International Geochemical Mapping in Europe: the FOREGS Geochemistry Task Group

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The Forum of European Geological Surveys (FOREGS) includes geological surveys from 33 European countries and is responsible for co-ordinating geological survey activities in Europe. As part of this programme, the FOREGS Geochemistry Task Group was established in 1994 to supervise European geochemical mapping policy in accordance with the recommendations of IGCP Project 259 'International Geochemical Mapping'. The task group comprises representatives from five countries whose initial remit was to compile an inventory of geochemical data within FOREGS countries.

An inventory questionnaire was devised and sent to geological survey and related organisations in FOREGS countries. The questionnaire was designed to establish the extent and types of surveys employed.

The results show that a variety of sample types, sample densities, sample size fractions and analytical techniques have been employed by different national surveys. The task group recognises that several ongoing surveys must continue to employ their present techniques to maintain national continuity. However, the variety of survey methods used makes the task of assembling existing data into international geochemical maps more complex.

The future strategy of the task group will be to increase compatibility between national geochemical surveys and to integrate existing data in the compilation of European geochemical maps. These two aims will be achieved by the collection of the Global Reference Network (GRN) of samples recommended by IGCP 259. The network comprises a predetermined sampling grid covering the land areas of the globe. Suites of samples from the European grid squares will be collected according to the recommendations of IGCP 259 and will form a reference collection of material to be analysed in a Europe-wide laboratory-standardisation exercise.

The collection and analysis of the GRN samples in Europe will rely on the cooperation of FOREGS geological surveys. Surveys will be asked to collect the GRN samples in addition to samples required for their national programmes. Due to the cooperation achieved through FOREGS and the support of the FOREGS Survey Directors, a proposal for funding the laboratory-standardisation programme has been submitted to the European Union.

Experience in Europe has shown that progress in International Geochemical Mapping can be achieved with co-operation between survey organisations and the support of Geological Survey Directors. Compilation of an inventory of geochemical data is strongly recommended as an initial international geochemical mapping activity. The inventory helps to establish contacts in different survey organisations and provides data on the current status and capabilities of geochemical surveys, thus allowing an international geochemical mapping strategy to be formulated.