

Interim Working Document on the implementation of a funding mechanism for Basic Research

Recalling the Spring Council conclusion that “the European Council sees merit in enhanced support for basic research of the highest quality”, the informal Competitiveness Council of 1-3 July 2004 welcomed the suggestion of the Commission to create a mechanism to support research conducted by individual teams in a competition at European level and expressed its will to conclude before the end of 2004 on the principles for such a funding mechanism. In its conclusions, the Presidency stated a number of these principles and invited the Commission to further define them upon consultation of the scientific community.

Following the Communication on “Europe and basic research” and the conclusions of the Competitiveness Council on 11 March 2004, the Commission has consulted widely on principles and appropriate mechanisms for funding basic research, taking account of different national practices, including those of the new Member States. In particular, the Commission and the EUROHORCs (EU Research Organisations Heads of Research Councils) set up a joint Working Group in order to develop recommendations for the operational parameters of a European basic research scheme, drawing from experience at national and European level.

On the basis of this work of consultation and analysis, it appears that the basic principles of the mechanism could be the following:

Principles

1. Investigator-driven research: the research supported should be truly “investigator-driven” and “bottom-up”, with proposals selected on the criterion of scientific excellence.
2. Adequate means: the level of funding accorded to the scheme would need to be appropriate and sufficient to address the specific needs of basic research in Europe. The individual grants should be of a significant size so as to attract the best scientists and teams from the whole Europe, including bright young researchers and excellent emerging 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 at national level and elsewhere, while being compatible with the EU financial management and legal framework.
4. Autonomy: the mechanism should be implemented and managed in an autonomous structure, to assure, in an optimal way, the particular features of the scheme and reflect its independence from the strategic orientations of other parts of the framework programme. At the same time, its funding decisions should be taken with a true European perspective, independently of research funding at national level and without any regard to ‘juste retour’.
5. Transparency: the mechanism should guarantee transparency in its operations, in particular regarding the management process, peer review and awards made.

6. Accountability: the mechanism should be accompanied by an appropriate reporting regime to ensure accountability in both scientific and financial aspects.

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.

1. Structure and administration: In pursuing the goal of generating higher levels of excellence in European science, it will also be necessary to assure the most favourable structural and administrative conditions for the funding mechanism. A high quality administrative structure would need to be set up, which should be guided by a body such as a “Governing Council” comprising representatives of the scientific community in Europe at the highest level. Members of this “Governing Council” would act as “representatives of science” rather than of countries, particular bodies or scientific disciplines. The Governing Council would oversee the operation of the basic research funding mechanism from the scientific perspective and act as guarantor of the quality of the process.
2. Scientific scope: 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 structures at national level, and the “horizontal” activities within the framework programme (Marie-Curie awards, infrastructure, NEST, etc.).
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. Specific provisions may be needed to ensure proper representation and treatment of inter-disciplinary topics.
4. Evaluation and peer review: Peer review is at the core of EU research funding, as the basic mechanism used for the evaluation of proposals. 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. Reviewers and, in cases where the review is organised in panels, panel members should be proposed and selected according to “best practice” standards and procedures.

5. Characteristics of the grant: The grant allocated to individual research teams should be attractive for the researchers in size and conditions and ensure a high level of flexibility in the implementation of the projects. It will be necessary to elaborate the financial and administrative characteristics of the grant with the 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.

6. Evaluation of the funding mechanism: In the same way as any EU 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.

Next steps

The principles and requirements for an operational framework for implementation set out above provide indications of the type of mechanism which will be needed for the support of basic research within the EU context and for the purposes of the European Research Area.

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 EU 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.

In the coming months, the Commission will address, inter alia, the following issues:

1. The choice of an appropriate structure, able to meet the requirements of the new funding mechanism (Executive Agency, traditional EU Agency, or specific structure, for instance a Foundation, under Article 171).
2. The establishment of the “Governing Council”, which would act as a guarantor and oversee the scientific aspects of the mechanism.
3. Further development of the operational framework of the mechanism (grant, evaluation and peer review, interdisciplinary research, etc.).

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