

REGIONAL INITIATIVES AND TRENDS-OTTAWA REGION

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ABSTRACT

This report is a sampling of developments in information science in the Ottawa area, developments at local, national and international levels. Developments in library automation, generalized information systems, data base creation, on-line searching and continuing education are discussed. Agencies covered include the Ottawa Public Library, CISTI, the National Library, Carleton University Library, IDRC, Energy, Mines and Resources, the Data Clearing House for the Social Sciences and QL Systems Limited.

RESUME

Echantillon des réalisations en sciences de l'information dans la région d'Ottawa, réalisations aux niveaux local, national et international. On présente les réalisations en automatisation des bibliothèques, en systèmes d'information, en création de banque de données, en repérage en ligne et en éducation permanente. Les organismes suivants sont couverts: Bibliothèque publique d'Ottawa, ISIST, Bibliothèque nationale, Carleton University Library, CRDI, Énergie, Mines et ressources, Centre de données en sciences sociales et QL Systems Limited.

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INTRODUCTION

Activities in information science in the Ottawa area can be seen at three different levels. Individual institutions have developed systems or have joined networks for local purposes. Many organizations in Ottawa offer national services. And Ottawa is also the major Canadian centre for links to international information systems. A sampling of current developments at all three levels will be given in this report.

LIBRARY AUTOMATION

Shared Cataloguing

The trend in library automation is increasingly towards cooperative network developments. Two major Ottawa libraries decided to join shared cataloguing networks during the year. The Ottawa Public Library became one of the few non-university libraries in the UNICAT/TELECAT consortium. Ottawa decided to join a consortium rather than just use the services and source files of the University of Toronto Library Automation Systems (UTLAS) because of the benefits of sharing original cataloguing. Ottawa has encountered some practical difficulties in joining a university based consortium—for instance not having access to the Inter-University Transit System (IUTS), the primary means of communication between UNICAT/TELECAT members. CISTI also joined a shared cataloguing network—first UNICAT/TELECAT on a five week experimental basis and later UTLAS. The UNICAT/TELECAT experiment was designed to yield information on the extent of cataloguing overlap between CISTI and the UNICAT/TELECAT libraries. CISTI found an overall retrieval rate of 58% predominantly from LC-MARC source files. This was one of the reasons CISTI made a different decision from the Ottawa Public Library and decided to contract for services directly from UTLAS with access only to the source files. CISTI is using UTLAS to begin building a cataloguing data base. Tapes from UTLAS will be loaded on CAN/OLE thus making CISTI cataloguing accessible across Canada. However, the ideal remains one system or network for both cataloguing and retrieval.

DOBIS

During the year the National Library and CISTI continued their involvement in Phase II of the DOBIS project. In Phase I DOBIS was found to be technically and functionally sound, but in need of some modifications and improvements. Phase II (April 1977-March 1979) objectives are to develop the modifications required to use the DOBIS cataloguing and Searching modules for pilot projects and to operate pilot projects at CISTI and the National Library (NL). The National Library pilot project will be in the union catalogues area. Serials held by NL will be enter-

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currently uses the University's Xerox Sigma 9 computer and is investigating acquisition of intelligent CRT terminals. Carleton also operates a Plessey circulation control system using bar coding.

National Library

The National Library has continued development of the Canadiana/Cataloguing System. The system now handles audiovisual material so all parts of Canadiana are now automated. Beginning with the January 1978 issue, Canadiana is also available on microfiche. Canadiana. Microfiche is a COM (Computer Output Microform) version of the prooflist for Canadiana, one of the interim products in many steps to production of the printed Canadiana. The microfiche version can be prepared for distribution within a few days, whereas the production and distribution of the printed issue may take as long as two months. Use of microfiche will also permit the production of monthly cumulating indexes. To date (February 1, 1978) there are approximately 70 subscribers to Canadiana. Microfiche.

The National Library is also continuing to expand its authority system. All names used in Canadiana are now included in the system and bibliographic records need only include authority control numbers. There is also a biweekly COM service for authorities with 107 subscribers. French subject headings are now being added to the system in cooperation with Université Laval and supplements to the eighth edition of Répertoire de vedettes-matière will be published by Laval from COM produced by the NL authority system beginning spring 1978.

The National Library makes MARC records from a variety of sources and in varying formats available in the CAN/MARC Communication Format through the MARC Records Distribution Service (MRDS). In 1977 MARC records produced by the British National Bibliography were added to this service.

GENERALIZED INFORMATION SYSTEMS

ISIS

ISIS (Integrated Set of Information Systems) is a software package developed by the International Labor Office and introduced in Canada by the International Development Research Centre (IDRC) which is used by several Ottawa libraries and information services. ISIS processes bibliographic data, provides both batch and on-line (interactive) retrieval capabilities and has built-in library management routines. ISIS was designed to run on IBM 360/370 computers and in Ottawa two versions were available through the facilities of Alphatext Limited, the IDRC version which incorporated a multi-lingual thesaurus feature and the National Museum's version with modifications and enhancements to support the Museum's National Inventory System of museum collections across Canada.

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ed into DOBIS in conjunction with the utilization of DOBIS by the Union Catalogue of Serials. In addition, union catalogue accessions reported to NL in machine-readable form will be entered into DOBIS. The National Library announced that it would accept machine-readable accession reports as of November 1, 1977 and approximately 20 libraries of all types and sizes have requested copies of a reporting guide containing detailed information on machine-readable accessions. The DOBIS pilot at NL will thus test the ability of DOBIS to enter accessions and locations reported to NL by Canadian libraries into the union catalogue and to retrieve locations of materials held in Canada.

At CISTI, conference proceedings will be catalogued as the Phase II DOBIS pilot. This will test the ability of DOBIS to aid cataloguing of complex material and will allow CISTI to compare the use of DOBIS to that of UTLAS. The modifications to DOBIS under development include expanding code tables, maps and data base layouts to cover the full CAN/MARC format and developing programs to both input and output full MARC records to and from the DOBIS data base.

Federal Libraries

Another significant force for cooperation in the Ottawa area is the Council of Federal Libraries. The Council's Committee on Integrated Library Systems has started to assess the impact of DOBIS on federal libraries. This Committee will continue to work with NL and CISTI in defining federal library requirements for the system particularly for shared cataloguing.

Many federal libraries are also networks within themselves. In Fisheries and Environment Canada, ELIAS, the batch-mode library automation system developed by the Departmental Library in Ottawa is now being used by 11 libraries in the Department across the country. The major users to date are the Atmospheric Environment Service, Downsview, Ontario and the seven libraries of the Department's Quebec Regional Library Service. A microfiche union catalogue is produced for all the libraries in the Environment network.

Carleton University Library

In addition to cooperative developments, Ottawa libraries are also developing and enhancing local systems keeping in mind interfaces with networks. Carleton University Library has been operating an automated cataloguing support system for several years which has successfully produced cataloguing products including cards for Carleton's own catalogues and for the National Library's Union Catalogue. Carleton has begun development of a new MARC-based Catalogue Support System beginning with serials. The new system will integrate serials holdings information with cataloguing data and will produce a variety of output products including tapes in the Mini-MARC format for the Union Catalogue. The Library

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Other Ottawa ISIS users are the Canada Council on Social Development, the Canadian Sport Information Resource Centre, the Data Clearing House for the Social Sciences, the Department of Industry, Trade and Commerce, and the Department of Labour.

IDRC

IDRC has completed development of a minicomputer based information system to process bibliographic data, to provide many automatic procedures for managing IDRC's library needs and to permit retrieval from several large data bases. The system is being implemented on an in-house minicomputer, a Hewlett-Packard 3000 Series II. This new system embodies many ISIS concepts but it has been designed to conform to the relational model of data bases. In addition, a fully interactive user language has been designed which enables the user to do anything from data entry to multi-parameter retrieval or from generating a KWIC index to producing an accounting of outstanding book orders.

The IDRC system is sufficiently generalized to permit the creation of data bases of many different types. The concept of data definitions is an integral part of the system software. The system has made use of manufacturer supplied system software such as the file system, the text editor, and the sort/merge software. To minimize maintenance of the package no modifications have been made to this software.

The system is small and stand alone; it is designed for implementation in areas where an inexpensive facility is required. IDRC is no longer operating its version of ISIS on Alphatext.

DATA BASE CREATION

Secondary Information

Many Ottawa based agencies are concerned with bibliographic control of Canadian materials. At the general level, primarily concerned with books in all subject areas, the National Library contributes to the program of Universal Bibliographic Control (UBC) through the national bibliography Canadiana and the Canadian MARC Tape Service. The National Library also contributes data on Canadian serials to the International Serials Data System (ISDS). There are also many activities in specific subject areas. For example the Technology Information Division of the Canada Centre for Mineral and Energy Technology (CANMET), a branch of the Department of Energy, Mines and Resources (EMR), maintains an in-house data base of mining technology information and files on mineral processing information and energy information. CANMET also contributes Canadian information to the Mining Technology Clearing House and the Coal Information Service of the International Energy Agency.

The Canada Centre for Geoscience Data, also part of EMR, maintains the Canadian Index to Geoscience Data, a computer based referral file of

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descriptions of documents on the Canadian landmass. Other federal agencies and provincial agencies contribute to the Index. However, Canadians are still very dependent on U.S. based secondary services for access to information about Canada. The Centre would like to expand its contribution to international services.

There is similar activity within Agriculture Canada. Agriculture contributes Canadian information to AGRICOLA, the U.S. Department of Agriculture data base and to the Commonwealth Agricultural Bureaux data bases. And there is an increase in interest in the Department in participating in AGRIS.

WATDOC, the Water Resources Document Reference Centre of Fisheries and Environment Canada continues to maintain and provide access to its Canadian water resources data bases which are available through QL Systems Limited. WATDOC also relies on a network of contributing agencies. The Department of Fisheries and the Environment also contributes to the FAO/IOC Aquatic Sciences and Fisheries Information System (ASFIS). A test data base of Aquatic Sciences and Fisheries Abstracts (ASFA) is now available.

Atomic Energy of Canada Limited continues to be the Canadian centre for INIS, the International Nuclear Information System. INIS is perhaps the most fully developed decentralized cooperative world wide information system and has set a pattern and a standard for other international developments such as AGRIS and ASFIS.

Primary Information

Sharing of non-bibliographic data is also gaining prominence. The Data Clearing House for the Social Sciences published the first test edition of the Social Science Data Inventory in 1977 followed by the 1977 annual edition. CANISS, the computerized inventory of social science data files and data centres on which the published inventory is based, now resides on the National Museums of Canada's version of ISIS on Alphatext Limited facilities. The Data Clearing House began offering referral services based on searches of the CANISS data base in an effort to encourage secondary analysis of existing data and avoiding duplication of research.

There was also evidence of activity in cooperation regarding scientific data with an Ottawa meeting of the ICSU/CODATA Task Group on Space and Time Dependent Data in February 1977. Such data is collected by a wide range of disciplines particularly in the earth, life and astronomical sciences but the transfer of useful methodology from one discipline to another has been random. At this international planning meeting (under the chairmanship of Dr. R.F. Tomlinson of Ottawa) formal cooperation between the international scientific disciplines was initiated and agreement was reached on the structure and basic content of a project that would improve and accelerate the useful exchange of knowledge of space and time dependent data handling methods.

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ONLINE SEARCHING

This past year has seen a much greater awareness and interest in online access in Ottawa, than any previous year. CASLIS workshops, NL and CISTI seminars and workshops have all been over subscribed. More libraries have contracted with Lockheed, SDC/INFOMART, BRS, CAN/OLE and QL than ever before (this from observation, rather than fact, since all of the systems consider the numbers of users to be proprietary information).

Perhaps the most interesting fact is that Canadian data bases have at last been made accessible online. QL Systems Ltd. has more Canadian data bases than any of the other systems, although SDC/INFOMART is also thinking of Canadian needs by adding such data bases as Canadian Business Periodicals Index and the Canadian Newspaper Index.

CONTINUING EDUCATION

Canadian library schools at the University of Toronto and the University of Western Ontario, responding to requests for credit courses and continuing education in the Ottawa area (now without a library school) have set up a series of credit courses, some of which are in the area of automated library functions. The library and information science organizations in the Ottawa area have also been active in offering workshops, seminars and meetings which are generally well supported.

CONCLUSION

During the year there has been considerable discussion in Ottawa both within the government and in organizations such as CAIS about the need for a Canadian information policy. There have been few concrete developments in this area. However, it is hoped that this report, which is a broad sampling of information science activities in Ottawa, shows some patterns of development and trends of productive cooperation even without an overall policy framework.

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