

NISSAT

NEWSLETTER

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LIS: Coming of Age

It is encouraging to note that the profession of library and information science has attained near maturity. The dingy ill-lit warehouses of books and periodicals have given way to neatly laid out information material in floodlit rooms. Today computerized information retrieval systems are being experimented upon in about 300 institutions in the country. Passive front desk issue clerks are increasingly being replaced by aggressive marketers of information products and services who are establishing communication systems between resource managers and resource users. The seldom seen librarians have shed their aloofness and found a place for themselves in the higher decision-making bodies of their institutions. In yesteryears, the centres existed in total isolation. Their intent to cooperate among themselves is now clear. Though driven more by resource crunch, endeavours for resource sharing are not all that uncommon.

Earlier, personality clashes usually came to the fore even on technical points. Now the information scientists argue on technical terms like any other scientist or engineer (The recent debate on adoption of one bibliographic format is a case in point).

Information centres are no longer bottomless pits in which investments are sunk without any visible development. The field is also receiving entrepreneurial attention. Private enterprises in Bangalore and Delhi are visible pointers.

It's not just that the information scientists have matured; the information users have also started taking information scientists seriously. Users have come to realize that the job of information handling is not all that simple and requires a long-drawn formal training. Recent tender enquiries floated an information handling assignments, for example, on retrospective conversion by DESIDOC Delhi, and on databank development by CMDA Calcutta. Earlier assignment on library management completed by, say ILA, at the Lal Bahadur Shastri Academy, may also to be recalled in this context. The two assignments, namely, consultancy to set up NACIDs and the turnkey job on MST library automation both awarded by NISSAT to DESIDOC are more recent developments.

If they live upto the expectation of the people, information scientists may be called upon to take up more such consultancy and turnkey assignments. The concepts in accountability like investment output and time--output relationships which are inherent to such assignments--would help nurture professionalism and pave the way to a higher degree of maturity.

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CDS/ISIS Applications in India — A Perspective

Sreedevi Ravindran
NISSAT, New Delhi

India is one of the few countries in the world which have made extensive use of CDS/ISIS package since its release in 1985. The factors which contributed to this are :

- i) need for a software package to meet information needs of the scientific community,
- ii) involvement of National Information System for Science & Technology (NISSAT) in the distribution and extensive training programmes on CDS/ISIS, and
- iii) enthusiasm of the recipient Institutions for its implementation.

NISSAT was established in 1977 for the development of a compatible set of information systems in S&T and interlinking them into a network. The programme envisaged experimentation with the introduction of modern information handling tools and techniques and development of endogenous capabilities for the purpose. The induction of CDS/ISIS was, therefore, one of the technical solutions for a long felt need. The initial phase of CDS/ISIS implementation is characterised by the development of small databases to gain sufficient experience and training on the features and capabilities of the package.

CDS/ISIS was also distributed to selected scientific libraries and information centres with adequate training support. The implementation of CDS/ISIS in these institutions was monitored regularly through exchange of information and user's group meetings. The statewise distribution of recipient institutions is given in Table 1.

During mid 80's, personal computers were becoming popular in Indian market and there were about thirty odd manufacturers. These were IBM PCs clones but not 100% compatible machines. An exercise was made to test whether these machines could support CDS/ISIS in part or in full. Of the 21

Table 1 Statewise Distribution of CDS/ISIS*

| State | Ver. 1.0 | Ver. 2.3 |
|------------------|------------|------------|
| Andhra Pradesh | 23 | 15 |
| Assam | 02 | 00 |
| Bihar | 03 | 04 |
| Chandigarh | 02 | 03 |
| Delhi | 65 | 56 |
| Gujarat | 09 | 05 |
| Haryana | 02 | 05 |
| Himachal Pradesh | 02 | 05 |
| Jammu & Kashmir | 01 | 02 |
| Karnataka | 21 | 11 |
| Kerala | 08 | 06 |
| Madhya Pradesh | 04 | 05 |
| Maharashtra | 41 | 22 |
| Orissa | 03 | 04 |
| Pondicherry | 01 | - |
| Punjab | 03 | 03 |
| Rajasthan | 05 | 01 |
| Tamil Nadu | 27 | 08 |
| Uttar Pradesh | 12 | 10 |
| West Bengal | 10 | 10 |
| Total : | <u>243</u> | <u>173</u> |

* As on 1st Jan., 1990

brands of machines tested, only three gave some problems and others were capable of supporting the package.

NISSAT adopted a multi-directional approach to meet the manpower requirements of the information centres for automation and adaptation of CDS/ISIS package. This included:

- * Adoption of CDS/ISIS as a topic of study in the regular long-term computer application courses conducted for information scientists,
- * Short-term crash courses for library and information professionals, and
- * *Ad hoc* courses for groups of institutions in different parts of the country.

CDS/ISIS is now included as a module in the long-term regular courses conducted by INSDOC and DRTC. Regular short-term courses are organised in Pune University, Delhi University, INSDOC, New Delhi and DRTC, Bangalore. *Ad hoc* courses have been organised by a number of institutions in different parts of the country. A summary of the number of courses and participants is given in Table 2.

| Year | Type of Course | Number of Courses | Number of Persons Trained |
|---------|----------------|-------------------|---------------------------|
| 1986 | Ad hoc | 3 | 86 |
| | Short-term | 1 | 09 |
| | Long-term | - | - |
| 1987 | Ad hoc | 10 | 213 |
| | Short-term | 3 | 39 |
| | Long-term | - | - |
| 1988 | Ad hoc | 22 | 441 |
| | Short-term | 4 | 58 |
| | Long-term | 1 | 15 |
| 1989 | Ad hoc | 8 | 163 |
| | Short-term | 12 | 207 |
| | Long-term | 2 | 25 |
| Total | Ad hoc | 43 | 903 |
| | Short-term | 20 | 313 |
| | Long-term | 3 | 40 |
| G.Total | | 66 | 1256 |

A self sustained momentum is now visible in the application of CDS/ISIS package in India. This is evidenced by a survey of CDS/ISIS users. Though the response to the survey is still incomplete, the available data show encouraging results. Out of 139 institutions, which responded to the survey question-

naire, as many as 76 have successfully implemented the package for various applications. The major areas of use are in Cataloguing (20), Indexing & Abstracting (17) and Current Awareness (15). The major non-bibliographic application is the preparation of directories. A summary of the applications is given in Table 3.

Table 3 Distribution of Institutions According to Type of CDS/ISIS Applications

| Type of Application | No. of Institutions |
|-------------------------------|---------------------|
| A. Bibliographic | |
| Acquisition | 08 |
| Cataloguing | 20 |
| Circulation | 05 |
| Serial Control | 07 |
| Indexing & Abstracting | 17 |
| Current Awareness | 15 |
| SDI | 04 |
| Special Bibliography & Others | 15 |
| B. Bibliographic | |
| Patients Record | 01 |
| Students record | 02 |
| Mailing List | 02 |
| Directories | 11 |
| C. External Programs | |
| DBASE | 05 |
| PASCAL | 03 |

Most of the institutions which have implemented the package are those with advanced training, research and technology. The record formats used for developing the applications varied. A majority of the users were using CCF. The distribution of institutions according to the format used is given in Table 4.

Table 4 Distribution of Institutions According to Record Format

| Standards | Number of Institutions |
|--------------|------------------------|
| CCF | 17 |
| AACR2 | 3 |
| MARC | 7 |
| Local | 6 |
| Not Reported | 43 |
| Total | 76 |

Non-availability of trained personnel has been reported as the major reason for non-implementation of the package by some of the institutions. Problems of hardware and other local reasons also contributed to the failure in many institutions (Table 5).

**Table 5 Distribution of Institutions :
Reasons for not using the Package**

| Reason | Number | Percentage |
|---|--------|------------|
| Lack of Training | 20 | 31.75 |
| Lack of suitable computer and non-availability of computer time | 21 | 33.33 |
| Problems of package | 4 | 6.35 |
| Problems of initial setting | 2 | 3.17 |
| Non-receipt of package | 5 | 7.94 |
| Other reasons | 11 | 17.46 |
| Total | 63 | |

The problems frequently reported by the users of the software are:

- i) Package supports only single user,
- ii) No security, no password system,
- iii) Difficulties in menu-modification and display format, and
- iv) Difficulty in data entry.

Out of the 63 institutions not using the package, 57 are intending to use for various applications like cataloguing, indexing, acquisition, circulation, serial

subscription, current awareness, etc. The distribution of these institutions according to the type of application is given in Table 6.

**Table 6 Distribution of Institutions
According to Type of CDS/ISIS Applications**

| S. No. | Type of application | No. of Institution |
|-----------------------------|---------------------|--------------------|
| A. Bibliographic | | |
| 1. | Cataloguing | 50 |
| 2. | Indexing | 38 |
| 3. | Acquisition | 40 |
| 4. | Circulation | 35 |
| 5. | Serial subscription | 35 |
| 6. | Current awareness | 39 |
| 7. | SDI | 6 |
| 8. | Others | 16 |
| B. Non-Bibliographic | | |
| 1. | Personnel records | 28 |
| 2. | Students records | 14 |
| 3. | Mailing lists | 6 |
| 4. | Others | 5 |

CDS/ISIS is rapidly becoming a useful package for library and information centres and scientific institutions in India. It is almost accepted as an industry standard for information storage and retrieval services. The successful modification of the package to handle library management and support local scripts would improve its acceptability in India. The experiment taken up by NISSAT to use the package for a total automation of library activities is likely to open-up new vistas for its future applications.

Availability of High-Cost Periodicals in S & T Libraries in Calcutta: Study Report

The Department of Scientific & Industrial Research sponsored, under its NISSAT Programme, a series of studies to collect data on the availability of high-cost S&T journals in major city centres with a view to providing better access to and promoting greater cooperation in acquiring expensive, but highly useful literature for scientific community. The Indian Association of Special Libraries & Information Centres (IASLIC) took up the project for Calcutta city. The main objectives of the Project were:

- To document the high-cost journals available in the region to assist the scientists in getting access to these publications.
- To assess the extent of duplication of library acquisitions of serials, particularly in respect of high-cost materials (Rs. 9,000/- and above per annum).
- To develop logistics for sharing of important (especially secondary) periodicals.
- To study the cost aspects involved in such resource sharing, and to suggest possible rationalisation in multi-library usage.

The data on the high-cost periodicals (costing > Rs. 9000) were collected from all S&T libraries in the city, tabulated, and analysed to study the extent of availability and duplication of the journal titles in three broad clusters of city libraries —north, central and south clusters. The periodicals have been taking a major share of the library's budget. There has been an annual rise of nearly 30-35% in the library's expenditure on periodicals, due to increase in subscription rates, as also the declining exchange value of rupee against foreign currencies. The main findings of the study are given below:

1. Nearly 346 costly journals (Rs. 9000/- and above per annum) are subscribed by 33 libraries in the city. Out of these, 212 costly journals are received in more than one library, i.e. a 61 percent duplication of titles within a region. These include 178 primary journals and 34 secondary periodicals. The total number of copies of these costly journals received in the libraries is 842.
2. It is seen that nearly 90% of the costly journals belong to Elsevier/North Holland (Netherlands), Springer Verlag (West Germany), Pergamon (England), and Gordon & Breach (USA) group of publishers. American Institute of Physics and American Chemical Society are the two society publishers of costly scientific journals.
3. In terms of financial outlay on high-cost journals and their duplication among the city libraries, the picture is most revealing; the 346 high cost journal titles together involve an annual expenditure of Rs. 66 lakhs; the cost on multiple copies of journals (additional 496 copies) received in the city libraries works out to another Rs. 1.50 crores, clearly indicating that the duplication is for the most expensive titles. This means the total annual expenditure on these costly titles involves a phenomenal Rs. 2.16 crores.
4. The extent of duplication among the periodicals in different subject groups will assist the libraries in working out cooperative arrangements for sharing their resources in their subject areas. Nearly half the costly titles are duplicated. Maximum duplication of titles prevails in Physics (81%) and Life Science (73%) followed by Chemistry (67%).

Subject-wise Duplication of Periodicals

| Broad subject group | No. of costly titles available in Calcutta | Duplication of titles | Total No. of copies subscribed |
|--------------------------------------|--|-----------------------|--------------------------------|
| Physics | 93 | 75 (81%) | 279 |
| Chemistry | 66 | 44 (67%) | 181 |
| Medical Science | 29 | 8 (28%) | 46 |
| Mathematics/Computer Science | 34 | 16 (46%) | 60 |
| Life Science/Biochemistry/Biophysics | 55 | 40 (73%) | 156 |
| Engineering/Earth Science | 48 | 22 (46%) | 91 |
| Miscellaneous | 21 | 7 (33%) | 29 |
| Total | 346 | 212 (61%) | 842 |

Suggestions for Improving Accessibility

I. The expenditure rising at a rate of 25-30% per annum must be a cause for serious concern and makes it imperative that a hard look is given to the avoidable duplication of journals that prevails even among the neighbouring libraries so as to conserve scarce resources; and if necessary to divert the funds so saved to acquiring a wider range of serial titles to serve the needs of the scientific community more comprehensively.

Each library spends between 5-10 lakh rupees on costly journals (about 40% of their journal budget), and it can save about 2 lakh rupees of its annual budget if duplication in costly journals is minimised.

II. It is evident from the survey that S&T libraries in the region have been functioning in splendid isolation quite oblivious of the economic compulsions and professional obligation of providing maximum accessibility to scholarly materials. The sooner the realisation that working as individual entities will no longer be economically viable in meeting users' demands dawns on these libraries, the better it will be for extending effective information service to city's scholars and researchers. There has to be a shift to a system that emphasizes distributed efforts and improved coordination. Resource sharing and arrangements for the developments of complementary collections among libraries will need to be increased. For this, the requirements are:

- Willingness to cooperate
- Detailed information of available resources
- Effective communication system
- National acquisition policy—there is need to ensure that at least a journal is available with accessible area
- Adequate bibliographic control, such as Union Catalogue, national and subject bibliographies, etc.
- Periodic meeting among the participating libraries to promote cooperation and resources sharing.

The alternative to this pragmatic approach would be to restrict the new acquisitions, and in some cases cancelling the subscriptions of existing journals. This would compromise on these libraries' objectives to maximize access to information for the growth of science and technology. If these libraries are unable to press for the required increase in their budget, we need as the National Enquiry into Scholarly Communication (USA) suggested, to move away from the concept of self containment to a model ... "In which the library will be a services centre, capable of linking users to national bibliographic files and distinct collections". Rapid developments in information technology, particularly the merger of computer and telecommunication technologies, provide the means of linking the users to information files, and emphasize the obvious strategy for the city libraries to adopt. A Network of city libraries will place at their command instant access to collective resources, and will facilitate cutting down avoidable duplication of costly journals. The multiple duplication of secondary periodicals could be replaced by acquiring/accessing machine readable database services, which would ensure multi-access, fast and random search for literature by the user groups. Setting up the Network of major S & T libraries in the city thus assumes a major significance and high priority.

Conclusion

It is hoped that the Report widely distributed among the scientific community, will help the scientific workers in the city to locate and access costly journals; it will also provoke the management of S&T libraries in the region to rationalise the acquisition of high-cost journals by cutting down duplication of

titles to the minimum and to promote greater cooperation among themselves through meaningful resource sharing. Such a cooperative approach has assumed greater relevance following the laudable effort of some city scientists and the DSIR under its NISSAT programme to launch the CALIBNET, with

the prime object of sharing costly resources and ensuring quick access to materials. It will be no exaggeration to claim that the CALIBNET Project can be self-financed, if only an earnest effort is made to economise on the duplication of high-cost journals in the city libraries.

Appendix—List of Journals for which Six or More Copies are Received

| <i>Title of Periodicals</i> | <i>Price (Rs.)</i> | <i>Title of Periodicals</i> | <i>Price (Rs.)</i> |
|---|--------------------|-----------------------------|--------------------|
| Biochemical Journal | 14625/- | Nuclear Physics | 88815/- |
| Biological Abstracts | 62700/- | Section—A | |
| Chemical Abstracts | 177675/- | Section—B | |
| Journal of Chemical Society Perkin Transaction | 33256/- | Physical Review | 53885/- |
| Journal of Materials Science | 20833/- | Section—B | |
| Journal of Molecular Biology | 17500/- | Section—C | |
| Journal of Physical Chemistry | 11177/- | Section—D | |
| Journal of Physics | 33787/- | Physical Letters | 68265/- |
| Section—B | | Section—B | |
| Section—G | | Tetrahedron | 39950/- |
| | | Tetrahedron Letters | 43340/- |

Creation and Use of Databases In Social Sciences:UNESCO-ICSSR Training Programme

Twenty-one participants including two from abroad (one each from Bangkok and Sri Lanka) attended a week-long training programme on Creation and Use of Machine Readable Databases in Social Sciences organised by Indian Council of Social Science Research with the co-sponsorship and support of UNESCO. The programme was inaugurated at JNU City Auditorium, New Delhi on 19 February 1990 by Prof. Moonis Raza, former Vice Chancellor, University of Delhi and Emeritus Professor JNU.

Prof (Ms) S. Bhan, Ag. Member Secretary, ICSSR welcomed the large audience at the inaugural session and stressed the importance of meeting the growing demand for trained professionals in library science and documentation. Ignoring the world developments in information science and technology was fraught with serious consequences for the country. The present course, she said, was one more step taken by ICSSR in collaboration with UNESCO to meet the manpower needs of developing countries. The encouraging response of participants was evidence of the need for organising such programmes more frequently.

Prof. P.B. Mangla (Delhi University) drove home the urgent need to expose professionals in the area to modern technique in data handling, storage and retrieval. He cited figures to show how fast recorded information was growing. The doubling rate was 4-5 years in science and technology and 8-9 years in social sciences. New storage devices like CD-ROM had dramatically facilitated the information storage problem and databases and software had made retrieval of the vast store of information accessible to those who had the knowhow, expertise and hardware at their disposal. It was, therefore, necessary to organize such refresher courses at regular intervals to keep abreast of current developments.

Prof. Moonis Raza's inaugural address raised several questions. Were the machines really capable of 'reading' in the sense in which humans did it? He was referring to 'machine-readable' databases. Reading was essentially an intellectual activity beyond the reach of machines which could only catch the quantitative aspect, sometimes mistaken as a substitute or short-cut for 'thinking' or comprehension.

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The chairman ICSSR, Prof Sukhamoy Chakravarty, while agreeing that though machines could not take care of the qualitative dimension of information, they were still necessary to sort, sift, rank, count and compare millions of data elements to enable planners, policy-makers and administrators to arrive at decisions promptly. Machine-readable databases were an essential part of this infrastructure.

Dr. K.G. Tyagi, Director NASSDOC, proposed a hearty vote of thanks to the VIPs and guests, at the function and participants for joining the programme.

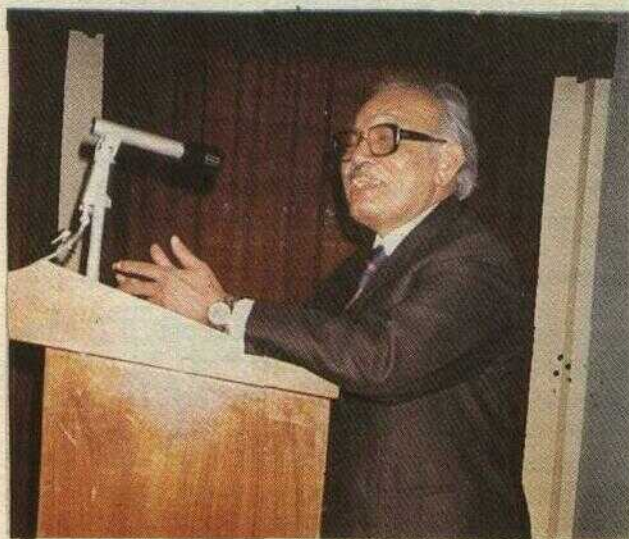
Local Area Network; Its Significance in Information System-SIS Convention, Goa

The Ninth Annual Convention and conference of the Society for Information Science was held at National Institute of Oceanography, Goa during January 18-20, 1990. The theme of the Conference was Local Area Network (LAN): Its Significance in Information System. About sixty information experts from R&D centres, enterprises in public and private sectors and libraries and information centres from all over India attended the conference which was inaugurated by Dr. B. Sheik Ali, Vice-Chancellor, Goa University.

In his inaugural address, Dr. Ali stressed the importance of information and library services in enriching human knowledge. Information is the backbone for development and progress of a nation, Dr. Ali observed. He referred to the monumental work done by Prof. S.R. Ranganathan, doyen in the field of library science known the worldover.



Fellowship Awards: (Top) Smt. Kamala Ramachandran, Project Coordinator, Wealth of India (CSIR) New Delhi (Bottom) Shri S.S. Murthy, Director DESIDOC, Delhi.



Inaugural Address: Dr. B. Sheik Ali, Vice-Chancellor, Goa University



Conference Theme

Shri. P.C. Bose, General Secretary of the Society, in his introductory remarks traced the development of the concept of Local Area Network (LAN) which is the culmination of interesting phases of development of information technology. From the mainframe computer system to the present day development of the microcomputer and its many phases of utility, the technology development surrounding Local Area Network over the last few years has been dramatic. Shri Bose mentioned that this conference would address a number of current issues in LAN design, performance, analysis, protocols, gateway development, distributed operating system, standards, network application and linkages at regional and national levels including case studies. There are several technical issues which are yet to be resolved before effective networks can be developed such as gateway design, protocols, conversion services, mapping and address resolution, and internetwork standards and regulations. He mentioned that the local computer network has great significance in the development of information system. Any database whether it was financial, management, S&T, bibliographical or non-bibliographical, could be accessed at any location and time. This is a big step towards modernisation of an information system where time factor is important in achieving the goal.

Shri. S. Nagarajan President of the Society in his welcome address reviewed the work done by the society since its founding in 1975.

Fellowship Awards

On the recommendation of the Education and Awards Committee, two distinguished scientists were awarded the Fellowship of the Society in recognition of their outstanding contributions to the advancement of information science and technology. The are:

- 1) Shri S.S. Murthy, Director, Defence Scientific Information and Documentation Centre, Delhi.
- 2) Smt. Kamala Ramachandran, Project Coordinator, Wealth of India Division, Publications and Information Directorate, CSIR, New Delhi.

The Award carries a scroll of honour and a medal besides Life Membership of the Society. The two awards were presented by Dr. B. Sheik Ali, Vice-Chancellor, Goa University.

Keynote Address

The keynote address was delivered by Shri Vijay Bhargava, Consultant, British Steels, Ahmedabad. He dwelt on the significance and meaning of keywords 'Local Area', 'Network' and 'Information System'. Shri Bhargava was of the view that the basic level of LAN should be the district level and only such information should form part of LAN for which there are many users in that particular area.

For networking it was essential that useful databases are created for administrative and economic information. Shri Bhargava referred to TIFAC (Technology Information Forecasting and Assessment Council), a concept promoted about a year ago. TIFAC it is stated, will not duplicate any existing system but freely draw upon them. TIFAC is supposed to provide technology information mainly useful for forecasting and assessment needs and will cater to decision makers, planners, industrialists and R&D organisations. It may provide information through a national network, most likely CMC.

For achieving national objectives, the keynote speaker felt, the country will need databases of administrative information, economic information and technological information. Such databases can be networked when based on state level information, otherwise we shall again be faced with the problem of excessive information.

Concluding, Shri Bhargava spoke of specific information packages needed by policy makers, operation managers, academicians and researchers. Information centres must, therefore, be manned by people with a proper blend of knowledge in management, library science, telecommunications and computer sciences in order to be able to effectively answer the need of various categories of users. He expressed the hope and confidence that the Society for Information Science would be able to play a positive and more effective role in this area.

Technical Sessions

There were five technical sessions: i) The nucleus for a LAN—how to build it up, its requisite structures; ii) Role of LAN in integrated information system; iii) Standardization of formats for a LAN; iv) Linkages at regional and national levels; and v) Case studies. The sessions were chaired by Shri S.S. Murthy, Prof. T. Viswanathan, Shri G.T. Mirchandani, Shri P.C. Shah and Shri I.R. Kumar respectively. Papers were presented by Shri M. Natarajan (INSDOC), Shri Vidhu Sekar (CMC Ltd.), Smt.

Saraswati Bhattacharya (CMC Ltd.), Shri R.M. S., Bhargava and Shri Kunte (NIO), Shri P.C. Shah (ATIRA), Shri R.S. Singh (NCL), Shri K.Y. Srikanth (DRDO), Shri Srikant Sharma (CIMAP) and Shri K.P. Sadasivam (RRL).

Recommendations

The concluding session was chaired by Shri R.M.S. Bhargava, Head, Data & Information, NIO, Goa. Considering that information is an essential input for any type of activity, the conference made the following recommendations:

1. Data available in all information centres/libraries in the country should be converted into a machine readable form so as to facilitate networking.
2. Local Area Networks (LANs), installed at major centres having problems of hardware and software compatible with similar regions nearby may be looked into and expert guidance provided by government agencies like the Ministry of Science & Technology, Department of Electronics, U.G.C, INSDOC, etc. These may be in a better position to coordinate the activities by overcoming obstacles.
3. In order to use fast emerging new developments in information technology, there is a need for trained personnel at all levels. To meet this requirement as well as to better their qualifications, regular practical training and courses should be organised.

4. The Society for Information Science should hold workshops in collaboration with agencies like CMC Ltd., for hands on training in hardware and software.

5. In the Eighth Five Year Plan, government should provide sufficient funds to meet the challenging tasks in the area of information processing and dissemination.

Vote of Thanks

Proposing a vote of thanks, Shri. P.C. Bose, the General Secretary, expressed the Society's gratitude to Dr. B. Sheik Ali for inaugurating the conference and Shri Vijay Bhargava for his keynote address. The credit for the excellent organisation of the conference went to Shri R.M.S. Bhargava, and his colleagues in the organising committee. Dr. B.N. Desai, Director (NIO) kindly made available all possible facilities for holding the Convention. And the consistent financial support extended by CSIR for the convention was greatly appreciated as a source of encouragement to the Society in conducting its programmes and activities.

P.C. Bose

Ram D. Taneja

Database: New Tool for Journalism

News reporters and technoscribes have started looking at information differently: the news is'nt just fires, the news is information.

Reporters are now using computers to extend their reporting abilities. To get information. To recall information. To organize information. To look for trends and patterns. To compare, count, rank, sort. It's the same old journalism but with better tools, says journalism professor at the university of North Carolina. It's a way of keeping up with the information society.

On-line data bases, of which there are now more than 3,000 in the United States, are designed mainly for the retrieval of information by searchers who tap into a data bank through telephone lines attached to a computer terminal. In-house data bases are customer-built on the organization's own computers, which may range from mainframes to personal computers. Although in-house databases tend to be structured for analyzing data as opposed to retrieving specific bits of information, the line between the two kinds of databases is blurring. The basic function of the computer database, however it is structured, remains the same — to organize masses of information into meaningful patterns.

The news media in the United States have steadily increased their use of on-line data bases since discovering them in the late 1970s. According to a 1986 survey, the number of newspapers doing on-line searching had quadrupled over the previous four years; in 1986, database use was reported by more than half of the 155 newspaper respondents.

The message: We must use the powers of computers to tap into the myriads of databases that are out there and when they are'nt there, build them.—*Span*, February 1990, 40.

Recent Publications

Publishers are invited to send to the Editor for review and noticing their new publications on information industry and technology, librarianship, documentation, archival science, micrographijy and reprography, information systems and services, science communication, printing and publishing (including electronic publishing, computer hardware and software, etc.)

Indian Patents in Biotechnology Published During the period 1972-88. Dept of Biotechnology. Ministry of Science and Technology, New Delhi, 1989, Pages x+224.

The publication contains information about the Indian patenting activity in the field of biotechnology during the period 1972-1988. The information comprising 951 Indian patents in the field of biotechnology has been retrieved from the Indian Patents Database (INPAT DATABASE) containing about 33000 published Patents under the Patents Act, 1970. This database has been developed by the Patents Unit, Technology Utilisation Division of the Council of Scientific & Industrial Research with the financial support given by the Department of Biotechnology.

An analysis of the data given in this publication shows that during the period 1972-88, nearly three-fourth (75%) of the biotechnology patents published in India originated from foreign countries mainly from US and European firms and research institutes. Of the total biotechnology patents published, the Council of Scientific and Industrial Research (CSIR) has emerged as the major single contributor accounting for about 9.5% patents.

The patenting activity in the area of biotechnology in the country has mainly been concentrated in the pharmaceutical sector which include processes for the preparation of antibiotics, vitamins, enzymes, antibodies and vaccines. In the area of chemicals, the inventive activity relates mainly to the production of alcohols and polysaccharides. Inventions relating to agricultural sector cover biocides, plant growth regulators, veterinary vaccines, plant cell and tissue culture while food industry covers dairy and fish

product, baker's yeast, food additives, starch products glucose and fructose syrups, etc. As regards the service industry, the inventions pertain mainly to waste water and effluent treatment. In the energy sector, the focus is primarily on the biogas production. It is important to note that the patenting activity in the area of biotechnology has increased significantly during the recent years and has shifted its focus from the traditional applications to newer areas employing genetic manipulation techniques.

The information contained in the publication would be useful not only to the scientists doing research in the field of biotechnology but also to those concerned with planning and decision making in regard to the direction of research work in India.

The Patents Unit is making the database upto-date and it is understood the database will soon be integrated with BTIS Network (Biotechnology Information System) making thereby its availability on-line.

The Publication is also available on floppy diskettes. For details write to Scientist-in-charge (Patents), Patents Unit, CSIR, INSDOC Building, 14 Satsang Vihar Marg, New Delhi 110067.

International Cooperative Information Systems, Networks and Programmes (Vol. 6 of Handbook of Libraries, Archives and Information Centres in India. Cord. Ed. B.M. Gupta. Pages 304. 1989. Information Resources Centre, New Delhi. Price Rs. 300.

In the information based society of today rapid developments are taking place to plan and knit together the country's information grid. In this context, the above volume becomes all the more relevant as a reference source to help India forge ahead to keep in step with the developments taking place the world over.

The 27 chapters contributed by eminent authors and professionals in the field cover a wide spectrum of information systems and services: INIS, AGRIS, DEVSIS, ISBN, ISONET, TIPS, IRES, to name a few. Information about these is widely scattered, By bringing it under one cover, the authors/publishers

have done a great service to the development, promotion and interaction of the national information network with international channels.

Special mention must be made of the very comprehensive and useful chapter contributed by Prof. C.N.R. Rao which presents a consolidated listing of some important organizations engaged in data generation, collection, evaluation and dissemination. This would be found extremely useful by many seekers of S&T information.

The Volume under review is a must for all information centres, libraries to serve as a comprehensive source book—RDT.

FID Occasional Paper Series

FID has recently established an *Occasional Paper Series* in which reports will appear which focus on important and current issues in documentation, information management and information science.

Two reports in this series were recently published as the result of studies undertaken for the General Information Programme.

From informal gatekeeper to information counsellor: Emergence of a new professional role by Marta Dosa, Mona Farid and Pal Vasarhelyi. The Hague: FID, 1989, 55 pp. (FID Occasional Paper Series; 1) (FID 677)

The concept of "gatekeeper" appeared in the literature more than 2 decades ago. This report describes some of the concepts and trends in the application of the "information gatekeeper" phenomenon. Some of the issues looked at in the report are: examples of studies into the subject, the transition of the gatekeeper's role in the organization, the general functions of information counselling, issues in information policies, and the implications for education and training. The report also has extensive references.

National information policies: a review of the situation in 17 industrialised countries, with particular reference to scientific and technical information by Michael W. Hill. The Hague: FID, 1989, 107 pp. (FID Occasional Paper Series; 2) (FID 678).

This survey aims to look at both the policies and practices which lie behind their formulation, which assist their dissemination and provide for their implementation as seen during the second half of 1988.

When possible the study has been restricted to scientific and technical information in 17 industrialised countries.

Policies and practices in these countries are presented in a way which, as far as practicable, makes comparison possible. The countries are Australia, Austria, Canada, Czechoslovakia, Denmark, Finland, France, Federal Republic of Germany, Hungary, Japan, Netherlands, Norway, Poland, Spain, United Kingdom, United States of America and the Union of Soviet Socialist Republics. Because certain international regional institutions are active in the field in a way that influences national policies, attention is paid to these too.

The document contains information, normally accessible to the public but not easy to locate, on the evolution of these information policies in countries with different social, economic and political structures.

Both publications are available at the price of \$ 40 or 80 Dutch Guilders from FID Sales Department, P.O.Box 90402, 2509 LK The Hague, Netherlands.

Bulletin of the National Natural Resources Management System (NNRMS). NNRMS Secretariat, ISRO Headquarters, Bangalore. 1989. pp vi + 60.

The Bulletin presents an interesting account of the not so well-known activities of the Satellite Control Centre for IRS-1A which completed one year of successful in-orbit operation in March last year. During this period, the camera systems on-board the satellite have covered the country 16 times thus generating a hundred thousand imageries.

The typical application areas where IRS-1A imageries are used include mapping of forestry and wasteland, crop inventory, ground water targeting, integrated drought management and regional geological mapping.

The yearlong operations of IRS-1A mission has given enough confidence to both working level operations system and top management that the operational remote sensing missions are no longer dreams but realities in the Indian context.

The attractive, well produced Bulletin should help disseminate information about the activities of SCC and thereby harness to a greater degree the potentials which have come to light through IRS-1A for more complex missions in the years to come. General terms of supply of data products by NRSA

Data Centre are detailed in the Bulletin. For details please write to Dy Director, Earth Observation System, ISRO HQ, Antariksh Bhavan, Bangalore.

Directory of Agents for Imported Machine Tools and Allied Equipment. Central Machine Tool Institute, Bangalore. 1989. Pages 150, Price Rs. 250.

A NICMAP publication (this is a revised edition), it is meant to serve as a ready reference guide for identifying Indian agents for foreign manufacturers of machine tools and allied products. The directory provides an alphabetical list of products, agents and their principals. Nearly 1550 products have been listed covering about 260 Indian agents and 939 principals.

Machine Tools and Production Engineering Thesaurus, Central Machine Tool Institute, Bangalore, 1989, Pages 84, Price Rs. 150 (Including postage), US \$ 30 (overseas surface mail).

This is an updated version of the thesaurus which NICMAP had published in 1984. Keywords pertaining to emerging technologies have been added. Contents include metal cutting and forming, machine tools and tooling, metal finishing, metrology, tribology, foundry, welding, plastics and allied fields.

This thesaurus serves as a ready reference tool in the field of machine tools and production engineering for industries, researchers, practicing engineers, technical institutions, information centres, libraries, students of engineering and others for indexing or arranging their collected information as well as in formulating technical enquiries to various data banks.

ISO/IEC-KWIC Index - 4th ed. - Geneva: ISO/IEC, 1989. -714 pp. ISBN 92-67-10 152-8

With the KWIC Index prepared in the format of key-word -in context, all international standards published on a given subject can be identified instantly. It includes some 12 000 documents from the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), and 27 other international organizations.

A key-word system makes the task of looking up a standard extremely simple. In English with instructions for use in French.

Conference proceedings on new information technology for library and information professionals and educational media specialists

This 480-page conference proceedings contains 64 original contributions covering such topics as library automation, online information retrieval, networks, database development, CD-ROMs and multimedia systems, hypermedia and information technology. These papers give an historical and current overview of activities and applications in information in South-East Asia and the Pacific Region. A subject and author index are included. The proceedings of the 2nd Pacific Conference on New Information Technology, 29-31 May 1989, Singapore, were edited by Ching-chih Chen and David Raitt. Contact FID, P.O. Box 90402, 2509 LK The Hague, Netherlands (International Federation for information and Documentation (FID) Publication No. 676.

Management of Government Information Systems: Elements of Strategies and Policies UN-DTCD, New York, N.Y. 10017.

Government information systems have become an important development challenge for public administration managers. Helping them to meet this challenge is a new UN-DTCD publication, Management of Government Information Systems: Elements of Strategies and Policies

Prepared in module format, this 200-page publication is a tool designed for immediate use by public sector decision-makers involved in setting up or managing information systems. It provides concise and detailed guidelines on key policy and practical issues in the information systems field.

Advice is given on the assessment of information needs in order to reduce the costs of information systems development. Specific guidelines are provided on procurement of equipment, software and services.

Decision-makers will find out how to organize the training of computer professionals as well as of managerial users. They will be helped to define appropriate technical methodological data standards to improve compatibility and consistency of information systems in public administration.

Finally, this new book provides guidance on the creation of an appropriate legal framework to facilitate the development of information technology in government and society and, at the same time, to protect society from the misuse of informatics and information.

Nissat-Insdoc Courses on Computer Application to Library and Information Activities

In response to the demand of library and information professionals, INSDOC is going to organize the following short term courses during financial year 1990-1991. Seats in these courses will be provided on first-come-first-served basis. Library and information professionals interested to participate in these training courses are requested to contact Shri B.K. Sen, Deputy Head, Education & Training Division, INSDOC, New Delhi 110067.

| Sl. No. | Course | Commencing | Duration |
|---------|--|---------------|----------|
| 1. | Computer Application to library & information activities (for freshers) (MS Dos, CDS/ISIS, d.Base III Plus, Wordstar, Lotus 1-2-3) | 2 April 1990 | 4 weeks |
| 2. | CDS/ISIS (Ver 2.3) & PASCAL for those having knowledge of CDS/ISIS ver. 1.0) | 9 July, 1990 | 4weeks |
| 3. | Computer application to library & information activities (for freshers) (MSDOS, CDS/ISIS, d.Base III | 20 Aug. 1990 | 4weeks |
| 4. | Bibliometrics | 22 Oct. 1990 | 1 week |
| 5. | DBMS & dBase III Plus | 19 Nov. 1990 | 4 weeks |
| 6. | CDS/ISIS (Ver 2.3) & Pascal (for those having knowledge of CDS/ISIS (Ver. 1.0) | 7 Jan. 1991 | 4weeks |
| 7. | Information Technology (online access, electronic mail, CD ROM, electronic imaging, Videotex, Teletex, etc.) | 10 Feb. 1991 | 2 weeks |
| 8. | DBMS & d.Base III Plus | 4 March, 1991 | 4 Weeks |

Course Fees:

| | |
|---------------|---|
| | (Rs. 2,500/- (with accomodation) |
| 4 week course | (Rs. 2,000/- (without accommodation) |
| | (Rs. 1,250/- (with accommodation) |
| 2 week course | (Rs. 1,000/- (without accommodation) |
| | (Rs. \$ 650/- (with accommodation) (for foreigners) |
| | (Rs. 650/- (with accommodation) |
| 1 week course | (Rs. 500/- (without accommodation) |
| | (\$ 350/- (with accommodation) (for foreigners) |

NB:• Maximum No. of seats in each course = 15

- Seats will be filled up on first-come-first served basis.

Calender of Meetings, Fairs, Exhibitions, 1990*

| S. No. | Date | Title/ Location | Contact Address |
|--------|-------------|--|--|
| 1. | March 6-9 | Melbourne, Australia COMMUNICATIONS International Exhibition for Electronic Communications and Informations Technology | Australian Exhibition Services Pty. Ltd. Illoura Plaza, 424 St. Kilda Road Melbourne, Victoria 3004 Australia |
| 2. | March 21-23 | Rome, Italy Modelling the Innovation: Communications Automation and Information Systems-IFIP/IFAC International Conference | Conference Secretariat Fondazione Ugo Bordoni Via B. Castiglione 59 I-00142 Roma Italy |
| 3. | March 21-28 | Hanover, Germany Fed. Rep. Hanover Fair CeBIT World Center for Office Information and Telecommuni- cations Technology. | Deutsche Messe AG Hannover Messegelände D-3000 Hannover 82 Federal Republic of Germany |
| 4. | March 26-29 | Lillehammer, Norway INDC-90 Third International Conference on Information Network and Data Communication | INDC-90 Secretariat C/o Ellen Bohler Den Norske Dataforening P.O. Box 6714 -Rodelokka N-0503 Oslo 5 Norway |
| 5. | April | Caracas, Venezuela VENEZUELA COM EXPO International Computer and Communication Exhibition | Fapezal Communication S.A. Paseo de la Reforma 300 Col. Juarez 06600 México, D.F. México |
| 6. | May 7- 9 | The Hague, The Netherlands 21st European Congress on Computer Applications in the Chemical Industry | Dr. J.M. Van Der Kamp KIVI 23 Princessegracht NL-2500 GK The Hague The Netherlands |
| 16 | 7. May 9-11 | Brussels, Belgium EFLC European Conference on Library Automation and Networking | European Foundation for Library Cooperation Postbus 237 B-1040 Brussels Belgium |

*Source: UNIDO, Vienna .

| S. No | Date | Title/ Location | Contact Address |
|-------|------------|--|--|
| 8. | May 9-11 | Utrecht, The Netherlands EUROPE SOFTWARE International Computer Software Trade Fair | Koninklijke Nederlandse Jaarbeurs Postbus 8500 NL-3503 RM Utrecht Netherlands |
| 9. | June 19-21 | Birmingham, UK ELECTRONIC PUBLISHING '90 Exhibition and Conference | Blenheim Online Ltd. Blenheim House Ash Hill Drive Pinner, Middlesex HA5 2AE United Kingdom |
| 10. | June 19-21 | Birmingham, UK NETWORKS '90 Exhibition and Conference | Blenheim Online Ltd. Blenheim House Ash Hill Drive Pinner, Middlesex HA5 2AE United Kingdom |
| 11. | June 22-25 | Hong Kong PACK-PRINT ASIA International Exhibition for Packaging and Printing Machines and Materials | Business and Industrial Trade Fairs Ltd. 28/F, Harbour Centre 25, Harbour Road, Wanchai Hong Kong |
| 12. | June 26-30 | Kuala Lumpur, Malaysia PRINTING AND PACKAGING International Exhibition | Malaysian Exhibition Services Sdn. Bhd. 2/F, Wisma Socfin Jalan Semantan Damansara Heights 50490 Kuala Lumpur Malaysia |
| 13. | July 9-13 | Sydney, Australia WCCE/90—Fifth World Conference on Computer in Education | WCCE/90 P.O. Box 319 Darlinghurst, NSW 2010, Australia |
| 14. | Sept 3-8 | Havana, Cuba 45th FID Conference & Congress: Information a Resource for Development | Comite Organizador FID '90 IDICT Apartado Postal 2019 10200 La Habana Cuba |
| 15. | Oct 15-19 | Zagreb, Yugoslavia INTERBIRO-INFORMATIK International Exhibition of Information Handling Equipment, Communication Systems, Data Processing & Office Equipment | Zagrebacki Velesajam Avenija Borisa Kidrica 2 YU-41021 Zagreb Yugoslavia |

| S. No | Date | Title/ Location | Contact Address |
|-------|-----------|---|--|
| 16. | Oct 22-26 | Tokyo, Japan International Conference on Information Technology | Secretariat Simul International Inc. 1-8-10 Akasaka, Minato-ku Tokyo 107 Japan |
| 17. | Nov. 8-11 | Beijing, China EXPO COMM CHINA International Exhibition for Telecommuncailtons & Computers | E. J. Krause & Associates 3 Bethesda Metro Center Suite 510 Bethesda, Maryland 20814 USA |
| 18. | Nov 26-29 | San Diego, California, USA IEEE Global Telecommuncations Conference | Institute of Electrical and Electronics Engineers Conference Coordination 345 East 47th Street New York, N.Y. 10017 USA |
| 19. | Dec. 4-7 | Stockholm, Sweden MEDICINE International Exhibition of Medical Sciences | Stockholmsmassan AB Mässvägen 1, Alvsjö S-12580 Stockholm Sweden |
| 20. | Dec. 6-9 | Hong Kong COMMTEL ASIA International Exhibition for Telecommunication | Business & Industrial Trade Fairs Ltd. 28/F, Harbour Centre 25, Harbour Road Wanchai Hong Kong |
| 21. | Dec 12-16 | Singapore SINGAPORE INFORMATICS International Exhibition | Technofairs Corp. Pte. Ltd. 111 North Bridge Road Ste. 1601, Peninsula Plaza Singapore 0617 |

FORM 1V
(See Rule 8)

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I, Dr. A. Lahiri hereby declare that the particulars given above are true to the best of my knowledge and belief.

March 1990

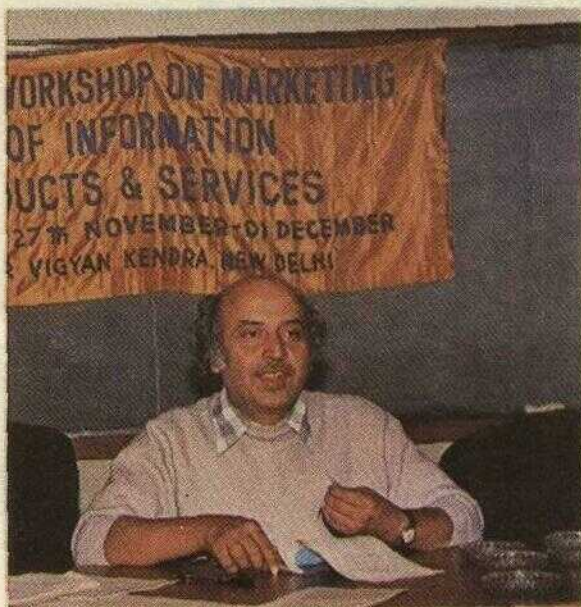
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NEWS & EVENTS

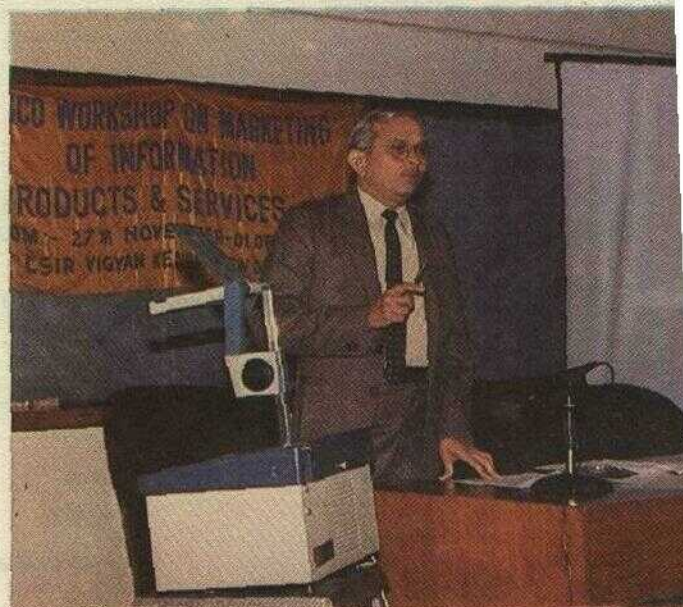
Marketing of Information Products & Services —

UNESCO workshop

The workshop was jointly organised by Unesco (Bangkok), NISSAT and AGLIS (Association of Govt. Librarians & Information Specialists), during 27 Nov-01 Dec 1989 at CSIR Science Centre, New Delhi. There were 19 participants from all over India, most of them being heads of the information institutions. The objective of the workshop was to familiarize the librarians, documentalists and archivists with the marketing concepts and enable them to apply these in the day-to-day information activities of providing services and products to the users. Dr. A. Lahiri gave a brief introduction in the subject, followed by Shri V.K. Rangra, the Coordinator, who explained the scope of the workshop. The curriculum comprised lectures, case studies, syndicate exercises and video films on market management. The topics covered were: basic marketing concepts, planning & strategies for marketing, information seeking behaviour, marketing research, audience research, marketing mix, education on marketing of information products and services, marketing communication, concept testing for on-line information services, literature survey. Case studies were also presented by some of the participants on their respective information services, namely: Texicon (textile), NICMAP (machine tools), NIC-ICMR (medicine), NCSTC Newsletter. The faculty was mainly drawn from the marketing professionals and comprised Sr/Shri N.K. Gopalakrishnan (Institute of Public Enterprises, Hyderabad), Raghu Roy (Business India, Bombay), A Ganguly (Ogilvy & Mather, Delhi), S.S. Murthy, Director, DESIDOC, Dr. Sunil Misra, Director, Audience Research, All India Radio, Dr. A. Lahiri, Director, NISSAT and others. A video film on "New Information Technologies and Services in a Modern Information Centre: DESIDOC" was shown followed by further explanation by Sh. V.K. Rangra, the concept and script writer of the film. The feedback provided by the participants rated the workshop as very useful.



Dr. A. Lahiri (NISSAT) introduces the workshop theme.



Shri S.S. Murthy, Director DESIDOC speaks on some aspects of marketing of information products and services.

New Delhi has INFOTEL Online Service Facility

An online service facility under the name of INFOTEL has become operational in New Delhi. Set up on 16 January 1990 by Informatics (India) Pvt. Ltd. in collaboration with Videsh Sanchar Nigam, the Centre provides online facility to information users in Delhi and its neighborhood, signifying the use of telecommunication for information searching through global computer communication networks. A similar centre set at Bombay in October 1989 received enthusiastic response from industry and education sectors of the metropolis.

The international Gateway Packet Switch Service (GPSS) was introduced with a demonstration cum-seminar held on 16 January 1990 at VSNL, New Delhi. It was attended by a cross section of information professionals and information users who witnessed interesting interaction with online Systems like DIALOG and EASYNET. The queries dealt with materials, products, markets and technology; and process knowhow in patents, standards and specifications, etc. INFOTEL has access to 12 major online hosts who together make available more than 1000 databases.

An effective presentation on INFOTEL facilities and services was made by Shri N.V. Sathyanarayana, Managing Director Informatics (India) Bangalore. The Chief General Manager VSNL introduced the GPSS.

INFOTEL cost of services varies from Rs. 500 to Rs. 5000, depending upon the requirements and the value of information the system offers. Membership is registered for a minimum period of one year on payment of a fee of Rs. 5000. Requests may be addressed to INFOTEL Online Service Centre, C/o Videsh Sanchar Nigam Ltd., Bangla Sahib Road, New Delhi-110001.

Interactive Computers Come of Age

What if a computer could actually comprehend the tasks it performs, instead of simply responding to programmed commands? And what if it could talk—not in a stilted video-game voice, but in natural conversational tones? Then it would truly be a system of two-way communication. The keyboard would then be redundant as a tool for inputting information.

The first steps toward realizing this interactive system were initiated by American researchers at Duke University in North Carolina in 1985. Led by Alan W. Biermann, associate professor of computer science, a group of Duke scientists were the first to develop a voice- and touch-activated computer system. With this, the user can talk to the computer, or touch the screen to give a command. The Voice Interactive System (ViPS) is the product of more than seven years' work by Biermann and his associates.

Since then, several other "intelligent" systems have been developed that combine all three components—voice, touch and text—to produce a fast and efficient processing system.

Casey Gilbert, an associate of Biermann, explained how the system works: "It is a voice and touch input system that can manipulate objects displayed on the screen. The screen is sensitive to touch—if you put your finger on it, you generate a coordinate that the computer recognizes. We manipulate text specifically with ViPS, although much of the system is general enough that we envision doing other kinds of tasks, like keeping a calendar of appointments."

ViPS is a task-oriented system, which means that it is designed specifically to work with a person in performing a task, such as word processing or information storage. Using ViPS, a worker on an assembly line could simply call out part numbers or models instead of having to use a keyboard to enter the information. The system would then store the information, and the worker could have his or her hands free for other tasks.

The way ViPS works is deceptively simple. The system has a vocabulary of about 80 words, and as long as the user groups these in a specific order, ViPS will carry out the appropriate command. For instance, the system can insert or delete groups of words or entire paragraphs; it can center, capitalize, and move words, sentences, or paragraphs within the document; it can colour parts of the documents.

Every command, entered through a microphone-equipped handset, begins with the word "Now," followed by an imperative verb and several noun groups, and ends with the word "Over".

ViPS quickly processes commands such as: "Now, delete the second sentence in the first paragraph, over." In issuing the commands, the user touches the relevant area on the screen as he or she says "the second sentence in the first paragraph."

To respond to each command, ViPS uses a two-stage process: voice recognition and language understanding. In the first stage, a commercially-purchased "recognizer" matches samples of language already stored in its memory with words that are spoken. Then, the recognizer is hooked to a host computer that actually translates the sentences into a form the computer can identify.

"The host computer's job is to make sense out of an English sentence, and if you tell it to do something, its job is to do it," Biermann says. "So the host computer has really a microscopic grammar for English. Then, it has special routines that represent the meaning of the individual words, so if you say the word 'paragraph,' the system will be able to find the paragraph." --Science Update, Dec. 1989.

Professor S. Bhagvantam--DSJ Commemoration Issue

The Defence Science Journal published by Defence Scientific Documentation and Information Centre came out with a special issue (Vol. 40, No. 1, January 1990) dedicated to the memory of Prof. S. Bhagvantam, former Scientific Advisor to Defence Minister and Director, Indian Institute of Science, Bangalore. The Commemoration issue was released by Dr. V.S. Arunachalam, Scientific Advisor to Raksha Mantri and Director General, Research & Development, Ministry of Defence on 6 Feb. 1990 at a simple and dignified function. The date marked the first death anniversary of Prof. Bhagvantam.

Glowing tributes were paid at the function to the personal qualities and outstanding work of Prof. Bhagvantam as a scientist. Dr. M. Krishnamurthi, former Chief Controller DRDO reminisced over his long years of close association with Dr. Bhagvantam as an old student and collaborator. As Guest Editor for the Special issue of DSJ, he has been responsible for its excellent collection of papers by eminent scientists extolling the work of the great scientist and science administrator.

The DESIDOC Director, Shri S.S. Murthy and his colleagues deserve to be congratulated for bringing out this excellent commemoration volume to honour the memory of one of India's greatest scientists.

IASLIC Study Circle Meeting, Hyderabad

A meeting was organised under the joint auspices of IASLIC Study Circle, Librarians Study Circle, Osmania University and ICSSR-Southern Regional Centre at Osmania University Library on 2 December 1989.

Dr. Mohammed Taher, Dy. Librarian, American Studies Research Centre, Hyderabad, who has recently obtained his Doctorate in Bibliometric Study of Islamic Literature from Cochin University, presented a paper on "Area Studies Librarianship: Trends in Quantitative Studies" and led the discussion. Prof. A.A.N. Raju, Head, Dept. of Library and Information Science, Osmania University presided over the function.

While presenting his paper Dr. Taher explained that the meaning of Area Studies Librarianship he has taken for his research is as an inter and multi disciplinary area and does not refer to geographical areas. He also used the synonymous terms as comparative, international and world librarianship for the topic. Illustrating the concept further he cited subjects like women studies, black studies, Islamic studies, etc. Explaining the important role that is being played by quantitative methods in library research, Dr. Taher mentioned that his study on Islamic literature is based on in-depth analysis of the data appeared in 'Index Islamicus'. His analysis of the literature revealed that there is explosion of literature both in terms of subject that contribute (Subject scatter) and in the countries that produce the literature (geographical scatter). The study arrived at a list of core journals of high significance which is very useful for the scholars, teachers and information personnel who are connected with Islamic studies.

An interesting discussion followed the presentation.

Medical Librarianship: International Congress Meets in New Delhi 24-28 Sept. 1990.

The Sixth International Congress on Medical Librarianship (6 ICML) and Pre-Congress Seminar will be held in New Delhi during 24-28 Sept. 1990. The Congress is sponsored by Medical Library Association of India, World Health Organization (WHO), National Medical Library (NML), Indian Council of Medical Research (ICMR)

and the National Information System for Science & Technology (NISSAT) are Co-sponsors.

A novel feature of this Congress is a "Pre-Congress Seminar on Health Sciences Information: Impact of Technology Developments on its Production, Analysis, Distribution & Consumption". This Seminar will provide an open forum for discussion. Invited papers from representative groups will be presented with a view to evolving consensus on key issues involved and possible solutions with a futuristic outlook.

- Seminar Theme : Health Sciences Information; Impact of Technology Developments on its Production, Analysis, Distribution and Consumption.
- Sub-Themes : i) Role for Publishers/Distributors
ii) Role for Health Sciences Librarians
iii) Role for Computer/Information Technology Personnel
iv) Role for Consumers/Users

For further information, please contact Shri S.K. Anand, Secretary-General National Organizing Committee 6ICML C/o World Health Organization, I.P. Estate, Ring Road, New Delhi-110002.

Computerised Services of JNU Library

The Jawaharlal Nehru University library set its pace towards library automation in January 1987 when it acquired a Wipro PC-AT, an IBM compatible, with 1 MB RAM, 40 MB Winchester disk drive and a 132 column printer for the DEVINSA Project, financed by IDRC. It also acquired the CDS/ISIS software from the Dept. of Science and Technology. The library also trained a few staff members under a computer expert, Mr. A.L.M. Abdul Gafoor of Marga Institute, Colombo. These expenses were also met by the IDRC. The training was for INMAGIC and CDS/ISIS, two separate library application/text based softwares.

DEVINSA Project--The DEVINSA (Development Information Network for South Asia) project formed under the Committee on Studies for Cooperation and Development in South Asia, Primarily aims at providing information particularly relating to non-conventional documents, like project reports, theses, working papers, official documents, etc. Six countries, namely, India, Sri Lanka, Bangladesh, Nepal, Pakistan and Maldives are participating in the project. "The JNU Library acts as Indian Focal Point, and contributes entries on Indian sources. About 3500 abstracts have been sent to the coordinating centre at Marga Institute, Colombo. The entries using the INMAGIC software are sent on floppy diskettes.

The products of this project are, the DEVINSA Monthly Bibliography and the DEVINSA Abstracts published from July 1987. The data for the year 1987 are available on diskettes.

22 India & World Affairs Project--This project an offshoot of the annual bibliography "India & World Affairs" published regularly in the Journal "International Studies" is taken up to present 40 years' data on Indian Foreign Policy as a mark of respect to Late Jawaharlal Nehru in his Birth Centenary Year.

The data from 1947 to 1977 has been fed into the computer. The output for two volumes covering 1947-57 and 1958-67 have already been taken for publication. The number of entries in the database now exceed 35,000 and include the materials of Journals articles, editorials, official statements and Lok Sabha & Rajya Sabha debates apart from other sources.

HP 3000 Computer--Mean-while the University decided on full scale Library automation by acquiring an exclusive computer system and suitable software for the Library. After several deliberations the Library Automation Committee decided on the purchase of HP Micro 3000XE Computer System, with 8 MB RAM, 652 MB disk space, 4 terminals, a console, and printers, and the MINISIS software from IDRC.

The Computer was eventually purchased and was installed in June 89. Training was imparted to the professional staff on the MINISIS Software and the operating system of the Computer in June 89.

Catalogue--During the following quarter different sample data bases were created and tested. The library opted for a changover to the AACR II and to follow CCF format for data input. The databases were modified accordingly. From November 1989 the input of cataloguing data started and a moderate database of 1400 records of Social Science, Science and Humanities books has been created. Output of different indexes & formats were taken. In addition, a database of retrospective records amounting to 1300 entries of Spanish & German books was also created.

From the catalogue-database a monthly list of additions is being generated and distributed to users for information on new additions to library.

From the Computer database the catalogue cards in the conventional 5"x3" size are being generated and multiple copies of cards are obtained by duplication. This was necessary since the users at present have no access to computer and are using the card catalogue only.

Documentation--Records of periodical articles (3600) from social sciences Journals were already entered in the documentation database. The proposed increase in the size of database is around 800 records per month. The database is capable of meeting the requirements of social scientists and other users of social sciences information in terms of search by author, subject (keywords, period, geographical area), title, Journal title and word searches. The feed back from users was encouraging. The effort to introduce SDI Service to individual faculty members has been started by collecting their profiles. Over a period of time, thesis database is expected to be a valuable source for users of social science information.

Suchika--The SUCHIKA, a monthly list of Social Science articles is currently published by computer output of selected articles from the Documentation database. In addition partial lists of interest to various centres of studies was also taken and distributed on a periodical basis.

Newspaper Clippings--The database on newspaper clippings has been designed and around 200 items of news pertaining to South Asia have been input into the database. The searches allowed by this database include the Area (Country & State), subjects and author if any and the newspaper title. The scope will be extended to other areas in the near future.

Journal Holdings & Serials Control--A database of Journal holdings of the JNU Library has been designed. The data input will be started after getting some clarifications from INSDOC, for inputting the entries in the format required for union catalogues. The CHECKIN Processor of the MINISIS has been tested for serials control with some sample inputs & databases. The regular serial control will be started for Journals subscribed for 1990.

Standards--In view of standardization required for networking purposes, the library has adapted some standards in the hope that the

same will be used by other participants in the Networks. As a first step it changed its system of cataloguing to AACR II and the computer input conforming to CCF. It is using the Library of Congress subject headings and standard thesauri like UNBIS, SPINES and Macrothesaurus.

The Library has ambitious plans towards adopting the latest information technology. The catalogue is expected to be online within an year or so with terminals provided in the user areas and work places. Some important databases available on magnetic media are proposed to be subscribed. The Library is also taking active interest in participating in the networking plans at different levels like DELNET and INFLIBNET.

DESIDOC Online Catalogue Project

DESIDOC has taken up Online Catalogue project which primarily involves conversion of card catalogue into machine readable form. This database includes books, reports, patents, standards, specifications, series publications etc. At present the entire collection of defence science library is as under: Library: 47,000; Reports: 84,000.

In first phase it was decided to consider the document collection from 1981 onwards. The main activities under this project are:

- (a) Software refinements
- (b) Data capturing
- (c) Data entry
- (d) Proof reading
- (e) Data editing
- (f) Database creation
- (g) Testing

The project was completed in 1743 mandays and is operational since November 1989.

Software refinements:—DESIDOC initially developed the software for Online Catalogue for use on PC and PC compatibles (single user system). However, since this project was to be implemented on multi-user environment, the software was refined for multi-user environment. (i.e. Xenix/Unix Ver 2.3). The software creates and updates invert files for searching keys, namely, author's name, descriptors/keywords, class no., report/accession/patent no., a lot of refinements were therefore made in the software for handling such a large database.

Data capturing:—This process involved following operations:

- Filing in the data input sheets in CCF format
- Editing of fields as per AACR II rules
- Checking of codes
- Selection and standardization of keywords using TEST thesaurus.

This activity involved approx. 1433 mandays for 11,550 documents. The students of B.Lib.Sc from Delhi University were used to carry out the routine jobs while the technical and more intellectual jobs were done by DESIDOC staff.

Data entry:—Data entry was done on INTEL-80386 based system under SCO-Xenix operating system. Four terminals were used for data entry operations. Data entry software was written by DESIDOC.

Proof reading:—Proof reading involved checking of entered input sheets for spelling errors, typographic errors etc. Data entry, editing and proof reading activities took around 250 mandays of the total

mandays mentioned above. Optimum speed in proof reading could not be achieved because of the illegible handwriting used by some students while filling in the input sheets.

Data editing:—This was done by same set of people who have done data punching. Separate software was written for updation of fields, entry of new tags and positioning them at proper place. This software also includes delete module to delete wrong entered entries.

Implementation:—The entire operation took 60 mandays because the software was again refined as it was working very well on test data but giving variety of problems in bulk data.

Hardware:—Xenix-80386 based system with 4 terminals.

Expenditure:—The estimated cost of the total job for 11,550 documents is as follows:

| | | | |
|------------------|---|-----|------------|
| Data punching | : | Rs. | 40,200/- |
| Data preparation | : | Rs. | 95,000/- |
| Implementation | : | Rs. | 12,000/- |
| Grand total | : | Rs. | 1,47,200/- |

Total input sheets = 11,550

Conversion rate per input sheet = Rs 12.70

Problems faced:—No proven agency was available for undertaking data capturing jobs in CCF. Also no agency was available to punch data in leader, directory i.e. ISO-2709 format.

GIST Transcript Card for Indian Scripts

Now you can work in any of the 14 Indian scripts on IBM-PC compatible using the Transcript Card developed by Dr. Mohan Tambe, formerly of IIT Kanpur and presently CDAC at the University of Poona, Pune. This is Dr. Tambe's latest in Graphics International Script Technology (GIST). It enables one to enter the text in any Indian language and the PC does the transcription. The card works with all standard PC software packages like WORD STAR, d-BASE, FOX BASE and also CDS/ISIS. For further details contact Dr Mohan Tambe CDAC, University of Poona, Pune 411007.

Data for Discovery: 12th International CODATA Conference 15-19 July, 1990

The 12th International CODATA Conference, 'Data for Discovery, has been organized around invited presentations from speakers representing 12 countries on six themes: Production of Global Change, Spatial Databases, Materials Data Systems, Expert Systems and Other Knowledge Tool, Trends in Integration of Information Across Biology, and Impact of New Technology on Data Handling.

The Keynote Address, "Future Directions of Science and Large Scale Scientific Computing," will be given by Professor of Physics K.G. Wilson, Ohio State University. Those desiring detailed information on the Conference Programme should address 12th International CODATA Conference, Applied Information Technologies Institute, 1880 Mackenzie Drive, Suite III, Columbus, Ohio, 43200, USA.

Computer Communications Symposium

The Institution of Electronics and Telecommunication Engineers (IETE), Chandigarh Centre, is organising a two-day National Symposium on Computer Communications at CSIO, Chandigarh on April 11-12, 1990. The board objective of the Symposium is to bring together scientists, engineers, academicians, industries and policy makers to share their views and to evolve strategy for accelerating growth in this important emerging area.

The National Symposium will have five technical sessions and a session exclusively reserved for a panel discussion for consolidation of views, evolving appropriate strategy and drawing recommendations for considerations of the Government.

The technical sessions scheduled are:

1. International Scenario in Computer Communication.
2. Data communication and network management systems
3. Software standards and protocols in Computer Communications.
4. Present scenario in India and perspectives for 1990s.

Registration fees for the seminar will be as follows:

Sponsored delegates Rs. 250/-; Individual Corporate members Rs. 100/-; Individual students members Rs. 50/-.

The registration fee should be sent in favour of Hon'y. Secretary IETE, Chandigarh Centre, CSIQ, Sector 30, Chandigarh.

CAD/CAM, Robotics Conference

Robot-aided manufacture and vision and speech for man-made machines were among issues discussed at the fourth International Conference on CAD/CAM, Robotics and Factories of the Future, December 19-22, 1989.

About 400 delegates from India, the United States and 10 other countries attended the conference at the Indian Institute of Technology, New Delhi, focusing on computer-aided design and artificial intelligence to be used in factories of the future.

The conference brought together researchers and practitioners from government organizations, industries and academia interested in utilizing CAD/CAM (computer-aided design, computer-aided manufacture) and robotics to address productivity-enhancement issues.

Keynote speakers at the four-day conference were Dr. Raj Reddy, director of the Robotics Institute at Carnegie-Mellon University, and Dr. A. Vidyasagar from the Centre for Artificial Intelligence and Robotics in Bangalore.

Dr. Raj Reddy said India should consider the establishment of dualpurpose factories in the defence sector. These factories, which would normally be used for defence purposes only, could be tailored to civilian applications with minor changes in the robot software.

Describing factories of the future, Dr. Reddy said "fears that widespread introduction of robots leading to self-operated factories would displace humans are unfounded.

"Experience has shown such self-operated factories have to be compatible with human operations," he said.

He said the complexity of emerging factories has changed several concepts of manufacturing where humans used to be supervisors.

Supervisory roles have now been reversed, Dr. Reddy said. While humans used to supervise machines in factories earlier, computers are now being increasingly used to aid operations on production lines.

India and the U.S. could increase cooperation in robotics to aid India's efforts at industrial liberalization, he said.

Dr. Reddy, currently the president of the American Association of Artificial Intelligence, was presented the Legion of Honor by President Mitterand of France in 1984. His present research activities in the United States included the study of Artificial Intelligence, man-machine communication, applications-specific computer architectures and rapid prototyping. Prior to joining Carnegie-Mellon's faculty in 1969, he was assistant professor of computer science at Stanford University and an Applied Science Representative at IBM Corporation.

After Dr. Reddy's address, Professor S. Sampath of the Indian Defence Research and Development Organization chaired a special panel discussion on "Factories of the Future."

In his address on the relevance of robotics to developing countries, Dr. Vidyasagar said developed countries like the United States could play a leading role in expanding the use of robots in India.

Robots in India— Potential robot applications in India, he said, include the manufacture of military aircraft and space vehicles, routine jobs in nuclear reactors, handling of nuclear fuel and laying and defusing underwater mines.

Dr. Vidyasagar said many high-precision jobs require the use of robots and Indian companies aiming for the export market would have to go in for widespread robotization to make the production costs competitive.

Dr. Vidyasagar said the centre for artificial intelligence and robotics in Bangalore had launched a program to develop light-weight robots which use relatively less powerful motors and more powerful computers.

This would help develop a robot which would cost less than Rs. 500,000, which is far less expensive as compared to a typical industrial robot in the United States which costs between \$ 50,000 and \$ 100,000.

He said robots should be built to work in the existing production facilities. The robots must fit the job and not the other way around, he said.

The fifth conference in this series will be held in November 1990 at the Old Dominion University in Norfolk, Virginia.

POPLINE Database in CD-ROM

The National Documentation Centre of the National Institute of Health & Family Welfare has secured the POPLINE (Population Information On line) database for the centre to serve users in India.

POPLINE provides bibliographic citations and abstracts of the worldwide literature on population and family planning

The World's largest bibliographic population database, POPLINE brings together in an easily accessible computerized system published and unpublished literature in most languages. An online search rapidly locates citations and abstracts relevant to a particular topic. Search results can be formatted to meet user's needs. An alphabetical list by author, by title, or chronologically by date of publication are only a few of the formats available.

POPLINE contains more than 160,000 citations from the worldwide literature on population, family planning and related health care, law, and policy issues. The POPLINE database presents citations and abstracts from 15 types of publications, including

journals, monographs and technical reports. About 30% of the records represent difficult to-obtain unpublished documents. The majority of items date from 1970, but some sources date from as early as 1886. Ten percent of the records are from non-English language sources, but all POPLINE records are in English.

Presently the search and retrieval of citations from POPLINE CD-ROM is free of cost. Contact Senior Documentation Officer, National Documentation Centre, National Institute of Health and Family Welfare, New Mehrauli Road, New Delhi-110067.

Andhra Daily On DTP

Deccan Chronicle, a leading local daily of Andhra Pradesh is the latest publication to have gone the DTP way. The Vijayawada edition of the newspaper has recently interfaced its existing phototypesetting system (PTS) with that of Visionlab's DTP systems. Both English and Telegu text can be entered and edited on the Visionlab's DTP system which is said to be the only one that offers compatibility with PTS systems. It supports full newspaper page composing and WYSIWIG preview in English and Indian languages, enabling the display of the text in all point sizes, full graphics and in all mathematical expressions. Another advantage is that text entered on the Monotype terminals can be read into Visionlab's system. The company claims that it is the only vendor in the country whose DTP system operates under Unix and supports upto eight multilingual terminals.

Virus Baffles Users

People are not the only ones who get stoned these days it seems--computers do too. In a replay of the drama of a few months ago, computer users in Bangalore have been struck by a virulent new strain of virus named Marijuana. Like the earlier C-Brain virus, the new one surfaced in one of the large tutorial institutes and proliferated so rapidly that in less than 10 days time, the list of the afflicted read like a virtual who's who of users in the city. Potentially more dangerous than its predecessors, Marijuana clammers onto a computer's memory through an infected floppy from where it gets into the system hard disk. Once in there, it proceeds to systematically wipe out the vital file allocation tables, rendering all the data stored in the disk totally irretrievable. Like the C-Brain virus however, Marijuana is easily detectable since it announces its presence through a rather cryptic message that goes: 'Your PC is stoned. Legalise Marijuana'. Apparently it is not just users in Bangalore who have been threatened by the virus onslaught. A major national bank and an engineering college in Bombay were also badly hit last December.

IDM-Infomix Tie-up

The Bombay-based International Data Management Ltd. (IDM) has entered into an exclusive tie-up with Infomix Software Inc., of USA, credited to be the largest Unix database application company. The first company to have introduced a commercial and also an SQL-based RDBMS for Unix, Infomix is also rated to be the second largest Unix software company in the world, second only to AT&T. With the tie-up IDM hopes to provide Indian users an opportunity to manage information on powerful Unix-based computers, complimentary tools that offer multi-platform access to data and connectivity software--Computers Today, Dec. 89.

Universal Agricultural Thesaurus Discussed

Representatives from the National Agricultural Library (NAL), Commonwealth Agricultural Bureaux International (CABI), and the Consultative Group on International Agricultural Research (CGIAR) initiated discussions on the need for a universal agricultural thesaurus at a meeting, at the United States National Agricultural Library, Beltsville, Maryland.

Staff from FAO AGRIS, CABI, CGIAR and NAL participated in a follow-up discussion meeting in Washington, D.C and it was agreed that a comprehensive universal agricultural thesaurus and gateway system would help researchers and scholars find information on specific topics in the multitude of agricultural databases available today. The detailed, scientifically sound, multilingual vocabulary would provide a consistent way of describing the major activities and concerns in agriculture and related disciplines; list systematically the taxonomic names of the most important plants, animals, and micro-organisms, and identify a common terminology for areas of interest for which no standards currently exist, for example, to describe agro-climatological regions. The gateway would provide an interface between existing retrieval systems and the comprehensive thesaurus; enable all users to take advantage of the enhanced linkages within the thesaurus to facilitate access to older materials with differing descriptors, and help all users with existing databases to take advantage of the enhanced thesaurus.

Major beneficiaries would be developers and users of project databases, agro-climatological information systems, agro-ecological information systems, geographic information systems, bibliographic databases and genetic resources databases. The major issues which will be considered in the development of this thesaurus are governance and management, form and content, systems and funding.

For further information on these discussions and the follow-up activities, contact Pamela Andre; Chief, Information Systems Division, National Agricultural Library, Beltsville, Maryland, USA.

Rural Development Information System

The Rural Development Information System (RUDIS) is based on a research project, begun in 1981 at the University of Ibadan (Nigeria), whose goals included: production of information resources suitable for use by non-literates, emergence of a prototype information support system for rural development projects in Nigeria and Africa, formulation of a programme of training library and information personnel for services in a non-literate environment, and giving an African orientation to library and information sciences.

The activities of the RUDIS project include the following:

- a small experimental library project near Ibadan to develop and test the methodology;
- Field surveys of the information environment of non-literates in Nigerian villages;
- graduate courses are being conducted at the University of Ibadan to prepare students for research exploration of the information needs of rural non-literates.

A model research project is envisaged that can be adapted to other communities and tested. Research materials and publications are also planned. Further information can be obtained from Professor B.O. Aboyade; Department of Library, Archival and Information Studies; University of Ibadan; Ibadan, Nigeria or c/o FID/ET Clearinghouse; School of Information Studies; Syracuse University, Syracuse, NY 13244; USA.

Adoption of ISO International Standards

At its 28th session, the Working Party on Facilitation of International Trade Procedures of the United Nations Economic Commission for Europe (ECE) and the United Nations Conference on Trade and Development (UNCTAD) adopted a revised version of its 1975 Recommendation No. 7: Dates, Time and Periods of Time, based on new International Standard ISO 8601 Data elements and interchange formats--Information interchange--Representation of dates and times. The revised Working Party Recommendation uses



Participants at Course I : Management Training for Librarians

ISO 8601 to establish a methods for a standardized and unambiguous Management Training for Librarians all-numerical designation of a given date, a given time of the day and a given period of time.

ISO 8601 describes a worldwide system for representing, in numeric format, calendar dates, ordinal dates, dates identified by week number, periods of time, and combined date and time of day. This international standard retains the most commonly used expressions for date and time of the day and their representations from earlier standards, which it replaces. The universal system proceeds from larger to smaller elements. For example, 1989-12-05T23:20:50 designates 5 December 1989, 23 hours, 20 minutes, 50 seconds. --ISO Bulletin, Vol. 20, No. 4, 1989.

World Translations Index (WTI) Goes Online on DIALOG.

WTI is the unique source for existing translations of literature relating to all fields of science and technology. Translations cited are in Western languages, and nearly 70 percent are translations into English.

The database is the machine-readable version of the publication World Translations Index. WTI contains bibliographic citations, referring both to the original and translated documents, collected by the International Translations Centre (ITC) and the "Institut de l'information scientifique et technique--Centre national de la recherche scientifique" (INIST CNRS), Paris, France.

As of September 1989, the file (295) on DIALOG contains over 160,000 citations of translations dating from 1984 to the present. In the near future the backfile to 1979 is to be added, which will bring the total number of records to over 295,000. Monthly updates will give an annual addition of 30,000 records to the database.

In addition to the database, and the WTI publications, the ITC, in co-operation with the British Library Document Supply Centre (BLDSC), Boston Spa, United Kingdom, also publishes Journals in Translation. This bibliography, listing 1,121 titles, gives a detailed description of published journals containing translations. Both WTI and JiT give a comprehensive view of existing translations today.

A series of four courses on management for librarians and library administrators was held in Hyderabad from October 16 to November 18, 1989.

The courses were offered by the management faculty of the Institute of Public Enterprise, Hyderabad. In all, about 75 librarians from over 70 institutions including NISSAT centres, National documentation centres, universities, regional colleges of education and engineering public enterprises as well as government departments took part in the intensive course in batches of twenty.

The courses covered a wide range of topics such as management concepts, organisation design and dynamics and Management by Objective (MBO). The other topics covered included performance appraisal, inter-personal communication, managerial leadership and motivation, etc. In addition to costing and pricing as well as marketing for non-profit organisations. Also topics such as Management Information System (MIS) and Management of computerisation were covered at some length.

The methodology of training included formal lectures, participants' case discussions, case studies, as well as syndicate work. Each participant was asked to present and discuss his/her own managerial problems and the syndicate work was evolved around these problems. In general, the work included setting up of managerial objectives, identifying the problems as well as offering potential solutions.

The courses were evaluated by individual participants using the standard evaluation form prescribed by the Dept of Personnel, Government of India.

Each course of 6 days' duration was designed for 20 participants. The actual participation was 19 library professionals per course with the average age of the participant at 45 in the age group 35 to 50. The course was received very well with an overall rating of 2.65 in the 3 point scale.

On the basis of this course experience and suggestions received from the participants, the course material is being revised. It is proposed that a few more such courses may be organized in 1990 so that several more of the senior librarians will be exposed to the modern concept of management.

FID Establishes Research Reviews

FID has launched a new series: The Research Review in Information and Documentation which will appear quarterly and will be published in parallel in the FID News Bulletin and in the FID professional journal *International Forum on Information and Documentation*. It replaced R&D Projects in Documentation and Librarianship.

Research Review in Information and Documentation will have two main themes. The first theme will focus on research in specific countries, describing new and innovative work with the stress on areas that are to develop in the future. The other main theme will concentrate on subjects that are currently under study and seek to identify new trends, research aspects that should be explored, etc. In addition, international meetings on research topics and, to a lesser extent, new publications will be considered for inclusion.

Research Reviews in Information and Documentation will feature articles by leading professional researchers drawn from a wide international professional community.

Mini-Micro CDS/ISIS Application for High Energy Physics Preprints

The European Organization for Nuclear Research (CERN) has developed, through international co-operation, a High Energy Physics (HEP) Preprints Bibliographic Database (PREP) which is an indispensable source of current information for HEP. Indeed, one particular feature of the HEP community is its "preprints culture" with a highly organized flow of as yet unpublished manuscripts which are circulated among more than 1,000 institutions. Consequently, efforts have been made by several laboratories to produce preprints and reports databases but co-ordination of these efforts appears necessary and requires international co-operation. An important user requirement in this context is that the database update and corresponding hardcopy display be ready in the major laboratories within one week after arrival of the material. Initiatives have been taken to create a system of shared responsibilities with decentralized input in a common exchange format. The organizations involved are CERN (Switzerland), SLAC (Canada, USA), DESY (Federal Republic of Germany), KEK (Japan) and IAEA (INIS Secretariat, Austria).

In order to facilitate the participation from less developed countries, a stand-alone application, MicroPREP, based on the new version of Unesco's Mini-Micro CDS/ISIS, has been developed.

The powerful and user-friendly database management features offered by Mini-Micro CDS/ISIS allow the user to perform almost all operations available in the mainframe system, such as on-line fast search, data entry, production and printing of catalogues and indexes, specialized application development. To operate MicroPREP, a minimum PC configuration with two floppy disks or one floppy disk and one hard disk is required.

In order to give the potential users of MicroPREP a general introduction to the system, CERN Scientific Information Service (TH/ISIS) distributes a sample MicroPREP system on two diskettes containing the actual Micro CDS/ISIS program and 243 records of the PREP database. This report provides step-by-step instructions for getting started with data entry and information retrieval, and allows users at the same time to test the system.

It is planned to make several years' bibliographic records on preprints available for local use. The basic idea of decentralized processing is that, as a counterpart contribution, the MicroPREP centers will undertake to collect HEP preprints within their country/area and enter appropriate "local" PREP records, which will subsequently be downloaded to diskette at regular intervals and submitted to CERN (transmission via Email is optional). On the other hand, Micro-PREP centers will receive "global" PREP updates from CERN on diskette regularly, which can be used to keep the MicroPREP file up-to-date by means of an automated merging routine.

For further information, please write to MicroPREP Service, CERN (TH/ISIS) 1211 Geneva 23

First Multi-lingual Agricultural Research CD-ROM Released

The Consultative group on International Agriculture Research (CGIAR) has released "Food, Agriculture, and Science", the first in a series of CD-ROMS which will eventually constitute a full agricultural library with 6,000 titles. Trilingual aids in English, French and Spanish on floppy disks accompany the CD-ROM.

Among the titles included are a farmer's primer on rice growing, field problems of beans in Latin America, potato research, agriculture-aquaculture farming systems, trends and projections of food in the Third World and sorghum breeding.

This new CD-ROM will be distributed free of charge to interested institutions in developing countries by international agricultural research centres, and will be sold in the United States for USD99 from Knowledge Access International, Mountain View, CA 94043. For more information, contact CGIAR, C/o World Bank, 1818 H Street N.W., Room N 5063, Washington, D.C. 20433, USA.

Scanfile: On-line Translation

Japanese scientific and technical databases will soon be instantly translated on-line into English by Japanese manufacturer, Fujitsu. The system called Scanfile is expected to be launched in late 1990 in the United States.

United States users will be able to dial up the Fujitsu mainframe in Japan. They will then input requests, which proprietary software, called Atlas, converts into Japanese commands. These are transmitted to the database, where all files on the topic requested are searched. Titles and abstracts are converted into English and sent back to the user in the United States. The process takes only a few minutes.

While pricing has not been finalized, it is expected that Scanfile will be sold on a subscription basis. Similar translators are planned for four other languages: Chinese, German, Korean and Spanish. --Information World Review, No. 41, 1989

Managed Data Network Service

British Telecom (BT) has introduced a new managed data network service in order to more accurately predict data networking costs. The service will run on BT's public data network PSS and will allow customers to send as much traffic as they wish in return for a fixed annual sum. The creation of this service is in response to a demand for more closely tailored customer services. BT will undertake network design and provide a nominated project manager and a system engineer. There will also be a singled dedicated fault reporting point with a four-hour response time and automatic escalation procedures. --Computer Communications, Vol. 12, No. 4, 1989.

Directory of Indian Processed Food and Allied Industries

The Central Food Technological Research Institute (CFTRI), Mysore will be shortly releasing the above Directory. Included in the Directory is a listing of over 4000 major food processors/exporters in the area of fruits, vegetables, bakery and confectionery, dairy, fish, meat and poultry, additives, packaging, etc. Additional information included is food laws and regulations; finance, license and quality control agencies; training organisations; R&D agencies and other development agencies. The Directory is divided into six major parts, i.e. (1) Processed Food Industries (2) Allied Industries, (3) Exporters, (4) Industrial Production and Regulation Agencies, (5) Indian Food Laws, Regulations and Specifications, and (6) Appendices.

The 752-page Director is an invaluable and indispensable guide to food processors, traders, exporters and others who wish to have an overview of the food processing sector. For easy reference, the entries are arranged alphabetically giving name of the manufacturer/exporter, address, products (trade names), phone numbers and telegraphic code. An Index giving information on range of products, flavours and additives available in the country adds to its usefulness as a comprehensive reference guide.

Price Rs 500/- plus packing and postage (Regd. Post) Rs. 25/-. Copies can be had from the Sales and Distribution Officer, FOSTIS, CFTRI, Mysore-570013.

International Bibliography Available

This reference source is an annotated bibliography of the publications produced by intergovernmental organizations ranging from the United Nations, the World Bank, OECD and EC to smaller organizations. The bibliography is divided into two sections: the bibliographic record and the periodical record. Also included are an Organization Index, a Title Index and a Subject Index. A separate section on "How to Acquire Publications" gives information on ordering the cited publications. The bibliography is published quarterly. The yearly subscription price which includes handling and shipping is USD90 in the United States and Canada and USD98 in other countries. Prepayment is required on all orders. Orders and inquiries can be directed to Kraus International Publications, One Water Street, White Plains, NY 10601

Information 90

A major international conference in the field of Library and Information will be held at the Bournemouth International Center, United Kingdom, from 17 to 20 September 1990. Further information from: Concorde Service Ltd., 10, Wendell Road, London, W12 9RT.

Current Topic: Editor Computer

STYLE is the man, it is said. But it may soon be 'style is the computer', if the latest language processing computers now in use in the US find universal application. Hitherto, we are familiar with computers programmed to tell us the correct spelling, synonyms and upper and lower cases of words. The latest ones are more invasive. They scan your writing, analyse your style, suggest which active verbs to use, improve your syntax, and in one case, provide automatic translation in five languages.

The four varieties of language processors in use are known as the writers' workbench, Critique, Max and Rina, each specialising in language processing in its own way. The Critique, for instance, lays down that the words in a sentence have maximum impact when they are limited to 15 words in technical manuals, 20 words in business letters and 23 words in academic papers, newspaper articles and fiction books.

Researchers admit that in the electronic age we are "more promptly -- but less judiciously informed." This is because the demands of speed and efficiency have chipped away at style and wordage. Besides, they concede that good editing demands interpretative powers and decisions, both items at which language processors have limitations. But writers and students in some 60 universities and schools in the US have found the Colorado University's Writers' Workbench computer handy. Companies doing abroad find Max very useful since it provides automatic translation for some 8,000 English words approved by it in five languages.

A study of the language processors undertaken by Ms Barbara Wallraff recently showed up the strength and weakness of language processors. She maintains there is still a long way to go before computers judge not only structures, but meaning and the thought processes too. Most readers take in both the explicit and the implicit connotations or meanings of words. "Knowledge is not just a data-base," the expert says and we should not feel humbled by the majesty and infallibility of technology.