

**EUROPEAN COMMISSION – EUROHORCs HIGH LEVEL WORKING
GROUP**

ON A EUROPEAN FUNDING MECHANISM FOR BASIC RESEARCH

REPORT OF THE WORKING GROUP

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INTRODUCTION

In his address to the General Assembly of the EUROHORCs in May 2003, Commissioner Busquin suggested that the Commission and EUROHORCs should seek to create a genuine partnership to advance the European Research Area. Since then, fruitful contacts have been established between the Commission and the EUROHORCs, in the context of the debate on the future of basic research in Europe in general and the creation of a European Research Council more specifically.

In November 2003, the EUROHORCs produced a position paper “The case for a new funding agency in Europe”, which recommended a European-level funding agency for basic research drawing on the strengths and experience of the existing national research funding agencies.

The Commission’s communication “Europe and Basic Research” released in January 2004 identified a need to reinforce levels of excellence in basic research in Europe by means of a new funding mechanism at European level, and set out a timetable for taking this idea forward with a view to incorporating such a funding mechanism into the next framework programme.

Such funding should be provided to research projects of individual teams, through competitive evaluation of proposals solely on the basis of scientific excellence. This would provide European added value by driving up the overall levels of excellence in basic research in Europe.

On 11 March 2004, the Competitiveness Council agreed to examine the case for specific funding within the Framework Programme to support basic research. It recognised the need to *“stimulate research excellence of world class quality in Europe, in a wide range of sectors and disciplines, including social sciences and humanities, by encouraging more competition in science-driven research at European level selected on the basis of excellence”*. The Council agreed to return to the issue of basic research following the Commission’s further input.

In the context of these developments, Commissioner Busquin and Professor Winnacker representing EUROHORCs agreed to give concrete expression to the proposed partnership between the Commission and the EUROHORCs by setting up a joint Working Group on the proposed European funding mechanism for basic research, composed of members from EUROHORCs Member Organisations and Commission officials. In its work the Group has taken into account input from individual Research Councils and the European Science Foundation (ESF).

OBJECTIVES OF THE WORKING GROUP “EUROPEAN FUNDING MECHANISM FOR BASIC RESEARCH”

The task of the Working Group was, on the basis of experience at national and European level, to develop recommendations for the operational parameters of a European basic research initiative.

This report of the Working Group sets out the key principles which should govern the implementation of a European basic research initiative, as well as suggestions for the operational framework to be adopted. This should help structure a more detailed discussion,

leading to a clear definition of the means for supporting basic research under the 7th framework programme.

Early discussions of the Working Group have already contributed to shaping the Commission's communication "Science and technology, the key to Europe's future".

PRINCIPLES APPLYING TO THE IMPLEMENTATION OF A FUNDING MECHANISM FOR BASIC RESEARCH

The key concept of the European basic research initiative is that funding is provided to research projects of individual teams, and proposals are selected only on the basis of the criterion of excellence; that is to say, scientific quality, established through international peer review. The implementation of such an initiative should respect the following principles:

1. Trust and Credibility: the success of the mechanism will depend on it receiving the trust and confidence of the scientific community at large. In particular, there should be no "political" steering: the content of the proposals and the funding areas must be science-driven and "bottom-up" with decision making on scientific matters demonstrably and transparently under the control of scientists.
2. Adequate means: the level of funding accorded to the scheme would need to be appropriate and sufficient to address the specific needs with regard to excellence in European basic research. The individual grants should be of an important size so as to attract the very best scientists and teams and give them high international visibility.
3. Efficiency: lean management procedures should be the rule, with minimal administrative requirements for applicants. The grant allocation should be flexible and light, and designed according to best practice as identified with Research Councils at national level and elsewhere, while being compatible with the relevant financial management and legal framework.
4. Autonomy: the mechanism should be implemented independently of the existing administrative structures within the framework programme so as to assure and protect its specific character – an activity driven by science, with excellence as the sole criterion. At the same time, its funding decisions should be taken independently of research funding at national level and without any regard to 'juste retour'.
5. Transparency: the mechanism should guarantee transparency regarding the scientific review, management process and awards made. The competitive quality-based approach should be rigorously implemented, in a fully transparent manner.
6. Accountability: the mechanism should be accompanied by an appropriate reporting regime to ensure accountability in both scientific and financial aspects. The scientific reporting regime should be the responsibility of the organisation's scientific governing body. The financial aspects must comply with best practice rules of good financial management and compulsory regulations at Community level.

OPTIONS FOR AN OPERATIONAL FRAMEWORK FOR IMPLEMENTATION

Based on the principles set out above, a number of precise operational parameters for implementation of the basic research support mechanism can be specified.

These must in some cases be considered as provisional, and they involve some key questions which will be the subject of further analysis and reflection.

In pursuing the overarching goal of generating even higher levels of excellence in European science, it will also be necessary to consider carefully the most favourable structural and administrative conditions for the funding mechanism and the need to build and maintain the trust and support of the research community.

1. Administrative structure and governance by the scientific community: An administrative structure of high professional standard would need to be set up, which should be guided by a body such as a Governing Council comprising recognised and respected representatives of the scientific community in Europe at the highest level, who would act within a mandate established by the political authorities. Members of the Governing Council would act as “representatives of science” rather than of countries, particular bodies or scientific disciplines.

The Governing Council would oversee all aspects of implementation from the scientific perspective. Falling under this function would be overall strategy, portfolio of scientific activities, and the selection of projects to be funded after each call for proposals.

2. Scientific scope: Europe has a very high quality research base, with teams and activities established at many places, and in all areas of science and technology. A key advantage of operating at European scale is that a more competitive approach to research funding can be taken. This allows the available resources to be adapted to needs and to respond to new opportunities arising for scientific and technological progress within and across disciplines.

For these reasons and according to wide international practice, there should be no pre-defined limits on the scientific scope of the new funding organisation which should indeed reflect the spectrum of activities supported by similar Research Council structures across Member States.

3. Management of disciplinary and inter-disciplinary research: Within the overall scope of the mechanism, the question arises to what extent it should be organised in terms of scientific areas, and in particular what disciplinary structures may be appropriate and how they should be defined. On the one hand, the organisation of science by areas and disciplines is essential for practical reasons as it helps to establish the basis of comparability in order to strengthen and maintain quality in science. On the other hand, as science progresses, disciplines have themselves become more complex and inter-linked, with borders that are increasingly indistinct. Rigid disciplinary structures can impede scientific advance, particularly in highly inter-disciplinary areas where the major new opportunities are often to be found. Ultimately the identification of appropriate methods for dealing with these issues should be at the discretion of the organisation’s Governing Council.

More specific provisions may be needed at a later stage to ensure proper representation and treatment of inter-disciplinary topics. In designing the mechanism, the experience of organisations such as national Research Councils and the European Science Foundation will be highly relevant, as well as that of the Commission in implementing the framework programmes.

4. Evaluation and peer review: At the forefront of science, peer review provides not only a means to evaluate proposals and identify those most worthy of funding. It also can contribute substantially to the development of ideas and methodologies, via the constructive assessment and criticism of the applicants' proposals. Depth of analysis and full transparency in the assessment of proposals by peer reviewers therefore play an important role in the advancement of basic research.

The bottom-up nature of the basic research funding mechanism, and the broad application to science across all fields, suggest the need for a relatively large pool of experts, which could be established for a period of time, possibly extending over a whole framework programme period. The selection of high-quality peer-reviewers is essential for the success of a funding organisation. Reviewers and, in case the review is organised in panels, panel members should be proposed and selected according to standards and procedures to be established by the Governing Council. The possibility for organising the identification of suitable experts in conjunction with national agencies will need to be investigated.

5. Characteristics of the grant: The funding mechanism should support projects of top-class research teams solely on grounds of scientific quality. The composition of the teams should be driven entirely by scientific requirements and the need to perform excellent research. In many cases the teams would consist of personnel from a single laboratory or institution, in others they could include cross-national partnerships.

The grant must be attractive for the researchers in size and conditions and ensure a high level of flexibility in the implementation of the projects. Within these parameters it will be necessary to elaborate the financial and administrative characteristics of the grant, with the clear aim to avoid unnecessary complexity and heavy administrative requirements. The best approach for the application procedure would appear to be a simplified cost-based model in which researchers specify the needs for their projects according to the full economic cost of research in relation to the institution at which it takes place.

Further reflection is needed as to whether there should be limits to the size and duration of the grant (e.g. size in the order of 0,5 to 1 m€ per year for a duration of up to 5 years). It will furthermore be necessary to develop adequate rules for progress reporting (with the aim of keeping scientific reporting to a minimum), control and ex-post evaluation of projects. These would be tasks for the governing body.

6. Evaluation of the funding mechanism: In the same way as any Community action, but in particular because the structure and approach is relatively new, the implementation of the basic research mechanism must be reviewed and evaluated at appropriate intervals both to measure its achievements and to adjust and improve procedures on the basis of experience. This will require consideration of appropriate performance measures at the start.

CONCLUSIONS AND NEXT STEPS

The principles and requirements for an operational framework for implementation set out above provide clear indications of the type of mechanism which will be needed for the support of basic research within the Community context and for the purposes of the European Research Area. Such a mechanism must have specific and distinctive characteristics and draw on experience and best practice from organisations in Europe and world-wide in order to be both effective, and credible to the scientific community.

It will be necessary to develop further and refine the operational parameters for this action, so that it can be incorporated within the portfolio of future Community research. Questions, such as the possible need to manage proposal pressure and over-subscription may then be addressed.

In carrying out this work, the collaboration between the Commission services, the representative bodies of European science, and the national funding agencies for basic research should be continued.