



The Association of Geological Surveys of the European Union  
(EuroGeoSurveys)

in their position as

custodians to their national natural resources

and

guardians of their terrestrial environment

present their contribution to

the Communication from the Commission

"Making a reality of the European Research Area: Guidelines for EU research activities  
(2002-2006)." COM(2000) 612 final of 4.10.2000

Richard Annells  
Secretary general  
EuroGeoSurveys  
3, Rue du Luxembourg  
1000 Brussels  
Tel +32 2 282 95 14  
info@eurogeosurveys.org  
[www.eurogeosurveys.org](http://www.eurogeosurveys.org)

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The remarks in this paper are structured to follow the headings in COM (2000)612. They are based on our members' experience and many different working contacts at various levels of the European Parliament, European Commission, European Environment Agency and Member State governments.

## **A NEW HORIZON**

EuroGeoSurveys has already welcomed the idea of a European Research Area set out in COM(2000)6 of 18 January 2000. In April and May 2000 it contributed a spontaneous written Opinion (No 10) on the topic to the European Parliament ITRE Committee during the preparation of the Resolution adopted on 18 May 2000. Opinion 10 was also copied to European Commission DG Research. A brief outline of EuroGeoSurveys is given at Annex A.

EuroGeoSurveys welcomes the intention of COM (2000) 612 final to offer a new horizon for scientific and technological activity and for research policy in Europe.

We agree that the EU continues to under-invest in research and development compared to the United States. Science and technology must be central to the policy-making process and must play a stronger and more central role in the workings of Europe's economy and society. In our own field this is the case only in some of the European countries. e.g. France, Germany, The Netherlands, the Nordic countries, Spain, Switzerland and the United Kingdom. In some countries scientific research in certain fields (e.g. radioactive or electromagnetic discharges in the environment, BSE, etc) has been ignored when politically expedient.

It is clear that in our field of expertise (sustainable management of the terrestrial environment, natural Earth resources and natural hazard mitigation) Europe has no common view and no adequate mechanisms for monitoring or response. This is due to the present splitting up of Member State national research policies into goals limited to national interests. None of our national research bodies can maintain research at a level adequate to these challenges of a global economy. Although EuroGeoSurveys links major centers of national public sector expertise in this important scientific and technical area (applied Earth sciences and related applications), it lacks the means to carry out the work it needs to do at EU level because at present it is funded by only 324,000 Euros p.a. contributed by member state organisations. In addition, the present EU Framework Programme and other tendering procedures are too short term (2-3 years) to enable the necessary long lasting programmes to be developed at EU scale.

In some areas, the EU approach will be relevant only if developed at a global (world-wide) scale. This is notably the case for issues concerning mineral raw materials, energy, and climate. Europe is heavily dependent on mineral raw material imports, with either targeted or global implications. However at present, it has no plan for approaching such issues. The Member State institutions are too weak to act in this field and there is no sustained programme at EU level. In contrast, the USA is able to develop a forward strategy and to implement policies in the above fields, whereas Europe remains "blind" and unable to act at the right level. US capacity is based on organisations such as the US Geological Survey (USGS) which has 10,000 staff. The total number of staff in the European Geological Survey organisations is 6,300 in eighteen separately administrated national locations. Under such circumstances it is impossible to set up a European equivalent of major programmes such as the USGS-led "Digital Earth" initiative which will receive long term finance from the federal administration in order to face global geoenvironmental issues in a holistic way. The next EU RTD programme needs to be able to face such issues.

Our experience is that public sector research in our field is vigorous and has resulted in important benefits and services for citizens: it could be even more effective if it received increased support through the coordination of Member States' research efforts at EU level.

We feel that many of Europe's adult citizens are poorly educated or complacent with respect to important scientific issues in our field (e.g. environment, including its influence on health, resource issues) and that their lifestyle has become too materialistic and consumer-oriented to question natural processes or to nurture an interest in acquiring knowledge of their surroundings. Unfortunately these attitudes are mirrored by many of those EU officials who lack a scientific background. However if these important issues can be included in European primary and secondary school curricula even the 'non-scientific' adults of future generations – many of whom will become decision-makers - will have a more balanced environment/natural resource perspective than their parents.

### **THE EUROPEAN RESEARCH AREA PROJECT**

**Making a reality of the *European Research Area* will necessarily be the product of a joint effort by the EU, its Member States and research stakeholders.**

EuroGeoSurveys agrees with these general principles. It has already through many years of cooperation made major advances in the sharing and transfer of knowledge and dissemination of results both across the EU and more widely internationally and is ready to discuss with the Commission the types of financial and support measures needed by EU research.

### **REASSESSING EU RESEARCH SUPPORT MEASURES**

Most Member State public sector research bodies, including the national Geological Survey organisations (GSOs), already deliver excellence as well as balanced and coherent technological development in the EU and they continue to prove their ability to relate to the definition, implementation and follow-up of EU policies. Indeed recent external management audits in a number of Member States have ensured that the GSOs are retained as public sector bodies in order to preserve the objectivity of their services and facilities and to ensure that the value of their vast information resources to governments, industry and academics is preserved.

We feel that few of the EU Framework Programme activities to date have made a consistent or significant contribution to world-level research in our own or indeed in any other scientific fields. Nor have they made adequate use of the great range of information and facilities which the GSOs offer. In general the research programmes have been poorly coordinated, inadequately funded "dilettante" affairs which have proved unable to sustain long term research infrastructure or facilities (e.g. major information databases) or to help build a realistic base for future policy. In contrast, the public sector nature of the GSOs has required their activities to contribute relevantly to both national activities and intergovernmental co-operation initiatives, increasingly combined with actors funded from elsewhere in the public and private sectors.

**The European Research Area project requires the full application of the principle, enshrined in the Treaty, of complementarity between EU research activities and Member States' research activities.**

EuroGeoSurveys will be interested to contribute to the discussions on the mechanisms envisaged and priorities.

## **BROAD LINES AND OBJECTIVES**

### **1. OBJECTIVES**

Our comments on the five objectives listed are as follows:

#### **Research activities**

EuroGeoSurveys agrees that the performance of European research will be improved by better networking and coordinated implementation of national programmes to network centres and areas of excellence in the public and private sectors in the Member States; and by carrying out large-scale targeted research projects. However we point out that in this context the universities are not strictly 'public sector' bodies (in some countries they are considered to be private sector) and they are not always sustainable networking centers or areas of excellence. In general their informational and database support is weak or inconsistent, they rely heavily on inexperienced, low-cost researchers and many in our field are driven by the pressure to publish 'fashionable' research rather than to solve day to day problems that are relevant to society. In contrast the GSOs are built for long term sustainable action and can act as stable foci of networks (e.g. the EuroGeoSurveys GEIXS and EUMARSIN projects of FP 4).

#### **Research and innovation, "start-ups" and SMEs**

As already stated in our Opinion 10, we believe that the key issues listed here depend on creating the right financial climate for take-up of EU technological innovations. The EU internal market is still too comfortable, consumer-oriented and complacent to achieve this situation and is over-controlled by an accountant mentality which prefers short term gain to the better results likely to accrue from taking moderate risks. However the current low value of the euro against other international currencies could be a positive stimulus for profitable new startups.

#### **Research infrastructure**

EuroGeoSurveys believes that a sound European research infrastructure is a key strategic issue and has already started to help implement a European policy in this area by offering access to its own large-capacity electronic information networks for research infrastructure on the Internet (GEIXS, EUMARSIN) and will continue to construct new networks for this purpose (e.g. EUROSEISMIC, SECURIS). As an example, during October 2000 the EUMARSIN Internet facility on sea floor geoenvironmental information received over 30,000 user enquiries from industry, public sector and academics.

#### **Human resources**

EuroGeoSurveys supports these aims, as already stated in Opinion 10.

#### **Science, society and citizens**

The EuroGeoSurveys members support these aims and continue to implement them practically in numerous ongoing national programmes. Examples from Member States are: setting up water resource management GIS facilities for Swedish municipalities; detection and remediation of heavy metal contamination in Norwegian children's playgrounds; providing information systems to set realistic property insurance parameters for the UK insurance industry and homeowners, etc.

### **2. THREE ASPECTS TO BE TAKEN INTO ACCOUNT**

Our views on the three specific aspects listed are as follows:

### **European scientific and technological cooperation.**

As mentioned above, the EuroGeoSurveys members actively engage in spontaneous EU-wide initiatives to provide policy advice and project networks, to set up EU standards (e.g. in metadata) and to increase the impact of European cooperation. Selected examples are:

#### **In Framework Programmes:**

DG INFSO	<b>GEIXS</b> project (FP 4) Distributed geoinformation database exchange across the Internet (24 European partners)
DG RTD	<b>EUMARSIN</b> project (FP 4) Distributed seafloor geoinformation database exchange across the Internet (16 European partners)
	<b>EUROSEISMIC</b> (FP 5) Distributed seafloor seismic information (14 European partners)
	<b>MINEO</b> (FP 5) Airborne detection of environmental pollution due to mining (11 European partners + JRC)
	<b>GESTCO</b> (FP 5) Selection of waste CO2 disposal sites (11 European partners including industry)

#### **Other programmes**

DG ENTR	<b>Raw Materials Supply Group:</b> advice on promoting sustainable development in EU non-energy extractive industry
DG ENV	<b>EU-wide Mining Waste study</b> (10 European partners)
JRC	Contribution to European Environmental Information Service (EEIS)
	Participation in GMES 'Risks and Hazards' Working Group
EEA	Activity in European Topic Centres for Soil and Water

#### **Regional dimension**

We agree that EU measures should encourage the regions to network their research, innovation and technology transfer activities, especially where they are confronted with common problems, e.g. planning to limit the costly damage which the natural physical infrastructure underlying the cities of the EU and enlargement countries causes to the built and human environment.

#### **The international dimension.**

The Earth science field in which EuroGeoSurveys members practise crosses national boundaries and demands an outward looking approach. Increasing numbers of countries applying for accession are integrated into our projects and networks to begin technology and knowledge exchanges and we have started to admit these countries to membership as part of our own enlargement process.

The EuroGeoSurveys members between them have cooperated with over 120 different recipient countries outside the EU in order to mobilise EU scientific and technological capacities for the benefit of third countries, mostly through national bilateral programmes and those of other international donors (World Bank, UN etc) because the administration of European programme competitions in this area hitherto has been complicated and cumbersome, with slow decision processes.

We agree that specific cooperation agreements or conventions are needed in certain key areas in the developing countries (e.g. setting up of information banks to help manage

water and mineral resources, protect against environmental pollution, and protect against natural hazards).

We agree that the above three aspects should be taken into account in particular by efforts to implement measures jointly with those of the European Research Area, provided that this does not impose a heavy bureaucratic load, duplicate efforts or slow down decision processes.

EuroGeoSurveys counts itself as a grouping of a specialised nature, such as the ESA, EMBL, ESRF and CERN. We agree that European research activities should join with or complement activities supported by Structural Funds, regional initiatives and the European Investment Bank, as well as programmes of economic and technical assistance to the Central and Eastern European countries, Mediterranean third countries, and the other financial instruments of international cooperation.

## **SELECTION CRITERIA AND PRIORITIES**

### **1 CRITERIA**

EuroGeoSurveys agrees that European research efforts should be focused on a more limited number of priorities which should be more precisely defined than in the present, often vaguely worded, Framework Programme terms of reference. Our experience is that frequently neither the proposing scientists nor EU programme officials are clear as to what is required. Indeed in some countries researchers find the terms of reference and application procedures so obtuse and lengthy that they bid into EU programmes only when all other opportunities have failed.

We do not feel that political linkages in Europe are yet sufficiently well prepared to set objective assessment criteria for research projects.

Regarding the two aspects of selecting and justifying EU research activities:

1) It is obvious that public funding has to be justified in terms of “public benefit”.

2) It is obvious that the key concept for justifying support at European level is that of **European added value**. This is particularly important for the trans-border processes and interactions which dominate the geoenvironmental, natural hazard and Earth resource areas (e.g. transfrontier aquifers), all of which affect sustainable development. It is also true for many other issues, including public health and epidemiology, external relations and development.

### **1 PRIORITIES**

EuroGeoSurveys agrees that important priority areas are:

- The research needed to develop the information society;
- Research and development work that one country or one firm alone could not carry out – for example in Earth observation and space sectors where there is considerable world competition;
- Research supporting European policymaking in areas characterised by strong uncertainties and risks (including the implementation of the precaution principle), e.g; the monitoring and mitigation of seismic and other natural geohazards;
- Environmental monitoring, including research in support of Community policies needed to implement a sustainable development model in the broadest sense (e.g. balanced management of water, energy, soil and mineral resources).

*However this section of the document is vague and seems to describe a structure very similar to that of previous Framework Programmes. In subsequent Opinions on 'Research Infrastructures' and 'Mapping of Excellence' we will suggest important priority themes for joint implementation through national programmes, networks of excellence and large-scale targeted research projects.*

EuroGeoSurveys believes that the 6<sup>th</sup> Framework Programme should really focus on large-scale issues rather than on short term results from technological programmes on fashionable subjects in which the private sector will invest anyway - such projects do not need to be supported by publicly funded EU programmes.

## **ANALYSIS OF PAST AND CURRENT ACTIVITIES**

### **1. THE OPINION OF THE INDEPENDENT EXPERT PANEL**

#### **General points**

We agree with the expert panel's view that EU research needs to be placed in the context of a real European research policy. However more detailed definition of the Commission's role, probably leading to modification of its activity, is needed.

#### **The past**

In many of the EuroGeoSurveys EU funded activities completed to date we feel that the actual collaboration with academic and industrial researchers has been more beneficial than the actual content of the research.

We feel that the frequently slow, cumbersome and inflexible administrative procedures of EU funded research need major remedial work. A thorough overhaul of all stages of Commission FP research management procedures is needed and staff with relevant scientific backgrounds, supported by up to date, open and responsive programme management and financial management techniques should be appointed. At present the Commission contains too many poorly informed generalists. Its internal distribution of information on opportunities or linkages is poorly coordinated and we believe that this could give rise to problems of transparency.

#### **The future**

We agree with the four recommendations listed here.

### **2. THE COMMISSION'S ASSESSMENT**

We agree that the six action points listed in the Commission's assessment are necessary and should be used to guide the preparation and implementation of the next Framework Programme.

## **INSTRUMENTS AND METHODS OF INTERVENTION**

We agree that the scale of financing of the EU's research programmes has to date been too small, making it difficult for the EU to compete with the much longer term, better funded and more

ambitious programmes run by competitor countries (e.g. the US 'Digital Earth' mentioned above). Our project experience is that these deficits in money and time cut deeply into participants' own budgets and make EU projects financially unattractive.

We agree that new ways are needed to generate proposals. The cumbersome style of the present schemes makes it costly for organisations such as our own (where project staff are not centrally funded) to bid for a consortium of true European extent (about 50,000 Euros).

We agree with the four main developments needed to adapt the future Framework Programme to the European Research Area:

- Basing action on a coherent group of activities with overall financing plans, including an EU part contribution;
- Moving towards structured, longer-term schemes based on support somewhere between support for projects and multi-year/permanent "institutionalised" financing;
- Expanding some EU schemes such as mobility or infrastructures so that they can impact more effectively on national initiatives;
- Using "variable geometry" instruments in order to achieve flexibility at programme level.

We agree that the range of instruments and methods of intervention must be designed to accommodate the needs of public and private research systems and important aspects of the European research infrastructure.

These measures will be especially welcome if they lead to faster, lighter-weight and more flexible and user-friendly administrative procedures.

The instruments in question could take the following form:

## **1. RESEARCH ACTIVITIES:**

### **Networking of national programmes**

We think that this is a useful idea which should be a long term objective due to the very different horizontal and vertical research needs and policy backgrounds of the different Member States and the conservative attitudes of national academic hierarchies. The coordinated implementation of national programmes also seems unrealistic except in the case of common priority themes recognized as urgent such as natural hazards, technological disasters (e.g. the next Baia Mare or Chernobyl), etc.

We agree that the EU should bear at least the costs of coordinated implementation of such programmes and that in the preparation of measures of this type it will be important for the Commission to take account of existing collaboration schemes or those in preparation. This has not always been the case.

### **Networks of excellence:**

We support the aim to network capabilities by linking the public and private sector in centres of excellence to achieve long-term joint programmes funded to a scale of several tens of millions of euros. These centres should have a balanced membership of industry, public institution and university participants with clearly defined aims.

We support the aims and objectives of the programmes outlined in this section and will welcome their application to generic and "risky" research in our own fields.

### **Large-scale targeted research projects**

We support the proposed format of the projects outlined here, and welcome the intention to use mixed consortia, large funding resources and transparent selection of research priorities and consortia members. Few of these criteria have been observed in large projects to date and key researchers have frequently been surprised to learn of consortia that appeared (like mushrooms) rapidly without open advertisement. This again suggests that the Commission must improve its own internal coordination and dissemination of information.

We support the idea of "clustering" of separate components or projects.

### **2. RESEARCH AND INNOVATION, "START-UPS" AND SMES**

We support the aims outlined in this section, particularly with respect to regional and national efforts to support technological innovation and the dissemination and exploitation of knowledge and results for the benefit of European industrial associations or groups of national associations on themes of interest to SMEs. EuroGeoSurvey has already acted in this way with European industrial and consultant associations (e.g. Euromines).

### **3. RESEARCH INFRASTRUCTURES:**

We particularly welcome any initiative which increases and diversifies EU support for transnational access to research infrastructures on a European scale through association agreements drawn up for a certain duration between them and the Community. This will however require the Commission to organise very open and transparent advertisement of opportunities.

We welcome the intention to support the development and use by the different scientific communities of high-speed electronic networks for research, of which the GEIXS and EUMARSIN networks are existing successful examples.

### **4. HUMAN RESOURCES**

We welcome the intention to increase the volume of mobility grants for researchers in the EU countries, candidate countries and third countries, particularly through grants to transfer knowledge and technologies to SMEs and to stimulate the development of employment of both men and women in science and technology in Europe. We also support the encouragement of young people to take up scientific research.

### **5. SCIENCE, SOCIETY AND CITIZENS**

We support the five broad activities described under this heading.

#### **Support for policymaking and European scientific reference system**

We welcome the items listed here to support policy making, particularly use of the precautionary principle and the sustainable development principle, and the development of a European scientific reference system. It will also be important to develop anticipation and warning capacities, for example in the case of natural and technological disasters, using stakeholders and quality information and knowledge which can be readily disseminated.

The role of the Joint Research Centre should be carefully monitored in this context because in our experience its individual institutions vary significantly in their openness and transparency of operation. We feel that the JRC should develop as a support to networks of existing national expert centres rather than assuming or duplicating their activities. In its present form the JRC does not

help to face this challenge because it duplicates the efforts of national research institutions without adding value to them at the EU level. We agree with the Davignon High Level Panel report (June 2000) that the JRC should be limited to the function of coordinating scientific expertise, and should be reduced to a maximum staff of 1000 scientists. The reorganised JRC should have the capacity to contract for long term programmes (10 years minimum) with institutions such as the EuroGeoSurveys members, providing the means for long lasting coordinated programmes (notably environmental monitoring and observation aimed at a complete and coherent coverage at EU scale).

### **Research and the needs of society**

The GSOs are ready to take part in research activities involving concerted foresight and analysis work, particularly in the important fields of environment, Earth resources (water, soils and minerals) and natural hazards. Activity in this area is still very weak in the EU and the JRC is not adequately equipped to tackle it without better balanced help from national expert centers.

### **"Science/society" dialogue:**

We have already stated our support for this issue in our Opinion 10.

### **Women and science :**

We have already stated our support for this issue in our Opinion 10.

### **Ethics**

We have already stated our support for this issue in our Opinion 10.

## **MEANS OF IMPLEMENTATION**

EuroGeoSurveys has the following comments regarding the means of implementation.

The credibility of EU activity in this area will be greatly improved if projects are selected on the basis of open, transparent public calls for proposals and evaluation is based on open, transparent peer review by competent evaluators. Proposers will need adequate guidance from properly qualified Commission programme and project officers, and a lighter-weight, less bureaucratic application procedure. It is evident so far that the Commission has not been able to control the quality of 5<sup>th</sup> Framework Programme evaluations.

We support the setting up of the five new methods of intervention proposed.

However we believe that to be cost-effective in terms of operation and results to be delivered the networks of excellence and research infrastructure activities should make use of the many existing Member State public facilities and networks such as EuroGeoSurveys, the members of which daily prove their competence in specialist fields. Our choice is not to develop a superstructure (like a single European Geological Survey) but to act as a permanent network based on the existing excellent permanent field, laboratory and air/space capacities for acquiring, storing, modeling (notably as maps and GIS) all data relevant to 'greater European area' public policies. This work should be based on joint programmes which do not yet exist and which the Framework Programme can not provide.

We feel that all the means of implementation listed in COM 612 are suitable. However the types listed should not be considered as having totally distinct boundaries. The present situation can be regarded as a system which combines the Framework Programme, JRC and agencies such as the

EEA with Member State scientific organisations but lacks an important intermediate layer. This situation does not affect applied research which can be implemented in short terms of 2-3 years but it provides no capability (at Member State or Commission levels) for addressing the long term public demands which are clearly relevant to EU policies and interests.

In the case of scenarios such as natural hazards, groundwater pollution, soil quality or mineral resources, there are no existing means to develop a coherent view or a forward plan at Union scale. The needs of institutions like the EEA are too short term to "fill the gap", and EEA budgets are too restricted. For example, the annual budget of the new European Topic Centre currently being constructed to cover information on soils, coastal zones and land use (land cover) for the entire EU territory is only 800,000 Euros!

We agree that certain implementation and administrative tasks at present performed by the Commission should be contracted out to neutral "implementing agencies" in the interests of cost-efficiency and to enable the Commission can get on with its essential tasks.

We believe that the Joint Research Centre should adopt a scientific and technical 'enabling' or support role and should not through lack of open or transparent competition be assigned any tasks which (in many cases) would be better carried out by member state centres or networks. We agree that the JRC should network to a greater extent with national and private-sector organizations only where it can add value at European level in an internationally valid scientific context.

## **THE NEXT STAGES**

EuroGeoSurveys has noted the Commission's aims and timetable for the next steps and will contribute further information and Opinions to Member States, the European Parliament and the Commission during what it hopes will be an open and transparent process of programme formulation. It will contribute written comments to the exercise on Mapping of Excellence and Research Infrastructures.

We note that for the immediate future, steps will be taken under the 5th Framework Programme to simplify procedures, to increase the size of projects and to modify several existing work programmes in order to:

- Stimulate the use of large-capacity electronic networks;
- "Cluster" research projects and coordination activities;
- Launch a small number of "integrated projects" and an additional effort in relation to research infrastructures;
- Initiate medium term pilot experiments to network centres of excellence in certain priority fields within the 5th Framework Programme.

## ANNEX A

### **EuroGeoSurveys: “*Earth Science in the Service of Europe for sustainable development*”**

EuroGeoSurveys is the dynamic consortium that involves eighteen western European national geological survey organisations (GSOs) – the fifteen EU Member States, Iceland, Norway and Switzerland. Within each member country and through the principle of subsidiarity, each partner GSO provides for its own community’s needs for geoscientific information and advice, addressing such issues as sustainable land and resource utilisation and natural geohazard mitigation, thus contributing to the policy agenda of the Council of Ministers.

EuroGeoSurveys is committed to acting as a unified neutral body of opinion, adding value by addressing these same needs in a pan-European dimension as a pre-competent, “virtual institute”\* which represents no business interests and can thus act as a true “service of general interest” in Europe. EuroGeoSurveys can cooperate with the European Environment Agency, EUROSTAT, and networks of mapping institutes (e.g. MEGRIN) to provide optimum support for specific policy formulation by the European Parliament and European Commission and their agencies through its contacts with the different spheres of responsibility and expertise within the Community.

EuroGeoSurveys recognises that the European Communities face major challenges which are related to the natural ‘geodiversity’ of the European landmass: information and knowledge transfer; sustainable land use planning; energy and resource demand; natural geohazards (including earthquakes); clean water, urbanisation, pollution and waste management; quality of the coastal and marine environment; land instability; impacts of climate change; and effective international cooperation in the Developing World, PHARE and TACIS programmes. The partner organisations of EuroGeoSurveys have therefore established a new network of “policy sectors” in which geoscience plays a significant role for sustainable development. This new structure will ensure that the European Commission and Parliament and supporting European institutions receive prompt, expert advice and reliable services that directly address these transnational challenges.

In order to meet the major challenges the new EuroGeoSurveys network involves eleven policy sector teams, each consisting of a group of experts drawn from across the more than 6000 geoscientists and technical support staff within the EuroGeoSurveys partnership. The policy sector teams address the following areas:

- Information technology and communication of geodata
- Soils and land use planning
- Groundwater resources
- Mineral resources
- Natural geohazards
- Earth energy resources
- Urban development
- Coastal and marine geoenvironments
- Geological aspects of climate change
- Research, innovation and technology foresight in geoscience
- International cooperation

Multi-sector teams can and will be assembled to meet other specific needs that arise in future. The policy sector teams identified above will be available for direct consultation and advice, and will develop EuroGeoSurveys-wide Opinions and advisory services.

The basic resource of EuroGeoSurveys is up to date information derived from its members' activities and this information needs a fluid, transnational means of exchange to be of use. In 1999 EuroGeoSurveys delivered a sustainable EU-wide Internet system (named GEIXS) for the public exchange of geoscience information between all sectors. GEIXS involves sixteen Surveys and was developed with EU ESPRIT funds as a specific response to a 1993 Council requirement for "improving access to, and updating of, information, both on geological and mining data ... and by increased cooperation between Member States' geological departments, and the use of their knowledge by the Commission." GEIXS activities now extend to eight additional Central and Eastern European countries and provide a long-needed standard system for the exchange of public-domain information to support environmental or earth resource policy and research. GEIXS is complimented by a second EuroGeoSurveys electronic network (named EUMARSIN) which from 2001 will enable all sectors to access public-domain European seafloor sediment information.

EuroGeoSurveys is adding value to European Union policy-making by working as a "service of general interest" which can provide information of guaranteed quality to cover the whole European landmass, thus supporting major policy initiatives such as the European Spatial Development Perspective (ESDP) and the extension of proven resource and environmental information and methods which will benefit the new candidate countries and the Developing World.

EuroGeoSurveys intends to contribute Opinions on the planning of the Sixth RTD Framework Programme and other future EU programmes. It is contributing to actions in the Urban Agenda; the safe disposal of carbon dioxide and radioactive wastes; environmentally responsible recycling of mine-site waste; the monitoring of groundwater and natural geohazards; the role of geology in sustainable development, city planning and the prediction of future climatic change

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\* As defined in Objective 7.2, 3.4 Support for Research Infrastructures, in Activity 1, Theme 3 "Competitive and Sustainable Growth" of the EU RTD Fifth Framework Programme.

## Amendments

- 1) It is clear that, in our field of expertise (natural resources, sustainable management of terrestrial environment, hazards prevention...), we lack of a common view in Europe. This is due to the present dissemination of national research policies on too limited goals of national interest. None of our national body is able to maintain a research at a convenient level in order to face correctly these challenges of a global economy.
- 2) An organisation like Eurogeosurveys, which federate the public capacities at national level in a given scientific and technical area (earth sciences and related applications), has presently no means to do the work it should do at Unions level. The contribution of member state organisations, presently our only permanent resource, cannot face this challenge. And the present commission procedures (call for tenders from PCRD and other programmes) are of too short term (2-3 years) to back the necessarily long lasting programmes to be developed at Union scale.
- 3) The JRC at present do not help to face this challenge, as it duplicates national research institutions with no added value. We fully back the Davignon report: JRC should be limited to a fonction of coordination of the scientific expertise, and should hence be reduced to a staff of 1000 scientists maximum. The new JRC should have the capacity to contract for long term (10 years minimum) with institutions like ours, providing the means for long lasting coordinated programmes (notably surveillance and observations offering a complete and coherent coverage at Unions scale).
- 4) Our choice is not to develop a superstructure (like one european geological survey) but to act as a permanent network based on permanent field, laboratory and air/space capacities for acquiring, storing, modeling (notably as maps and GIS) all data relevant to european public policies. This should be based on joint programmes. But they are lacking. At present, the PCRD do not allow to cover such needs. All the means of implementation listed in COM 612 are suitable. But the types listed should not be considered as totally distincts, and criteria should be "additionable".
- 5) In fact, the present situation could be looked as a system in which between the commission (PCRD, JRC, Agencies like EEA) and the state members scientific organisations, a "layer" was lacking. This is not so much the case for applicative research which can be implemented in a short term (2-3 years). But for long lasting issues answering permanent public needs, clearly relevant to Unions policies or interests, this is particularly clear: there is at present no capability, neither from member states nor from the commission side. If we take the example of natural hazards, groundwater pollution, mineral resources, or soil quality, there are no means to develop a coherent view at Union scale. The needs of institutions like EEA are too short term to "fill the gap", and budgets are anyhow too restricted (e.g. 0,8 MECU to cover the informations on soils, coastal zones and land cover at Union's scale!)
- 6) Hence our opinion is that the 6<sup>o</sup>PCRD should really focus on such issues, rather than on short term results from technological programmes on fashionable subjects that the private sector will anyhow invest. Such projects do not need to be supported by Union programmes.
- 7) Priority should be given to issues at Union scale, with coherent coverage

and permanent surveys in all relevant fields (see annex). But in a few cases, the approach will be relevant only if developed at global (world-wide) scale. This is notably the case for minerals, energy, and climate issues. Europe is heavily dependent on imports, with either targeted or global implications. But at present, we lack of any tool to approach such issues. National institutions are too weak, and there is no sustained program at Unions level. The result is that only the USA is able to develop a strategy and to implement policies, whereas Europe remains "blind", and unable to act at the right level. US capacity is based on an organisation like the US Geological Survey (USGS), worth 10.000 staff. This compares with capacities available in Europe (if national capacities are added), but the only difference is that the US capacity is organised, not the European one!

8) A project like "digital earth" financed by the federal state and led by USGS is typical of the initiatives that the US administration is capable to engage in order to face such global issues, with no European equivalent at present. The next framework programme should be able to face such issues.