

European Union R&D funding

Do's & Don'ts

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Introduction

The Fifth Framework Programme is the name of the European Union's Research and Development programme. The programme, which started in January 1999 has a budget of 15 billion euros and will run until 2002. Framework 6 is already under discussion and is expected to start in 2003. This article provides an overview of the Fifth Framework programme and the issues, which must be considered when applying for R&D funding.

EU R&D programmes were started in the early 1980's and the early programmes concentrated on promoting co-operation between European researchers. Since the mid-1980s the emphasis has been on the development of the 'best European science' and on using this science to support European Union policies. In 1995 the European Commission funded a range of studies to assess the impact of EU Framework programmes and the results of these studies were published in the EU Green Paper on Innovation (1). One of the main findings of these studies was that, while European scientists were found to be producing world class science, the impact of these developments were not found in European enterprises. This became known as the 'European Paradox'. Since this time the Framework programmes have stressed the importance of exploiting the results of the Framework programmes.

In 1998 the Fourth Framework programme was evaluated and the main recommendation from this evaluation was that 'the next Framework programme must be firmly based on the twin pillars of scientific excellence and social and economic relevance' (2). This article examines the range of issues, which must be considered by researchers when preparing proposals for the Fifth Framework Programme.

The Basics

The information needed to submit a proposal to the Fifth Framework Programme is found in the Framework 5 website (www.cordis.lu). This website contains the programme details, the calls for proposals, the software to prepare the proposals and the evaluation manual which will be used

by the evaluators.

The Framework 5 programme is divided into four 'thematic programmes' and three 'horizontal programmes'

Thematic Programmes

- Competitive and Sustainable Growth (2.785 beuro)
- User Friendly Information Society (3.6 beuro)
- Energy Environment and Sustainable Development (1.083 beuro)
- Quality of Life and Management of Living Resources (2.413 beuro)

Horizontal Programmes

- International Co-operation (0.475 beuro)
- Innovation and SME Involvement (0.363 beuro)
- Training and Mobility of Researchers (1.28 beuro)

Types of Proposals:

There are six main types of proposal that can be submitted by researchers. These are summarised as follows:

- Research and Technology Development Projects: This is the main category of proposal for scientific research and development projects. Over 70% of the Framework 5 budget is allocated to these type of projects.
- Demonstration Projects: This category of project is for R&D which is being transferred from the laboratory to a more real life application. The key issue here is to assess the developments needed in 'scaling up' and the funding is for the 'risk associated with scaling up'.
- Co-operative Research – This category of project is better known as CRAFT projects. In CRAFT projects companies define a problem to be solved and research groups develop technical solutions to solve the problem.

The European Commission is aware that many new research groups want to get involved so they have introduced a number of special types of proposals to help them. These include:

- Accompanying Measures: This category is used to fund workshops, conferences (up to 100 people), training courses for researchers and summer schools. This is an

ideal starting point for researchers who are not familiar with Framework 5.

- Thematic Networks: The aim of thematic networks is to allow European researchers in the same technical field to establish a network to discuss the R&D needs and to prepare strategies for future R&D. It is an ideal mechanism to meet with other European researchers and to plan future R&D projects.

- Training Fellowships These are better known as Marie Curie Fellowships. This funding is used by young researchers to spend up to two years in another member state research laboratory. The funding covers the costs of the researchers and administration costs for the host organisation.

Explaining the State of the Art

In the past, proposals were written in a general format but more and more the proposals appear like scientific publications i.e. with references to define the state of the art.

One of the biggest mistakes researchers make in proposals is that they start by telling the evaluator HOW they will undertake the research. The correct approach is first to tell the evaluator WHY you are doing the research and then tell them HOW you are going to undertake the research. The following section describes how to explain the relevance of the proposed idea to the evaluators.

Explaining the 'Relevance' of the proposal to EU economic and social policy

The greatest difficulty in writing proposals for Framework 5 is explaining why the proposed work is relevant to EU social and economic policy. This is a new arena for researchers. To explain the 'relevance' researchers must first be familiar with EU policy and the thinking behind EU policy. This is easier than it first appears as the European Commission has a database of all EU studies (25,000 documents) and these can be used to identify the areas where R&D is needed. The databases are available at <http://europa.eu.int/geninfo/info-en.htm>

Example: In 1999 a research group in University College Cork, Ireland submitted a proposal to study the link between the foods we eat and osteoporosis. In the above database the author identified a study titled 'Osteoporosis in the European Union'. One of the main recommendations in this report was that 'more research is needed on the link between the food we

eat and osteoporosis'. The group submitted the proposal and it was immediately funded.

Selecting Partners

In EU R&D programmes the consortium must include organisations from the different member states. In practice an ideal consortium will involve eight organisations from 4 or 5 member states. Other countries, which can participate, include: Central and Eastern European Countries: These are politically important as 'enlargement' of the EU is the most important political issues in the EU.

European Economic Area (Norway, Liechtenstein, Iceland).

Other countries include Israel and Switzerland

In the past year the EU has signed 'R&D Co-operation Agreements' with a number of countries. These countries can participate in Framework 5 but they cannot receive EU funding. They include the United States, Canada, Argentina, China, South Africa and Australia.

Selecting partners is a difficult issue (and reason for failure) in the Framework

5 programme. The following are some recommendations:

Beginners: Find organisations in your field that already have contracts in Framework 5 and join them in a proposal. In this way your contribution to the proposal will be limited to your scientific work and you can use the experience to learn the procedures of Framework 5. Existing contractors can be found on www.cordis.lu

Summary

EU R&D programmes are an ideal mechanism to generate funding for your research group and to establish working relationships with other researchers throughout the EU. The rules and procedures are difficult at the beginning but the European Commission has introduced mechanisms such as the Accompanying Measures and Thematic Networks to help researchers.

Your strategy for Framework 5 should be as follows:

- Produce the 'best science'
- Promote your 'best science' at EU conferences and through EU publications
- Establish personal contacts with comple-

mentary researchers in other EU institutions.

- Use Accompanying Measures and Thematic Networks to identify topics for proposals.
- Submit initial proposals as a minor partner or sub-contractor.
- In later proposals increase your involvement in the work.
- Your long term objective should be to be the co-ordinator and main contractor in Framework 5 projects.

Conclusion

EU R&D programmes will continue and the organisations who will receive funding will be those: who produce the 'best science'; who are able to explain the relevance of their work; and who have mechanisms in place to exploit their results. You must think of EU R&D programmes as a long term activity. In the beginning there will be some frustrations with rejections and in understanding the procedures. Once these are overcome the EU R&D programmes can be an ideal mechanism to work with international R&D teams and to see the results of your R&D implemented in economic and social policies.

(1) EU Green Paper on Innovation
http://europa.eu.int/en/record/green/gp9512/ind_inn.htm

(2) Five Year Assessment of the European Community RTD Framework Programme. Prepared by an independent panel chaired by Viscount E. Davignon February 1997

Note on the author:

Sean McCarthy Managing Director of Hyperion Ltd. Since 1980 Dr. McCarthy was involved in over 150 proposals to EU R&D programmes. He also acted as a proposal evaluator and in 1997 he was part of the team which evaluated the EU Innovation programme. Hyperion specialises in the development of training courses for research managers and research administrators. Since January 1999 Hyperion has trained over 2000 research managers on topics such as proposal writing for the Fifth Framework Programme, management of EU R&D contracts and the preparation of exploitation plans. Hyperion also trains researchers how to present their R&D activities to business executives, EU officials and politicians. All of Hyperion's courses are presented in co-operation with the EARMA (European Association of Research Managers and Administrators) (www.cineca.it/earma/).

