

Database Directive Evaluation Underway

by P. Bernt Hugenholtz*

More than 7½ years have passed since the European Database Directive was adopted in March 1996. The Directive obliges all member states of the EU to introduce special legal protection for databases that reflect 'substantial investment' – the so-called database right. The Directive has now been transposed into the laws of all member states, as well as in an increasing number of non-EU states with which the EU has concluded bilateral agreements. At present over 50 states have adopted, or are soon to adopt, database right legislation, including most states of Eastern Europe and the former Soviet Union and even Mexico. So far, the United States have resisted the call for database protection, but a bill proposing similar legislation is expected to be introduced into the Congress soon.



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<http://www.codata.org>

The Committee on Data for Science and Technology (CODATA) was established in 1966 by the International Council for Science (ICSU). Working on an inter-disciplinary basis, CODATA seeks to improve the quality, reliability, management and accessibility of data of importance in all fields of science and technology.

The new database right has caused widespread concerns within the scientific community. Scientists are afraid that data sets that are essential inputs to research and experiment will lose public domain status. The Directive does permit member states to provide for limited exemptions for scientific purposes, but not all states have done so. No scientific use exemption exists, for instance, in France and Italy, whereas Ireland allows such use only in respect of non-electronic databases.

Ambiguities in the provisions of the Directive have added to the scientists' concerns. In recent years a large number of cases concerning database right have been brought before the courts, with mixed and sometimes contradictory results; see the *Database Right File*, an online collection of case law compiled by the Institute for Information Law, available at <http://www.ivir.nl/files/database/index.html>. The use of 'deep links' and dedicated search engines has been held infringing by lower courts in Denmark, Germany and the Netherlands, but a recent decision by the German Federal Supreme Court (in the 'Paperboy' case) provides relief to those fearing that the database right will make the World Wide Web illegal. In its landmark decision the German court points out that without hyperlinks and search engines the web would become practically useless.

Another important question, soon to be addressed by the European Court of Justice in a series of cases concerning compilations of 'event data' (such as horse racing fixtures and schedules of football matches), is what exactly constitutes 'substantial investment'. Should labour and expenses spent in activities that are not primarily aimed at producing a database be taken into account? (See Stephen M. Maurer, P. Bernt Hugenholtz & Harlan J. Onsrud, *Europe's Database Experiment*, *Science*, Vol. 294 (26 October 2001), p. 789-790.) The answer to this question may directly affect the status of scientific data which result from research or experiment, and are not primarily aimed at building databases.

In the meantime, the European Commission is busy reviewing the Directive and its national implementation. An EC-commissioned report by the law firm of NautaDutilh (Brussels) was completed last year, and has been distributed in interested circles. It is expected that the evaluation process will be completed by the end of this year. Scientific organizations wishing to let their concerns and wishes known in Brussels should do so now.

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International CODATA Conference 2004

The 19th International CODATA Conference 2004, *The Information Society: New Horizons for Science and Technology Data*, takes place 7-10 November 2004, Hotel Steglitz, Berlin, Germany.

The Conference addresses the interactions between the emerging information society and scientific and technological (S&T) data on issues such as:

- The environment
- Education
- Health and well being
- Data preservation and archiving
- Economics
- Interoperability
- Data management and integration
- Law
- Ethics

Taking place between the two upcoming World Summits on the Information Society, Geneva 2003 and Tunis 2005, the conference highlights the important contribution of scientific and technological data makes to society:

- For decision-making and better governance
- In ensuring universal access to scientific and technical data, including overcoming the "digital divide"
- In improving education and training
- For policy making

As the information revolution leads to the information society, scientific and technical data is critical for conveying the growing understanding of our physical world and how that understanding is improving our quality of life. This international conference features how data are a primary mechanism for communicating scientific results and how they are used.

Professor Andreas Oberweis, Germany and Dr. John Rumble, Jr, USA, Co-Chair the International Scientific Program Committee (see box at right). Details on the Scientific Program and the Call for Papers will be available shortly on <http://www.codata.org>.

EMS Workshop on Information Management

The workshop, organised by the Engineering Management Society, German Chapter, will present information Management best practice and facilitate discussion from participants from a variety of backgrounds. Different fields of projects presented will allow the discussion of management relevance, discussions and actions in choice of system, implementation and use of development perspectives.

Presentations are encouraged from the fields of Enterprise and Business Process Modelling and Applications, Automotive, Risk and Disaster Management, Science and Technology Mass Data, Logistics, Human Resources Information Systems, Customer Relationship Management, Supply Chains and On-Demand-Services.

The workshop will take place at the Fraunhofer Institute for Computer Graphics in Damstadt, Germany on 15 November 2003. For more information please log on to <http://www.horst-kremers.de> or http://www.horst-kremers.de/EMS0311/031115_1.PDF. For information on how to participate please contact the Workshop Convener: Horst Kremers at office@host-kremers.de.



John R. Rumble, Jr., is currently the Chief of the Measurement Services Division at the National Institute of Standards & Technology (NIST).

He received a Ph.D. (1976) in chemical physics from Indiana University. Prior to joining NIST in 1980, he was at the Joint Institute for Laboratory Astrophysics in Boulder, Colorado, and the International Atomic Energy Agency in Vienna, Austria. He has also worked as a chemist in industry.

In 1993-1994, he was a Department of Commerce Fellow working in the Office of Science and Technology Policy in the Executive Office of the President.

John has published extensively in atomic and molecular physics and scientific informatics, including several books. He has been active in developing scientific database standards, including an international standard for industrial data exchange.

He is a Fellow of the American Society for Testing and Materials, a Fellow of ASM International, a member of the Russian Federation Academy of Metrology, a Fellow of the International Union of Pure and Applied Chemistry, and recipient of the U.S. Department of Commerce Silver Medal. In 1998, John was elected President of the Committee on Data (CODATA) of the International Council of Scientific Unions.

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Born 1962, Andreas Oberweis received a Diploma Degree in Industrial Engineering from the University of Karlsruhe in 1984 and a Doctoral Degree in Computer Science from the Faculty of Mathematics and Computer Science at the University of Mannheim in 1990.

From 1985 to 1995, he was Research Assistant at the Universities of Darmstadt, Mannheim and Karlsruhe. Since 1995 he is a Full Professor for Information Systems at Goethe-University in Frankfurt/Main. He is Co-Founder of several software companies and of the Virtual Global University (VGU) in Frankfurt/Oder.

His current research areas are in the field of Information Systems Engineering, Business Process Management, Tele-Teaching and E-Collaboration. He is author and co-author of over 70 papers in journals, conference proceedings, and monographs. Furthermore he is author and co-editor of 10 books on several topics of applied informatics.

Contact him at: oberweis@wiwi.uni-frankfurt.de

Members of the core scientific program committee are :
Prof. Toshihiro Ashino (Japan)
Dr. Nahum D. Gershon (USA)
Acad. Mikhail Z. Zgurovsky (Ukraine)

The complete list of the international scientific program committee will be available shortly on <http://www.codata.org>.

Access to Data Seminar at NRCC

As part of a growing international concern over access to publicly funded scientific research data, a Seminar on *Access to Publicly Funded Scientific Data* was held at the National Research Council Canada (NRCC) on 26 May 2003 in conjunction with the joint meeting of Ciset¹ and NRCC/Partners². The objective of the Seminar, organized by the Canadian National Committee for CODATA, was to explore the status of Canadian efforts in ensuring accessibility of publicly funded natural sciences research data and, if a deficiency were determined, to develop actionable plans to address that deficiency.

Keynote speeches by senior executives of Canada's premier science agencies set the scene. Opening the Seminar, Dr. Arthur Carty, President of NRCC, observed that "the pressures around the preservation and archiving of scientific and technical data are mounting. Without concerted action, we risk losing many potentially significant collections of data - a loss that will be felt for generations to come". Dr. Thomas Brzustowski, President of the Natural Sciences and Engineering Research Council (NSERC), proposed the principle that "all reliable data produced in research totally funded by the public should be 'broadcast' (communicated openly to the broad public) with the exception of research on issues of national security". Dr. Janet Halliwell, Executive Vice-President of the Social Sciences and Humanities Research Council (SSHRC) argued that Canada does have a problem. The recent SSHRC-National Archives-sponsored study on access to data "demonstrated that Canada is way behind other countries, and not just the G8. There is no doubt - research archives get used". She suggested a solution needs to be pursued because to do so is "good science, good stewardship and in the national interest".

An expert panel then gave Seminar participants a perspective on data access issues on the international and national fronts. Dr. John ApSimon, currently Special Science Advisor to the Deputy Minister of the Environment, and Dr. David Moorman, Senior Policy Advisor at SSHRC, reported on two major data access studies with which they have played an active role. The OECD report³, a sober and extensive examination of the issues from both multinational and multidisciplinary perspectives, adopted the central principle that "publicly funded research data should be openly available to the maximum extent possible". The SSHRC - National Archives report⁴, a wide-ranging consultation of Canadian stakeholders in the social sciences and humanities fields, advocated the creation of a national research data access, preservation and management system for their community. Funds are being sought to implement the recommended National Research Data Archive which, while focussing initially on the needs of the surveyed community, will be open ultimately to providing services for the natural and medical sciences as well as engineering. Prof. Thomas Rosswall, Executive Director of the International Council for Science (ICSU), was a special guest at the Seminar and provided an international perspective on data sharing and archiving.

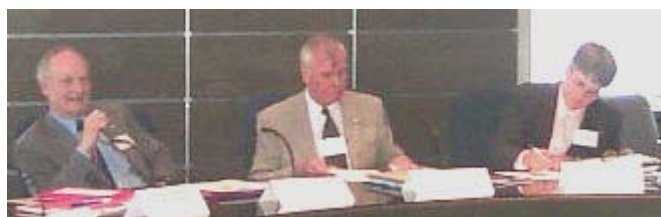
With that background, the remainder of the Seminar was devoted to an open forum discussion among the approximately 55 participants, led by Dr. Ian Smith, Chair of Ciset. To focus discussion, participants examined a number of previously distributed questions such as:

- Is there a problem?
- Why should a solution be pursued?
- What should be in such an archive
- Who should be involved?
- How might it work in practice?

The key recommendation which emerged was that there is a need to examine the issue of "access to publicly funded scientific data" from the perspectives of the Canadian natural science, technical and medical communities. To this effect, participants outlined a systematic approach including recommendations that:

- the study should be guided by a representative Working Group comparable in size to the one that oversaw the SSHRC-NA study (about 20 persons);
- the study should be complementary to the SSHRC-NA study, adopt its methodology as appropriate and not repeat all of its relevant work;
- the Canada Institute for Scientific and Technical Information (CISTI) should lead the effort.

A small Steering Committee, to include members from NSERC, SHRC, CIHR and CFI, and led by Dr. Gordon Wood, Group Leader (Research) at CISTI, is being formed to act upon the recommendations.



Left to right: Dr. T. Brzustowski, Dr. A. Carty, Ms. P. Mortimer (Secretary General of NRCC)

¹ Ciset -- NRCC Committee on International Science, Engineering and Technology
² Representatives of the 30 Canadian National Committees for the ICSU Scientific Unions and Committees to which NRCC adheres on behalf of Canada

³ *Promoting Access to Public Research Data for Scientific, Economic and Social Development*, OECD Follow Up Group On Issues of Access to Publicly Funded Research, Final Report, March 2003
http://dataaccess.ucsd.edu/Final_Report_2003.pdf

⁴ *National Data Archive Consultation Final Report: Building Infrastructure for Access to and Preservation of Research Data in Canada*, NDAC Working Group, Social Sciences and Humanities Research Council of Canada (SSHRC) and National Archives of Canada.
http://www.sshrc.ca/web/whatsnew/initiatives/da_finalreport_e.pdf

Fundamental Constants Task Group Meeting

The Task Group on Fundamental Constants met at the Bureau International des Poids et Mesures (BIPM) near Paris on July 4, 2003. The meeting was attended by ten task group members and two representatives of members who could not attend. Various experimental and theoretical data relevant to the next adjustment of the fundamental constants were reviewed and discussed. A number of issues, such as dealing with contradictory data, were addressed and resolved in the meeting.

It was decided that the Task Group would proceed to recommend a new set of values of the constants based on all the data available up to the end of 2002 and possibly some additional relevant information that became available early in 2003. These values would be finally reviewed by the committee and published around the end of the summer or early fall of 2003. The new values will first appear on the Web at <http://www.physics.nist.gov/constants>.

It was planned that the next meeting of the Task Group on Fundamental Constants will take place in London, in conjunction with the Conference on Precision Electromagnetic Measurements in July 2004.



CODATA / ERPANET Workshop on the Selection, Appraisal and Retention of Scientific Data

ERPANET – Electronic Resource Preservation and Access Network – and CODATA are pleased to announce a joint International Archiving Workshop on the Selection, Appraisal, and Retention of Scientific Data. This three day training seminar, co-hosted by the Biblioteca Nacional will be held in Lisbon, Portugal on the 15th to 17th December 2003.

The aim of the workshop is to identify and discuss the key scientific, technical, management, and policy considerations for the successful implementation of appraisal and selection guidelines and retention policies. The workshop will also provide a networking opportunity for participants to meet with other researchers, data managers, information specialists, archivists, and science policy experts across disciplines and national boundaries.

Benefits from Attendance

One of the major aims for this workshop is to provide an international forum to exchange information about data archiving policies and practices across different scientific, institutional, and national contexts. This seminar is aimed at all people involved in the creation and management of scientific data.

Programme and seminar focus

- opening: 15th December, 13:30
- overview of ERPANET and CODATA activities
- overview of selecting, appraising and retention of scientific data across disciplines
- achieving the maximum potential scientific, economic and social benefits from public investments in the long-term retention of scientific data
- exploring perspectives across different disciplines via case studies
- examining common/unique long-term appraisal and selection guidelines and long-term retention policies
- successfully implementing scientific, technical, management, and policy considerations
- closing: 17th December, 12:30

Seminar Format

During this 3-day seminar, disciplinary and interdisciplinary case studies will focus on both the content creator and the end user perspectives. These sessions will be followed by a general discussion of the case studies. A plenary discussion will examine common/unique long-term appraisal and selection guidelines and retention policies as well as scientific, technical, management, and policy considerations for successful implementation. Expert speakers include Meredith Lane (GBIF Secretariat, Denmark), Peter Quinn (European Southern Observatory, Germany), Alex Szalay (John Hopkins University, USA), Myron Gutmann (ICPSR, USA), Kevin Schurer (UK Data Archive, UK) and John Faundeen (EDC, USA). The workshop will also feature keynote addresses from Peter Weiss (National Weather Service, USA), Dominique Foray (Centre National de la Recherche Scientifique, France) and Bernard Smith (European Commission).

Venue: The venue is the Biblioteca Nacional at Campo Grande 83, 1749-081 Lisbon, Portugal.

To Register: The registration fee is 150 Euros, to be paid in due time before the seminar. [Register](http://www.erpamet.org) at www.erpamet.org.

For more information contact british.editor@erpamet.org.

CODATA Gas Hydrates North American Regional Meeting

by E. Dendy Sloan, Jr.*

Twenty six international attendees attended the CODATA Gas Hydrates North American Regional Meeting, held this date in the Little America Hotel in Salt Lake City, Utah, USA. The CODATA meeting was held as the major part of the third hydrate committee meeting of the Energy and Minerals Division (initialized April 2000) of the American Association of Petroleum Geologists (AAPG). Chairman Timothy (Tim) S. Collett, opened the meeting and welcomed the participants from North America and Japan.

Dr. John Ripmeester (NRC Canada) introduced CODATA to the group and discussed the hydrate project within CODATA, chaired by Dr. Fedor Kuznetsov. Previous Natural Gas Hydrate committee meetings were in Paris (4/01 and 4/03), Yokohama (5/02), and New Brunswick, Canada 10/02.

Dr. John Ripmeester presented the committee members and discussed regional meetings to be held around the world. Of particular interest was the Russian Regional meeting, with 102 people, resulting in the formation of the Russian Gas Hydrate Association.

Dr. Dendy Sloan then introduced the GASHYDAT database, using the PowerPoint presentation for the Baku Meeting provided by Dr. Dimitrov. The photocopied technical portion of the final report was given to each meeting attendee, along with a basic explanation of the database.

Finally, Dr. Dendy Sloan presented the meeting a handout on the Colorado School of Mines (CSM) Hydrate Literature database, which was incorporated into EndNote[®]. The database has 5,575 literature citations (from the years 1778 through 2002). The EndNote[®] aspect of the database has the below advantages, among others:

- It can import from online databases such as Georef, Scifinder, and Web of Science.
- It has a macro-driver enabling incorporation of references easily in Microsoft Word.
- Easily accessible by author, journal, year, issue, page, keyword, and abstract.

Each attendee was offered a copy of the CSM Hydrates Literature Database, with the stipulation that each recipient would (a) obtain a copy of EndNote[®] to allow access to the database, (b) correct the list of his/her own references, and (c) help correct the database by providing a copy of an addition to the database by 12/03.

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