

Session HL 2.1 What do we mean by Open Access to data?

Chair: Ray Harris, University College London and Chair of the ICSU Strategic Coordinating Committee on Information and Data (SCCID)

Introduction (Ray Harris)

There are many scientific benefits of open access to data. Biology, astronomy and environmental science have all benefitted from open access to data in their disciplines.

The 34 members of the Organisation for Economic Co-operation and Development (OECD) have agreed at ministerial level a statement on *OECD Guidelines and Principles for Access to Research Data from Public Funding*¹. On open access the OECD principles state:

Openness means access on equal terms for the international research community at the lowest possible cost, preferably at no more than the marginal cost of dissemination. Open access to research data from public funding should be easy, timely, user-friendly and preferably Internet-based.

Other organisations have created principles or formal statements on open access, for example:

- Panton Principles for Open Data in Science, <http://pantonprinciples.org>
- Creative Commons as the origin of the Protocol for Implementing Open Access Data, <http://sciencecommons.org/projects/publishing/open-access-data-protocol>

In publications the “3B” declarations (Budapest, Bethesda and Berlin) have provided formal statements on open access to information:

- Budapest Open Access Initiative, <http://www.soros.org/openaccess/read.shtml>
- Bethesda Statement on Open Access Publishing, <http://www.earlham.edu/~peters/fos/bethesda.htm>
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities, <http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/>

However, there are *legitimate* concerns over open access to data. The locations of the nesting sites of endangered bird species are usually protected because of concerns that poachers might destroy the eggs. This concern can be found, for example, in the data policy of the International Polar Year. Data about the location of ships at sea may at first sight be of wide benefit to science through open access, but concerns about piracy, terrorism and drug smuggling plus the need for border surveillance have prompted the International Maritime Organisation to discourage governments to publish these data because the data could be detrimental to the safety and security of ships and port facilities. Data about individuals are attractive in biomedicine and social science contexts, but they could be an invasion of privacy and privacy rights are protected by the Universal Declaration of Human Rights adopted in 1948.

There are also *questionable* concerns over open access to data. Some research groups want their own data restricted to their group to protect their intellectual property. Some principal investigators on science projects believe that only they can understand the data because only they understand the experiment and so want restrictions on open access.

¹ OECD Principles and Guidelines for Access to Research Data from Public Funding, <http://www.oecd.org/dataoecd/9/61/38500813.pdf>

In addition, and finally, there is much confusion over terminology. Uncertainty has been created by the use of different ideas such as full and open access, free access, public access, universal and equitable access and by the (somewhat artificial) distinction between access to data and access to publications. At the same time some initiatives have been trying to formalise 'open' beyond the initial access definitions, for example open data, open archives, open content, open knowledge and open notebook science.

So, this session is devoted to the question: "What do we mean by Open Access to data?" Four panel members have been invited to give their perspectives on the question for 3 – 5 minutes (5 minutes maximum). This will be followed by an open discussion from the floor where participants in the session can provide their own views. The panel members are:

- Geoffrey Boulton, OBE, FRS, University of Edinburgh
- Bob Chen, CODATA Secretary General, Columbia University
- David Mao, Law Librarian of Congress, Washington DC
- ANO

The session will be concluded with a summary of the main points in the session by the chair and this summary will be the basis of a written report that will be produced and submitted to CODATA and to ICSU.