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SIXTH UNITED NATIONS CONFERENCE
ON THE STANDARDIZATION OF
GEOGRAPHICAL NAMES
New York, 25 August-3 September 1992
Item 5 (b) and (c) of the
provisional agenda\*

NATIONAL STANDARDIZATION: OFFICE TREATMENT OF NAMES; TREATMENT OF NAMES IN MULTILINGUAL AREAS

The Canadian geographical names database: An overview

Paper submitted by Canada\*\*

<sup>\*</sup> E/CONF.85/1/Rev.1.

<sup>\*\*</sup> Prepared by Barbara Bowler, Chief, Toponymy Section, National Atlas Information Service, Energy, Mines and Resources, Canada.

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The Canadian Geographical Names Data Base (CGNDB), formerly known as the National Toponymic Data Base (NTDB), is a national depository of Canada's geographical names. Because of the confusion created by a similar data base name and acronym used by Energy, Mines and Resources, in September 1990 we decided to change the name of our geographical names data base. This digital data base is composed mainly of names recorded by the Canadian Permanent Committee on Geographical Names as well as name entries from our Special Records files. Ongoing maintenance and integrity of the data base is the responsibility of the Toponymy Section of the National Atlas Information Service (NAIS).

The CGNDB now resides on a SUN-4 computer and is managed with version 6.0 of the ORACLE Relational Database Management System. Access to the information is possible using the SQL language, a standard language for relational data bases, or a full screen forms interface. ORACLE can take input from any standard ASCII file. With our available hardware, it is possible to output information on several types of media, including: 3 1/2" diskette, 5 1/4" diskette, 1/2" data cartridge tape, and 8mm cassette tape. ASCII substitutions for specific accented letters have been replaced with 8-bit characters conforming to the ISO 8859 standard and the forms interface has been modified for easier access to information. Data can be made available in ASCII or EBCDIC code, an ORACLE - Export format, or a DOS text file.

The CGNDB presently contains approximately 470 000 geographic names records. Populated place names presently constitute 14% of the name records and physical features, e.g., lakes, rivers, and mountains, make up the remaining 86%. An associated cadastral reference is usually recorded for each name, for example, a county in Prince Edward Island or a section, township, and range in the Prairie Provinces. Also a location narrative is usually recorded to relate the name to its surrounding area. An origin narrative is stored for approximately 25% of the names records; cross-references are included in many geographical names records.

Cooperative ventures with other government departments and agencies, both federal and provincial have started or been completed. For example, municipal names from the files of Statistics Canada are being matched with approved CPCGN geographical place names in the CGNDB. The purpose of this project is to correct those municipal names collected from a variety of sources and stored at Statistics Canada for the next Census. In turn, EMR will be allowed access to population data necessary for compilation of several NAIS products. We have also recently joined the Department of National Defence (DND) and the GIS Division of EMR in the effort to update the nomenclature for the Digital Chart of the World project now available on CD-ROM. The names files produced for the DCW project will also be used for future updates of the World Aeronautical Chart series produced by Aeronautical Charts; both map products are at the 1:1M scale. The CGNDB has also recently been used to compile a comprehensive populated place names list to update the gazetteer of populated place names used by the Chief Electoral Officer. During the last few years, the names offices for Saskatchewan and British Columbia have provided contract personnel to match World War Two casualty names with the associated provincial geographical names records. Canadian Parks Service contract staff and Secretariat staff have begun to assign National Park codes to features located within Canada's many national parks.

Our data base is only textual in nature and does not allow us to compile the names manuscripts digitally. These names manuscripts are still compiled manually for each map in the National Topographic System (NTS) Mapping Programme. It is hoped that in the very near future, a cooperative venture with Topographical Mapping will address the need for digital names files to accompany the digital cartographic files now sold by Topographical Mapping.

Extensive editing has to be done for each names list prepared for any NTS map sheet. An initial dump from the CGNDB will supply a categorized list, noting any approved names which fall within a particular polygon or within the boundaries of a requested NTS map sheet, e.g., 31 G/5 Ottawa. Nomenclature staff must then refer to paper map files and special records files to bring the names list up-to-date to ensure that all approved names, labels, and the sheet title are correct for the production of the next edition of this map sheet. Once completed, the names list is stored. It will be called up again for the next update to that particular map sheet or will be made available to a client wishing a digital names list to accompany a digital cartographic file.

## CANADIAN GEOGRAPHICAL NAMES DATA BASE (CGNDB) NAME RECORD

Feature Name Arviat

Name Key
ARVIAT

Latitude Region 61 **Northwest Territories** Longitude Unique 610630 940330 Status **A8** Name Change Key Generic Hamlet(1) Gazetteer Map **LBCFY** 11

055E01 Obscure Y
Border Flag

DATES DD/MM/YY CC

Decision : 01/06/89 19
Meeting : Cross-reference

CGNDB Update: 31/05/89 Eskimo Point

Location 1 : Keewatin

Location 2 :

Loc-Narr : West shore of Hudson Bay

Origin Narr:

Eskimo Point was adopted 20 April 1946 on 55 SW as a Settlement. The post office was established 10 August 1962. Eskimo Point (Hamlet) was confirmed 31 March 1980 on 55 E at 61 06 40 - 94 03 30. Name changed to Arviat 1 June 1989 on 55 E at 61 06 30 - 94 03 30. Arviat means 'place of the bowhead whale'.

## Sample output record from the CGNDB

Several of the provinces, such as Quebec, Alberta, and Manitoba, are very active in the development of their own digital geographical names data bases. Other provinces which might not have the necessary resources to develop or keep a digital names data base, can very easily tap into the CGNDB for reference, with the proper instructions. The Northwest Territories and British Columbia members of the CPCGN have recently acquired software and pertinent data from the Toponymy Section to set up territorial and provincial data bases, which will reside in PC environments. Data will be exchanged freely between our respective data bases, and specifications and procedures are now being developed. We hope that other CPCGN members will gradually be able to access information on-line and to transmit their name decisions directly to the CGNDB to avoid duplication of effort.

The time has come to move towards standard outputs and away from customized outputs derived from the CGNDB. Upon review of the requests filled over the last few years, we noted that certain products were commonly requested. This examination formed the basis for the decision on what our standard product line is. Predetermined file structures will be made available in one of several formats. Rather than having individual regional files, a choice between files of comparable size or a complete national file will be made available. For example, a file could contain preselected names information for the Atlantic Provinces, Quebec and Ontario, the Prairie Provinces, or British Columbia together with the Yukon Territory and the Northwest Territories. A further option would be a choice between a populated place names file or the same file combined

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with physical feature names. Another choice would be to acquire names (and associated data) which are new or have changed since the publication of the latest edition of a particular gazetteer volume. These examples plus the various map products, i.e., NTS 1:50 000, 1:250 000, 1:1M, 1:2M, and 1:7.5M scales, will make up our repertoire of standard digital products.

Before ordering digital names files, the client should examine the sample record to see the type of information stored for each name entry. By contacting the Toponymy Section, one can receive further explanation of our standard products and learn the cost to purchase data from the Canadian Geographical Names Data Base (CGNDB).

It is understood that the information acquired from the CGNDB is for the sole use of the purchasing agency and is not to be sold without the prior approval of NAIS, Energy, Mines and Resources Canada. Should the purchasing agency wish to sell any CGNDB data, we would be pleased to discuss a licensing agreement.

If further information is required regarding the CGNDB or the acquisition of digital names information, please contact:

> Toponymy Section National Atlas Information Service Geographical Services Division Energy, Mines and Resources Canada Room 650, 615 Booth St. Ottawa, Ontario K1A 0E9 Telephone: (613) 992-3647

Fax: (613) 943-8282

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