Appendix A: The Prospectus in 2001

Data Science Journal

A Journal of the Committee on Data for Science and Technology (CODATA) of the International Council of Scientific Unions (ICSU)

With the advent of the personal computer and the explosion of the internet, computer delivery and use of scientific and engineering information has come of age. Because of the wide availability of computer-readable data, virtually every area of science and engineering is becoming model-based. Many measurement technologies are becoming routine, or the measurement time has been reduced by an order or magnitude or more. Property prediction is more accurate and easier than before. All these advances point to an ever-increasing need for more data, better access to the data and higher data quality, usually stored in databases. Thousands of databases are already available, and the numbers grow weekly. These databases deliver a rich variety of scientific information, including numeric data, images, maps, video, expert systems and full text of research articles, abstracts and indexing information. All this activity has naturally spawned a lively body of literature that is rapidly growing in volume, detail and breadth.

The Committee on Data for Science and Technology (CODATA) of the International Council of Scientific Unions (ICSU) therefore plans to be the sponsor of a new journal on scientific and engineering data, to be published electronically on the internet, devoted to scientific and engineering data. The focus will be on data management and delivery issues rather than contents of specific databases. The issues that confront builders and suppliers of scientific and engineering databases usually occur across many fields, yet there is virtually no mechanism for sharing new knowledge across disciplines. This journal is designed to foster such communication and convey new insights and progress to the scientific data community, regardless of discipline.

The journal will be a peer-reviewed electronic publication, with issues appearing four times a year. An international Editorial Board is being appointed to cover the full scope of the journal. The first issue is planned for early in 2002.