INDUSTRIAL POLICY CRITERIA FOR THE EVALUATION OF THEME 1 RESEARCH PROJECTS

The 5th Framework Programme for scientific research aims at responding to the research needs and priorities of community policies. This translates for the specific programme on life sciences (Quality of life and management of living resources) into a strong focus on modern biotechnology. The Work Programme details research priorities while the Evaluation Manual describes the selection process for proposals. The present document shall provide additional guidance to assess research proposals relevant to Theme 1 from an industrial policy point of view.

1. INDUSTRIAL AND LEGAL CONTEXT

- The industrial policy of the Community aims at creating a knowledge-based society with enterprises operating on markets open to international competition. The policy fosters innovation, sustainable development and the removal of obstacles to change. It encourages flexibility, knowledge investments and entrepreneurship as well as the spread of information and know-how. It promotes Europe as a location for investment by companies whatever their origin, and seeks to enhance the competitiveness of European industry in an increasingly globalised context.

- Particular attention needs to be given to paragraph I of article 157 of the Treaty, which specifies that:

  "The Community and the Member States shall ensure that the conditions necessary for the competitiveness of the Community's industry exist. For that purpose, in accordance with a system of open and competitive markets, their action shall be aimed at:

  - speeding up the adjustment of industry to structural changes;
  - encouraging an environment favourable to initiative and to the development of undertakings throughout the Community, particularly small and medium sized undertakings;
  - encouraging an environment favourable to cooperation between undertakings;
  - fostering better exploitation of the industrial potential of policies of innovation, research and technological development".

- In addition, article 163 states that:

  "The Community shall have the objective of strengthening the scientific and technological bases of Community industry and encouraging it to become more competitive at international level, while promoting all the research activities deemed necessary by virtue of other chapters of this treaty".

2. SPECIFIC CRITERIA IN RELATION TO BIOTECHNOLOGY

The evaluation of research projects of the thematic programme "Quality of life and living resources", needs to take specific account of the potential contributions to EU industrial competitiveness.

Especially, proposals related to the biotechnology industry, as an important, research-intensive area, should cover the following perspectives:

- **Promoting industrial competitiveness and employment**

  Modern biotechnology constitutes indeed a growing range of techniques and processes applied for production and processing purposes in a wide variety of sectors (agriculture, pharmaceuticals, chemicals, food and environment). As a matter of fact, it has already been identified in the 1993 White Paper on Growth, Competitiveness and Employment as a technology with enormous potential for economic growth and job creation.

  Thus, modern biotechnology could create large numbers of jobs: In Europe in 1995, the estimated value of products and services involving biotechnology was around ECU 40 billion, representing between 300 000 and 400 000 jobs.[1] The value of products involving biotechnology could rise in the best case to ECU 250 billion by 2005, including ECU 175 billion for agri-food products alone. The associated employment would then represent between 3 100 000 and 3 300 000 jobs.

  Even thought it is usually recognised that Europe is not making the most of the opportunities provided by modern biotechnology, Europe has however been successful in transforming successful research (based both on a strong science base and on the high quality of process engineering) into new products and market shares.

  Evaluation of proposals therefore needs to take account of the potential impact of research activities on European industry's ability to generate economic growth, particularly in comparison with international expectations for the industry.

- **Innovation and take-up of new technologies**

  Industrial competitiveness policy is base, *inter alia*, on a comprehensive evaluation and understanding of the mechanisms underlying the innovation process and its relationship with research and commercial activity.

  Considering the vase potential inherent in modern biotechnology and given the crucial role of innovation, special attention should be given to the innovation factors, such as the academia-industry transfer of technology and the financing of

---

[1] Europabio's estimates (1997) in the 'Benchmarking and competitiveness of biotechnology in Europe' Report includes businesses involved primarily in biotechnology, but also those involved in a range of activities and those which merely make use of modern biotechnology.

innovation. This list is non-exhaustive: all factors for achieving successful innovation are important.

Conclusion

Therefore, the most important specific criteria that the evaluators have to pay attention to are:

1. **the innovative content of the project;**

2. **the contribution to growth and competitiveness and impact on job creation;**

3. **the academia-industry transfer, in order to contribute to the two first objectives.**