

U.S. NATIONAL COMMITTEE FOR CODATA

Final Technical Report:  
September 15, 1996 to September 14, 2000

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## Introduction and Background

The Committee on Data for Science and Technology (CODATA) is an interdisciplinary group of the International Council for Science. CODATA is concerned with all types of quantitative data resulting from experimental measurements or observations in the physical, biological, geological, and astronomical sciences. Particular emphasis is given to data management problems common to different scientific disciplines and to data used outside the field in which they were generated. The general objectives are the improvement of the quality and accessibility of data, as well as the methods by which data are acquired, managed, and analyzed; the facilitation of international cooperation among those collecting, organizing, and using data; and the promotion of an increased awareness in the scientific and technical community of the importance of these activities.

The U.S. National Committee (USNC) counsels the U.S. National Delegate to CODATA on the U.S. position regarding official CODATA business. It also provides a link between the United States and international data compilation and evaluation activities, taking into account the needs of the scientific and technological (S&T) user community, and undertakes special studies and other actions consistent with the overall CODATA objectives. A committee roster, which lists the members of the U.S. National Committee for CODATA as of September 2000, is attached as Appendix A.

## Unexpended Funds

The U.S. National Committee for CODATA spent all the funds, in the amount of \$110,000, obligated by the Department of Energy under this award. A no-cost extension of this award was requested and granted in August 1999 to allow for the continuing support of the activities of the U.S. National Committee for CODATA. Unfortunately, additional funding was not provided due to a reduction of funds within the agency. As such, there are no unexpended funds.

## Accomplishments during the Award Period

1. During the four-year award period from September 15, 1996 through September 14, 2000, the USNC/CODATA held seven meetings. The most recent meetings were held in April and November 1999. During the April 1999 meeting, the Committee reviewed international CODATA activities and issues and discussed current and planned USNC/CODATA activities, including a review of intellectual property right developments as they relate to S&T databases, a proposal for bilateral data-exchange symposia with other CODATA national committees, and preparations for the 2000 Data Conference. On the second day of the meeting, the Committee hosted an *International and Domestic Data Issues Forum: Scientific and Technical Data Needs and Opportunities*. The forum focused on policy and management issues relating to national and international S&T data activities. The Committee heard presentations from senior federal data managers addressing their interdisciplinary data needs, priorities, and concerns and how they thought CODATA could help address them. As a result of this meeting, the Committee and invitees will begin to establish an agenda for action at both the national and international levels.

The Committee also met in November 1999 to discuss national and international CODATA activities, including Task Group proposals and nominations for the CODATA Prize and CODATA officers. During this meeting, the Committee also continued planning for the 2000 Data Conference and a bilateral exchange with the Chinese National CODATA Committee (see descriptions below). Finally, the Committee convened a forum with liaisons from ICSU U.S. National Committees and federal data managers on the second day of its meeting. The purpose of this forum was to get acquainted with the various ICSU-related activities at the National Academies. The ICSU/USNC liaisons discussed the data-related activities and issues the various USNC and ICSU parent bodies are currently addressing or

planning to investigate as well as identified topics in the areas of data management or policy that require attention in the near term that the USNC/CODATA or international CODATA might address.

2. The USNC/CODATA continued planning for its contributions to the 1996, 1998, and 2000 CODATA Conferences and General Assemblies. The 1996 Conference was held on September 29-October 3 in Tsukuba, Japan. The U.S. Delegate to CODATA, the Committee Chair, and the Director attended the conference. The USNC/CODATA Director presented a paper at the conference summarizing the key trends in international data exchange that were identified in the Bits of Power report. The 1998 Conference was held on November 8-14 in New Delhi India. The U.S. Delegate to CODATA and the Director also attended this conference, and the Director presented a paper on recent developments in intellectual property law in databases. Finally, the 2000 Conference was held in Baveno, Italy, on October 15-21, 2000.

3. The USNC/CODATA continued to oversee the "Bits of Power" study, which was chaired by R. Stephen Berry of the University of Chicago. The study examined the technical, legal, economic, and policy issues that have an influence on transborder access to data by the scientific community. The report, *Bits of Power: Issues in the Global Access to Scientific Data*, was released at a public and press briefing on April 10, 1997, and was widely disseminated.

In addition, with support from the National Research Council, the staff of the USNC/CODATA organized and held a "Symposium on Proposed Changes to Intellectual Property Law: Balancing Diverse Interests" on November 21, 1996. The symposium focused on intellectual property law issues concerning scientific databases and copyright that were identified during the course of the "Bits of Power" study. It was attended by over 100 representatives from the federal government and the research, education, and intellectual property communities. Many newspaper and trade press articles were published about the symposium and the Bits of Power report.

4. In conjunction with several federal agencies, the USNC/CODATA initiated a series of national data conferences. The first of these, the *National Conference on Scientific and Technical Data Exchange and Integration*, was held on December 15-17, 1997 at the National Institutes of Health's Natcher Conference Center. The purpose of the conference was to create opportunities to improve progress in the area of scientific and technical data exchange and integration, with a focus on identification of areas in which data exchange is important. Over 200 individuals from government, industry, and academia attended the conference. Selected contributed papers from this conference are available on the USNC/CODATA web site at <http://www.nationalacademies.org/usnc-codata>.

The *Second National Conference on Scientific and Technical Data: Data for Science and Society* was held on March 13-14, 2000, at the National Academy of Sciences in Washington, DC. The main focus of this activity was to improve the availability and usefulness of S&T data to all users, both in research and in the broader society. Emphasis was placed on the following three main challenges: 1) How can access to and use of S&T data for interdisciplinary basic and applied research be improved? 2) How can access to and use of S&T data by other sectors and applications areas outside research (e.g., in business, education, media/entertainment, general public understanding) be improved? and 3) How do we measure and evaluate productivity and performance in the management and use of S&T data within disciplines, across disciplines, and in other sectors and applications areas? Over 150 representatives from government, industry, and academia attended the conference. The U.S. National Committee for CODATA was responsible for overseeing the preparation of the proceedings from this conference. The invited plenary presentations were taped, transcribed, and edited, and then subsequently submitted for formal external review under NRC report review procedures. The *Proceedings of the Second National Conference on Scientific and Technical Data* have been published electronically via the National

Academy Press home page (see [www/map.edu](http://www/map.edu)).

Additional information regarding both conferences can be found on the U.S. National Committee for CODATA's web site.

5. As a result of the issues identified during the course of the "Bits of Power" study, the USNC/CODATA continued to monitor developments in the area of intellectual property rights in scientific databases, as well as the impacts of the proposed changes to intellectual property law by the World Intellectual Property Organization and the U.S. Congress as they relate to scientific databases. As part of this activity, the Committee helped organize a study assessing policy options (including related technical, economic, and legal considerations) with regard to their effectiveness in promoting access to scientific and technical (S&T) data for the public interest. The project focused on proposed legislation in the U.S. Congress for strengthening the proprietary rights and interests of data providers, and take account of recent legal initiatives enacted or proposed in Europe and the World Intellectual Property Organization. Several different policy approaches were selected and analyzed with a view to identifying the inherent costs and benefits to both the S&T data providers and users. The report of this study, *A Question of Balance: Private Rights and the Public Interest in Scientific and Technical Databases*, was released in October 1999.

6. The USNC/CODATA has mailed CODATA Newsletters to a circulation of over 700 individuals in the United States. Copies of CODATA Bulletins, USNC/CODATA reports, and other data-related information also have been distributed upon request. The Committee has established a home page on the National Academies web site (see [www.nationalacademies.org/usnc-codata](http://www.nationalacademies.org/usnc-codata)) for dissemination of results from its meetings and other activities.

7. The Committee staff has continued to monitor legal and policy developments regarding S&T databases, both at the national and international levels, and has provided reports on these issues at the committee's meetings as well as through e-mails between meetings.

8. More generally, the USNC/CODATA has provided an ongoing forum in the United States for the S&T research community and the federal research and development agencies to exchange views and information on issues related to S&T data management, particularly in the international research context.

#### Goals and Objectives

The U.S. National Committee for CODATA has performed the proposed goals and objectives outlined in the various funding proposals and progress reports submitted to the Department of Energy. The Committee did not encounter any problems that impeded the performance of its activities during the award period.

#### Findings and Relevance

The U.S. National Committee does not conduct research, per se, and there are no research findings to report.

U.S. National Committee for CODATA  
*as of September 2000*

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