

Canadian Geoscience Knowledge Network Update #4 (Mar. 2002)

This email is the fourth of a series of CGKN email updates. Previous updates and other information about CGKN can be found at the CGKN Home Page (<http://cgkn.net>)

1) CGKN On-line Geoscience Data Catalogue Project

This ongoing project is creating comprehensive catalogues containing consistent metadata describing all government geoscience data searchable through a CGKN Internet search engine and the GeoConnections Discovery Portal. This project is funded by the Earth Science Sector's Targeted Geoscience Initiative (TGI) and NGSC agencies. Since the Sept. 2001 update, the following progress has been made by the federal/provincial Implementation Working Group.

- a) The CGKN on-line catalogue search engine is operational in development mode for participants use.
- b) Six metadata catalogues are now completed and online.
- c) All but 3 agencies will have their metadata catalogues completed by March 31st. The remaining agencies have made completion of metadata catalogues a priority for 2002.

Progress on completion of agency metadata catalogues has been slower than planned. Each agency is encouraged to prioritize this work while funding is available. Contact James Rupert for information.

2) GeoConnections Support.

In July 2001, the CGKN received \$290K from GeoConnections that leveraged existing cash and in-kind funding from NGSC agencies and the Targeted Geoscience Initiative (TGI). The CGKN has started preparing a follow-up proposal seeking continued GeoConnections funding for the coming year. It is anticipated that the new proposal will include requests for funding to continue current projects as well as initiative new ones. Contact John Broome for information.

3) CGKN Data Integration Working Group Update

The federal-provincial CGKN Data Integration Working Group continues to meet via conference call to work on solutions for technical issues related to CGKN Implementation. Subgroups involving both federal and provincial participants have been created to develop the CGKN standards and tools required by each discipline. An update on key developments follows:

4) Bedrock Geology

A data model and database template have been developed for the project based on version 5.2 of the North American Data Model (NADM). Geomatter is being

used with the database template as a graphical user interface for entering and organising map data. An approach to generalisation of detailed map units for display at regional scales has been developed based on the Tectonic Assemblage/Tectonic Terrane classification used in the Cordilleran Orogen. Newfoundland and Nunavut are currently adapting these concepts for the Appalachian Orogen and Shield Terranes. Progress has also been made on reconciliation of geological maps from different agencies/authors that differ in mapping style and resolution. Newfoundland map data, and data from the Central Foreland and Ancient Pacific Margin NATMAP projects have been entered into instances of the NADM database in St. John's, Calgary, and Vancouver. Data for BC, Yukon Territory, Nunavut, and Labrador should be entered, at least in part, by the end of March. To maintain co-ordination between the different agencies involved in the project, and to allow searches to be made across the distributed databases, a central registry is being developed. The registry will act as a clearinghouse to receive user queries, poll the distributed databases and return the query results to the user as text or maps. Finally, a web interface is being developed based on freeware. Contact Peter Davenport for further information.

5) Surficial Geology

A preliminary logical data model for surficial geology data has been completed. Standards for language and structure are also nearing completion. Ontario GS, Manitoba E&M, and GSC are active participants. A method for defining science language (legend content analysis) is being employed to make the science language more robust. The bedrock and surficial geology data models and tools (Geomatter, etc.) are being developed in parallel, including a trial Web Map Server (WMS) implementation. A " parsing tool " which enables the geologists to link their map legends to the corporate science language will be completed by March 31st, 2002. This tool will not only allow the integration of new data to the NADM, but will also permit legacy information to be loaded into the model. Several maps are being loaded into the data model, including a USGS map that will be used by USGS participants to evaluate and add to the project. A workshop is planned for May (after the GAC Annual Meeting) to finalise Version 1.0 of the Surficial Geology Data Model. Contact Ron Dilabio for additional information.

6) Geochemistry

At least 6 provinces and the GSC are participating in the "Geochemistry On-line" Project and continue to meet regularly. The project team is currently reviewing bids on a RFP for a data-loading tool (GoldTools). GoldTools will enable loading of new and legacy geochemical information to the Geochemical Data Model. Because it is based on a functioning Laboratory Information Management System (LIMS), GoldTools will also check the quality of the information. Contact Andy Moore for more information.

7) Geophysics

A GeolInnovations project proposal to develop systems for online visualization and delivery of geophysical, mineral deposits and geochemistry data types was not successful. However, the GSC has initiated a contract with DM Solutions to develop a system for provision of metadata, online visualisation and delivery of geophysical data. Contact Joan Tod for further information.

8) XML/GML

This CGKN/GeoConnections project is developing standard CGKN XML "schema" for geoscience data that will allow file-based exchange of geoscience data between agencies and a generic schema for merging different databases for other stakeholders. The contractor, Galdos Systems, has developed draft application schema for geochemical, geophysical, and mineral deposit data. The geochemistry schema is based on the NGR Standardized Geochemical Data Model developed by CGKN. The national mineral deposits schema has been developed from Yukon, Ontario, BC (MINFILE) and Newfoundland mineral deposit databases. In late March, the contractor will deliver a prototype Internet browser for map display of the contents of CGKN XML data files. Contact John Glynn or Eric Grunsky for more information.

9) Sedimentary Basin/Petroleum Resources Project

A new discipline working group has been established to focus on sedimentary basins and petroleum resources. Initial meetings have been held to scope proposed activities for 2002-03.

Groups members have agreed to build on existing activities and data models (PPDM, NADM). Contact Phil Moir for further information.

10) New CGKN Web Site

The CGKN will be unveiling a new web site in early April. The CGKN site is being redesigned to better support the activities of the working groups and facilitate maintenance. New graphics and descriptive information will enhance information content and facilitate participant access to projects, documents, and discussion groups. Contact James Rupert for further information.

11) Kerri Croucher

In January, Kerri Croucher joined CGKN to help the Secretariat with a number of tasks, one of them being updating the content of the CGKN web pages. Kerri has been contacting CGKN participants you obtain information on project or working group activities.