

International Union of Geological Sciences

REPORTING FORM FOR CONSTITUENT BODIES

1999

1. TITLE OF CONSTITUENT BODY:
IUGS/IAGC Working Group on Global Geochemical Baselines

2. OVERALL OBJECTIVES (mission statement and goals):
To prepare a global geochemical database, and its representation in map form, to document the concentration and distribution of chemical elements and species in the Earth's near-surface environment. The database and accompanying maps may then be used to create a geochemical baseline against which future human-induced or natural changes to the chemistry of the land surface may be recognised and measured.

In the short to medium term this involves:
Implementation of the recommendations of IGCP 259, published in
Darnley A.G. et al 1995 A Global Geochemical Database for Environmental and Resource Management. Recommendations for International Geochemical Mapping Final Report of IGCP Project 259. Earth Sciences 19, UNESCO, Paris (1995) as follows:

- Collection and analysis of Global Reference Network (GRN), a series of multi-media geochemical samples, according to procedures established in UNESCO Publication 19, Darnley et al, 1995.
- Design and publication of a Field Manual detailing sampling methods for collection of the GRN samples.
- Design and production of an Analytical Manual detailing analytical methods for analysing the GRN samples.

3. ORGANIZATION (broad description):
The project is led by a Steering Committee which co-ordinates the activities of four Technical Committees and contributions made by individual Country Representatives.

• **STEERING COMMITTEE**

<i>Honorary President</i>	Dr Arthur Darnley,	Geological Survey of Canada
<i>Co-Leaders</i>	Prof Jane Plant,	British Geological Survey
	Dr David Smith,	US Geological Survey
<i>Scientific Secretary</i>	Ms Lorraine Williams	British Geological Survey
<i>Treasurer</i>	Dr Tony Reedman	British Geological Survey

• **ANALYTICAL COMMITTEE** Dr H Sandstrom, GSF
Co-ordinates the work plan for the analysis of the samples and the activities of the laboratories.

• **DATA MANAGEMENT** Dr T Tarvainen, GSF
Supervises sampling strategy and co-ordinates the sampling progress of the participating countries, databasing for sample information and analytical results.

• **REGIONAL CO-ORDINATORS** Prof R Salminen GSF

Co-ordinate project activities of groups of neighbouring countries and report back to Steering Committee.

• **PUBLIC INFORMATION** Prof P R Simpson, BGS

Advertises and promotes the aims, objectives and achievements of the project to as wide an audience as possible, including by use of the World Wide Web.

4. **EXTENT OF NATIONAL/REGIONAL/GLOBAL SUPPORT FROM SOURCES OTHER THAN IUGS:**

The project does not have any other source of direct funding. However, within Europe, National Geological Surveys and associated Institutes have provided staff time and support to the project to complete the preparation of a GRN.

5. **INTERFACE WITH OTHER INTERNATIONAL PROJECTS:**

This project is closely associated with the work of the FOREGS Geochemistry Working Group. In addition, the INCO-COPERNICUS project, a laboratory standardisation project involving Western European and former Soviet Block countries, is associated with this project. The project also has links with the IAEA and potential links with GTOS, the Global Terrestrial Observing System are being investigated.

6. **CHIEF ACCOMPLISHMENTS IN 1999:**

- ◆ Near completion of European sampling programme.
- ◆ Initiation of geochemical surveys in Botswana, Panama, Morocco and India based on the recommendations from IGCP 259 and 360.
- ◆ Completion of pilot study for this project in Colombia.
- ◆ Panama and Morocco are in the progress of establishing geochemical surveys.
- ◆ The Committee for Coastal and Offshore Geoscience Programmes (CCOP) has agreed to act as a Regional Co-ordinator for their member countries (China, Japan, Vietnam, Indonesia, Cambodia, Thailand, Malaysia, Papua New Guinea, Philippines, and Korea) in SE. Asia.

7. **CHIEF PROBLEMS ENCOUNTERED IN 1999 (if any):**

The main problem encountered by the project was the lack of the funding required to achieve the aims and objectives of the project.

8. **CHIEF PRODUCTS (eg. publications, maps) IN 1999:**

9. **SUMMARY OF EXPENDITURES IN 1999**

None from IUGS.

10. **WORK PLAN FOR NEXT YEAR AND FOR THE FOLLOWING YEARS:**

The samples that have already been collected in Europe will be analysed in the agreed laboratories according to the work plan already devised.

The analytical methods used in the project will be published in the form of a technical document, similar to the existing Field Manual for sampling of geochemical media.

A database will be created to store all of the sample locational information and data management protocols will be discussed. The data produced from the analyses of the samples will be available to all participants for interpretation.

Countries outside Europe will continue to be encouraged to observe the work done by the FOREGS Geochemistry Working Group and to try to formulate similar working relationships and sampling programmes.

11. SUMMARY BUDGET FOR NEXT YEAR (Affiliates should report only if requesting IUGS financial support):
12. POTENTIAL FUNDING SOURCES (INCLUDING NON MONETARY FINANCIAL SUPPORT) OUTSIDE IUGS (Affiliates should report only if requesting IUGS financial support)

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SIGNATURE:

POSITION: Scientific Secretary

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