GEOSCAN

Geoscan is a national data base containing references to geoscience literature concerning the Canadian landmass and the offshore economic zone. The data base is funded and operated by the Geological Survey of Canada and data capture is a microcosm of federal provincial cooperation. Participants in GEOSCAN include federal and provincial geological surveys, a university library and one professional organization. Levels of participation among the agencies varies from daily updates to yearly contributions from locally maintained data bases.

As mentioned, GEOSCAN contains references to Canadian geoscience. The sources for these references include the publications, open files and internal reports of the federal and provincial geological surveys, mineral exploration assessment reports submitted by private industry, some journal articles and university theses. The latter two however, are not emphasized as there other sources for these particular documents and local priorities dictate the indexing of agency publications first.

Given the nature of a cooperative data base; for example, such things as differing priorities among our contributing agencies, variations in regional geology across Canada and occasional staff changes, it was imperative that standards for the indexing and use of virtually every field in GEOSCAN be established. To that end it was decided in 1982 to use the UNISIST standard for bibliographic records. This decision coincided with our changeover from S2000 and RAID to MINISIS and the acquisition of an HP3000 minicomputer.

The MINISIS package is a very flexible dbms and allows for the inclusion of a large number of fields and subfielded fields in the database definition. This capability permits us to maintain tight control over specific data elements and yet permits the creation of highly complex printed products by combining data elements into larger groupings of similar information. Another advantage of MINISIS is the ability to create separate views of the master database allowing us to restrict access to certain data types or groups of records.

MINISIS is command driven with a simple search language allowing for multiple display formats, individual field display, ad hoc sorting, the use of title lines for offline prints and reverse display of the search results. In GEOSCAN a typical search for a client would be something along the lines of "find me all the documents on the Alberta side of NTS reference 074 that deal with uranium." A further restriction would be to limit the result to mineral assessment files. Other access points to the data base include author, title words, corporate authors, geographic areas, geologic ages, stratigraphic, paleontological and structural terms and of course, keywords. A search on the UCHI SUBPROVINCE for example generates 57 references. At the present time, GEOSCAN is available to the public through the various libraries of the Geological Survey of Canada, the offices of our contributing agencies or through the National GEOSCAN Centre. Searches are typically done free of charge, although in instances of very large searches requiring heavy commitment of staff and resources to generate the final product, a charge is made for the service. In the near future we hope to make GEOSCAN available to the general public through the CAN-OLE search service and are currently working with CISTI to make this possible. This will enable us to fulfil our mandate of making Canadian geoscience information generally available to the Canadian public at all levels; government, academic, corporate and private individuals.