The IUGS Approach to Standards Leadership: The Commission for Geoscience Information (CGI)

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At the 2004 International Geoscience Congress, the International Union of Geological Sciences (IUGS) launched the Commission for Geoscience Information, or CGI. The creation of this new Commission focussed on geological data was in response to recommendations to the IUGS from a small international group of geoscientists who had been meeting in the context of International Association of Mathematical Geology (IAMG) conferences to discuss geoscience data management and standards. Principal reasons for the creation of the CGI were to assist the IUGS by enabling the global exchange of knowledge about geoscience information and systems and by bringing improved coordination and clarity to the development of standards for the management of geoscience data.

The CGI has grown steadily since its creation and currently has 229 members located in 63 countries. The CGI is run on a voluntary basis by the CGI Council, a small group of data management experts from geological organisations around the world.

The CGI Council coordinates a number of CGI activities including the Data Interoperability and Thesaurus Working Groups, outreach workshops, specialized seminars and workshops; and a web site (http://www.cgi-iugs.org) that provides access to a range of geoscience data management resources.

One of the highlights of CGI activities continues to be the GeoSciML standard for the exchange of digital geological data. This GML schema derived from a rigorous geological database design project in North America during the 1990s. GeoSciML has emerged as the de-facto international standard used by OneGeology (http://OneGeology.org) and other national and international initiatives and organizations. The CGI Interoperability and Multilingual Thesaurus Working Groups are now working together to build on the success of GeoSciML by developing a Multilingual Thesaurus for the geosciences.

In addition to these focussed activities, the CGI council advises the IUGS on data-related matters, coordinates representation of the IUGS on CODATA and ICSU data committees and has linkages to other international standards organizations such as the Open Geospatial Consortium (OGC) and the International Standards Organization (ISO). The CGI is currently working with the IAMG and the Geoscience Information Consortium organizing a unified data management symposium for the International Geological Congress in Brisbane in 2012.