

# CGI Working Group on Data Model Collaboration

## Terms of reference

### Background

The Data Model Collaboration Working Group will organise collaboration between interested parties towards the development of a common geoscience data model. It will report to the CGI Council; will direct and coordinate terms of reference for the task groups; will coordinate activities and task groups; will evaluate task group products for compliance; will distribute results to the community and coordinate feedback; and will look for funding possibilities.

The desire to develop a common geoscience data model is based on the need of users to be able to access digital geoscience data from a variety of sources, process them using common software packages, and integrate them with data from other disciplines. These objectives will not be readily achievable without a common geoscience data model.

The setting up of the working group and its subsidiary task groups stems from an informal Data Model Collaboration Meeting held at BGS in November 2003, attended by representatives from fifteen Geological Survey Organisations (GSOs) at which the objectives and methodology of the working group were discussed and agreed.

The working group and task groups will function primarily using electronic communications, although occasional meetings may be necessary.

### Charge and roles

1. **Report to the CGI council.** The Working Group on Data Model Collaboration has been set up under the auspices of the IUGS Commission for the Management and Application of Geoscience Information (CGI) and will report regularly to the Council of the CGI. The Working Group will determine and oversee its own mandate, process, and activities.
2. **Direct and coordinate terms of reference for the task groups.** The Working Group has set up three task groups on 'Conceptual Model/Interchange'; 'Testbed; and 'Classification Requirements'. Other task groups may be set up at the discretion of the working group to meet specific requirements. The working group will direct and coordinate the development of terms of reference by the task groups.
3. **Coordinate activities of task groups.** The working group will coordinate the activities of the task groups. The working group will identify broad functional goals for the data model in sufficient detail that they will aid the task groups in detailing and accomplishing each goal. The working group and task groups will together determine the completion dates for each goal and monitor progress.

4. **Evaluate task group products for compliance.** The working group will be responsible for ensuring that the products delivered by the task groups meet the functional goals specified by the working group.
5. **Distribute results to the community and coordinate feedback.** The working group will arrange for the development of a web site for the collaboration and arrange to publicize the data model and its supporting products via the web site. In addition the working group will encourage presentation of the data model by the working and task group members at appropriate conventions, meetings, workshops, and publications. Task group products are to be credited to the originating task group as a whole, including authorship of products and presentations, with contributing task group members listed. The working group will facilitate discussion regarding both broad issues and technical details of concern in the data model and gather feedback. This feedback will be incorporated into the further development of the model.
6. **Look for funding possibilities.** Although it is expected that the bulk of the funding for the work of the working group will be met by the participating organisations, the working group will look at options for supplementing this from external sources.

## **Membership**

Members will be primarily drawn from, but not limited to, the member organisations of the IUGS and must have expertise in GIS, geological mapping, database design, or software development, and have a professional interest in the implementation of a standard data model for digital geologic maps. Members must be capable of contributing guidance to the task groups. The coordinator of each task group will be a member of the working group.

## **Coordinator**

To promote efficiency and communication, the working group will have a coordinator appointed through majority working group vote. The coordinator will serve for a period of one year, after which the coordinator will be re-confirmed or a new coordinator appointed by working group vote. An interim coordinator, agreed at the informal Data Model Collaboration Meeting held at BGS in November 2003, will serve for the first year.

The coordinator will:

1. lead working group meetings
2. work with working group members to develop meeting agendas
3. compile minutes for each working group meeting
4. serve as the official point of contact for the working group.

## **Task Groups**

Task groups have been set up by the working group to develop: a conceptual data model and its means of interchange; a testbed to demonstrate the working of a subset of the data model; and classification requirements. Each task group will have a

coordinator who will also be a member of the working group. An interim coordinator for each task group, agreed at the informal Data Model Collaboration Meeting held at BGS in November 2003, will serve for the first year.

The outline charges and roles of the task groups are:

*Conceptual Model/Interchange Task Group*

1. to determine the depth and breadth of the conceptual model
2. to develop feature level metadata
3. to develop XML/GML encoding
4. to decide on a common conceptual schema language
5. to determine terms of compliance for the conceptual model
6. to advise the working group on whether the task group should split into separate conceptual model and interchange task groups

*Testbed*

1. to develop an implementation of a subset of the data model for demonstration purposes
2. will use and demonstrate the results of the conceptual model/interchange task group
3. will consist of more than one server and client

*Classification Requirements*

1. to identify the classification requirements of the data model
2. to identify existing classification systems that meet the requirements of the data model
3. to forward requirements for which no existing system has been identified to the CGI Council for action