

ANNEX II

TECHNICAL ANNEX

At present the European research effort consists of the simple addition of the efforts of the 15 Member States and measures taken at Community level. The main reference framework for research in Europe, including financing, is still national. Ultimately this situation could lead to diminishing growth and competitiveness at European level.

In its communication of 18 January 2000 entitled "Towards a European research area"¹, the Commission proposed that this trend should be corrected by opening up and integrating the Community's science and technology area. It called in particular for greater coherence between measures taken by the Member States at national level so as to kickstart research in Europe. In this instance the European Union would act as a catalyst for a real European research area by way of the framework programme for research and technological development.

Following on from this course, the Research Council of 15 June 2000 outlined a number of avenues to go down² The Council called in particular on the Member States and the Commission to devise an information tool to improve the exchange of information on research activities.

Consequently, the Commission undertakes this study to establish an integrated information system on research and technological development in Europe. This information system should encompass national and Community systems of existing research and technological development.

1 OBJECTIVE OF THE CONTRACT

2.1. The contract consists of undertaking a study designed to:

- (a) identifying all the relevant sources of information so as to give a detailed overview of the policies of the Member States in research and technological development and more limited insight into the policies of countries associated with the framework programme and Switzerland (only the sources of information mentioned in point 2.2(1) and (3) need to be identified);
- (b) preparing the structure for an information system that fully integrates the sources identified in point 2.1(a) (these having to be utilised ultimately by the various players in research and technological development).

To achieve these two tasks account should be taken of the objectives set out in the above-mentioned Commission communication and Council resolution, in particular:

- co-ordination of national and European research programmes, including the mutual opening-up of national programmes,
- mapping of excellence,
- definition of a European approach to research infrastructure, better use of instruments of indirect support to research, benchmarking of national research policies.

¹ COM(2000)6, 1810112000 (<http://europa.eu.int/comm/research/area.html>)

² Conclusions of Research Council of 15 June 2000 (Ref. 9026/00).

The study is on behalf of the Commission which reserves the right to forward it to any national authorities that may be interested.

2.2. Sources to identify

The sources of information to be identified concern the areas below¹

- 1 Broad outline and priority of research and technological development policies, including existing programmes and programmes being prepared (plus calls for proposals). Evaluation systems. Prospective analyses.
- 2 Links between economic activity and RTD policy - in particular RTD policy driven by industry.
- 3 Principal research and technological development indicators.
- 4 Structure and organisation of RTD policies (including decision-making processes).
- 5 Legal bases of national and regional RTD policies (constitution, legislation).
- 6 Research financing mechanisms.
- 7 Measures to encourage research and technological development/promotion of innovation (including tax incentives, venture capital., etc.).
- 8 Human resources employed in the field of research and technological development (number of persons active, fellows, post-doctorate students, etc.).
- 9 Aspects of international co-operation. Bilateral co-operation with third countries (broad lines and resources). Participation in international organisations.
- 10 Plans for the future development of RTD policy.

The regional dimension must be taken into account in these various aspects.

2.3 Preparation of the structure of an information system

The contract is also for the preparation of the structure of an integrated information system. The creation of the actual system will be at a later stage. To this end the information organisation outline set out in point 2.4.4 must include the following features:

- **Targeting of existing information systems**

A number of information systems have been set up at European level (notably the Community initiatives CORDIS² ERGO³ and CRIS⁴), but while they contain pointers as to research policies at national level they do not provide comparative data on the subject. Information channels have also been made available in the Member States.

These information systems all have to be taken into account as far as possible in this study. The question of the languages in which the information is available should also be addressed.

- **Features of the information system to be created subsequently**

This information system should meet the following criteria: it should be user friendly; make for continuous, decentralised updating; offer graduated access to information according to the type of user

¹ The list is not in order of priority

² Community Research and Development Information Service (<http://www.cordis.lu>)

³ European Research Gateways Online (<http://www.cordis.lu/ergo/home.html>)

⁴ Current Research Information Systems (<http://www.nsd.uib.no/english/research/eucris/>)

(the target public will be varied and include policy-makers, university researchers, public and private research organisations and institutes, industry, investors, and the public in the broader sense); and allow geographic and/or thematic cover to be extended.

2.4 Work programme and description of tasks

The study breaks down into the following tasks¹:

- 2.4.1 Identification of relevant sources of information (as referred to in point 2.2) of public and private origin in the respective national and regional institutions (ministries, organisations, agencies, research institutes, etc.), taking account of information systems which go beyond the national framework. Presentation of how information systems are structured and operate (in particular, right of access to the different types of information). Production of lists.
- 2.4.2 Analysis of data collected, using a method that will help eventually to devise an integrated information system. This should be organised through a modular structure made up of a principal module covering the horizontal aspects of research and technological development with additional modules for each scientific field.
- 2.4.3 Summary and analysis of the conclusions following completion of the task set out in point 2.4.2 in order to establish the feasibility of the integrated information system, and in particular evaluate the capacity to integrate national information channels.
- 2.4.4 Proposal of an outline for information organisation based on the modular structure referred to in point 2.4.2 plus the layout of a website sufficiently detailed to enable the Commission to decide whether or not to create this website at some stage.

All the necessary fact-finding will be carried out primarily by survey, by post or electronic mail, or by any other means deemed appropriate.

Travel will be restricted to a maximum of 25 trips (each one not being longer than four days depending on how far the country being explained is from the contractor's place of work) and meetings with the Commission's departments in Brussels (as mentioned in point 3 of the terms of reference).

¹It has to be assumed that the countries involved on a priority basis (as per point 2. 1 (a)) will be called upon to establish the information system. The Commission will play the role of catalyst and focal point and help to integrate existing information systems concerning Community RTD programmes.