audience and increases the visibility and impact of their work
  - > Good for the career
- Self-archiving achieves rapid communication
  - > The more, the faster and the broader the distribution and use the better for the author and the community
- OA helps authors as readers to access the information they need
  - > All researchers benefit, since no library can afford to subscribe to all scientific journals



#### Motivation For Publishers

Over 90% of journals have already given their green light to author/institution self-archiving

- Articles are more visible, discoverable and usable
- Permitting e.g. post-print archiving attracts authors
- Permitting OA for e.g. all back-issues after a certain period etc. increases visibility and results in more subscriptions
- Sponsoring models result in a long term relationship

NB: Physicists value their journals: "American Physical Society" and "Institute of Physics publishing" report that the subject repository arXiv (http://arxiv.org) has had no effect on journal subscription



#### **Motivation For Libraries**

Providing their users with access to information is one of the main goals of the profession. Price and access barriers undermine that effort

- Pricing crisis
  - Journal prices rise faster than inflation since 1970's (4 times faster than inflation since 1986)
  - The volume of published knowledge grows exponentially and always faster than the library budget
  - > OA scales with the growth of knowledge
- OA allows (research) libraries to provide information their users need
  - > This increases impact of research at the laboratory
    - → increases laboratory funding
    - → more sponsoring of journals possible



#### Roads Towards OA

• "Golden" Road: Open access publishing

OA Journals make their articles available immediately on publication (see e.g. <a href="http://www.doaj.org/">http://www.doaj.org/</a> for a list of  $\approx 2500$  OA journals)

- Processing fees (Page charge, author charge, ...)
- Sponsoring
- "Green" Road: Open access self-archiving

Authors make copies of their own (published) work

- pre-print (before peer-review)
- post-print (after peer-review with revisions; content as published)
- publishers version (the version, that is published in a journal, incl. layout etc.)

accessible on an institutional or subject repository (see the SHERPA/RoMEO list at <a href="http://www.sherpa.ac.uk/romeo.php">http://www.sherpa.ac.uk/romeo.php</a> for publisher copyright policies & self archiving)



# Open Access @ DESY

In accordance with the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*, signed by all German research organizations, the Helmholtz Association among them, the Deutsches Elektronen-Synchrotron supports the open access movement

All scientists at DESY are asked to

- transfer preprints of their approved publications to OA print archives
- preferably publish in open access journals
- see to it that DESY retains the right for OA self archiving in an institutional repository, when submitting work for publications in other journals



# Open Access @ DESY

DESY follows a mixture of "green" and "golden" road

- Sponsored journal
  - Physical Review Special Topics Accelerators and Beams
- Transfer of preprints and internal reports to arXiv
- Author annex for publications in non-OA Journals
- And institutional repository
  - via publication database (<a href="http://pubdb.desy.de">http://pubdb.desy.de</a>)
  - SPIRES / a Web Server (with link to full-texts)
  - Provide data via OAI-PMH (Open Archive Initiative-Protocol for Metadata Harvesting) interface
    - ... for Google
    - ... for meta-search engines



#### Resources

- Open access self-archiving: An introduction May 2005 (<a href="http://eprints.ecs.soton.ac.uk/11006/01/jiscsum.pdf">http://eprints.ecs.soton.ac.uk/11006/01/jiscsum.pdf</a>)
- Open Access site (<a href="http://www.eprints.org/openaccess/">http://www.eprints.org/openaccess/</a>)
- Wikipedia (<a href="http://en.wikipedia.org/wiki/Open\_access">http://en.wikipedia.org/wiki/Open\_access</a>)

