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Report to IUGG from the representative to CODATA

by

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1. Introduction.

CODATA - the Committee on Data for Science and Technology is one of the ICSU committees, which aims at improving the quality, reliability, processing, management and accessibility of data of importance to science and technology. The members are unions belonging to ICSU, (such as IUGG), and nations. Several international organisations are associated with CODATA.

CODATA organizes international conferences and holds bi-annual general assemblies. It is run by an executive committee and a small secretariate located in the ICSU building in PARIS. It operates through small task groups, commissions and working groups with very few members. However, these groups are allocated funds generally covering meeting expenses.

2. Activities 1987-1991.

The 16. General Assembly was held in 1988 and the 17. in 1990 in Columbus, Ohio. Since I was appointed IUGG representative in 1989, I have only had the possibility of attending the 17. General Assembly, which was held following the 12 Int. CODATA Conference in Columbus, Ohio, July, 1990. I shall return to these meetings below.

CODATA publishes many useful publications of which few are broadly known. Its publications in the period 88-90 consist of: proceedings, books, the CODATA Bulletin, Special reports and a Newsletter. Here should be mentioned: "Directions for Interna-

tional Compatible Environmental Data", edited by Carter and Diamondstone, Hemisphere Publ. Corp., 1990, CODATA Bulletin Vol. 21, no. 3, "CODATA Directory of East-Asian Data Sources for Science and Technology", 1989. Especially the last one may be helpful for scientists starting data collection in East-Asian.

At the 12. Conference many extremely interesting scientific projects, which involved handling of large or complex data sets, were presented together with many technical papers on data management and handling. Data bases were demonstrated, including the newly developed data base "Geophysics of North America" (prepared by the US National Geophysical Data Center) and the Ocean Networks on-line information system. It was clear from the conference that data handling and management issues are very well developed within IUGG as compared to other areas. This is very much due to the FAGS-services and the Word Data Centers.

At the 17. General Assembly the main issue was the establishment of new task groups and commissions. Of importance for IUGG was the continuation of the important task group on Fundamental Constants, the CODATA Referral Data Base task group, a task group on Artificial Intelligence and Computer Graphics and the establishment of a Commission on Data for the IGBP.

Earlier CODATA activities had resulted in the establishment of data bases of commercial value. The secretary general, prof. A. Bussard raised, because of this, the question whether CODATA should take on the management of large data bases, or just provide the scientific oversight. The first alternative would require a complete change of CODATA, and this does not seem realistic. The second more limited goal seems to be achieved already now, and CODATA functions fine as an interdisciplinary forum for scientists engaged in data management issues. (It is here somewhat disappointing that very few scientists, which are active in IUGG, are also active in CODATA).

New members of the executive committee was elected in Columbus. Prof. D. Abir, Israel was elected president and G.H. Wood, Canada, Secretary General.

3. Conclusion.

It is my impression that CODATA is a well functioning organization, which uses its limited funds very effectively. Its main activities will naturally be in areas such as biology and materials science, where data management issues seem not to have been dealt with before. CODATA has an important role to play in the future, where data bases are becoming accessible world, wide through the computer networks. IUGG has a well functioning system of supporting services, which other scientific fields would envy us - if they knew about them.

(Prepared Feb., 1991)

Professor Paul Melchior,
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Dear Paul,

Enclosed my report as IUGG representative to CODATA. I hope it is satisfactory.

Kind regards

C.C. Tscherning