## **European Research Council Expert Group**

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## **Summary Document**

#### Introduction

The European Research Council Expert Group (ERCEG) was set up on the initiative of the Danish Minister of Science, Technology and Innovation, Helge Sander, during the Danish EU presidency. It was a follow-up to the debate in the Council of Ministers in November 2002 on the status of the European Research Area (ERA). The Expert Group has been asked to further discussions on the purpose and scope of a European Research Council (ERC) and to explore options for its possible creation. The Expert group will deliver its report to the EU research ministers in December 2003.

This interim paper has been prepared to summarise the present state of discussions in the Expert Group. It will be widely distributed to facilitate broad consultations with ministries, research organizations and other interested parties. The ERCEG will take these consultations into account in writing the final report.

It is the hope of the Expert Group that these consultations and the final report may be a valuable input to the political discussions in Europe along with other initiatives aiming at strengthening the ERA.

#### **Background and proposal**

Several broadly supported initiatives have been launched recently to strengthen the competitiveness of Europe. By the Lisbon declaration the European Union has acknowledged that in establishing the European Research Area (ERA) there is a strong need to improve the competitiveness also through strengthening the knowledge base in order to make Europe the most competitive and dynamic knowledge-based economy in the world. That this cannot be done without increasing the investments in R&D was acknowledged in the Barcelona declaration. The Expert Group has surveyed the situation in Europe with respect to the existing base of research and knowledge and has found that the available evidence strongly supports these points of view.

However, an emphasis on increasing European competitiveness and on achieving growth through investment in research and education (as argued e.g. in the recent Sapir report) may not be sufficient to reach the ambitious political goals set out – necessary and laudable as they are. In addition, full use must be made of the opportunities offered by the European Research Area by mounting a concentrated effort to strengthen the very basis for scientific discovery by carefully nurturing innovative, long-term and risk-taking basic and investigator-driven research.

The knowledge base is preserved by and made useful through institutions and people. The main issue is therefore to reinforce the knowledge base through building up excellence and competitiveness in private research-led companies, in universities and in dedicated research institutions. This cannot be done without a strong European, as well as national,

commitment to investment in research and a new European research policy for basic research and for training of young researchers.

The overwhelming bulk of basic research is still to be carried out in the member states, with external funding predominantly provided through national funding. However, the ERA needs – in a carefully orchestrated and complementary division of labour with national efforts – a research policy with new funding mechanisms for basic and investigator-driven research, based on the highest level of excellence and on competition as the mechanism of selection.

In the coming decade there will be a shortage of highly qualified researchers and at the same time a risk of brain drain and a lack of incentives for enterprises to invest in R&D in Europe. There is a need to find mechanisms to better utilize the young European talents, in particular the many talents in the new member states. One must remember that industry and research is acting on the global scene; therefore it is very important to create attractive positions and research environments in Europe for such talents.

There is a need to increase the training of new researchers and of researchers of high quality. Researchers in Europe should have easy access to the international front line of science. By competing for research funding at the highest level of excellence in Europe they should be encouraged to raise their scientific standards and to pursue challenging research careers in an open, competitive manner.

In order to ensure that R&D expenditure is used at the highest level of excellence, a reasonable part of public investment in research should be distributed for basic research on the basis of competition at European level, allowing long-term research strategies and risk-taking, and not being directed by short-term considerations.

European funding should also help in raising the overall standards of scientific quality in national research funding systems throughout Europe and in strengthening the use of existing European and international resources. In addition, it may inspire and contribute to innovation-oriented research within the EU Framework Programmes and national programmes.

A stronger European base of research and knowledge is needed for economic, social and intellectual reasons:

- for long-term economic development and growth
- for a harmonious cultural and social development
- for the upholding and strengthening of the great European scientific and intellectual potential and traditions as we face the challenges of new scientific discoveries and innovation.

Against this background the Expert Group has found that there are compelling reasons for adopting a European research policy involving new funding mechanisms for basic and strategic, investigator-driven research, in particular the setting up of a European Research Fund for Basic Research. In order to be credible and efficient such a fund must be managed at arms length from the political system.

# The Expert Group recommends that the European Union sets up a European Fund for Basic Research to be guided and managed by a European Research Council (ERC).

The European Research Council should in the main build upon eminent researchers. It should operate with a clear political accountability while having at the same time a considerable degree of scientific autonomy.

The *general mission* of the ERC, spelled out in a charter, should be to promote scientific excellence as a basis for social, cultural and technological progress throughout Europe by funding internationally excellent research. The ERC should strengthen the ERA, especially in researcher-initiated endeavours. It should promote the highest scientific quality through European competition for funding on an international level via competitive processes guided by international peer review within all research disciplines including engineering, the humanities and the social sciences. Its main challenge is to put Europe at the forefront of international research.

The ERC must have scientific autonomy, be fully accountable, operate on the basis of a set of clear objectives and have adequate means for its tasks.

#### Tasks

The *basic tasks* for the ERC in using its funds must be outlined against a careful analysis of the strengths and weaknesses of the present European research systems and must be adapted to the situation in different research areas. At least five tasks should be considered, and should in each case be carefully outlined in cooperation with existing national and European funding mechanisms, to obtain clear added value:

- Increasing scientific excellence on all levels throughout Europe by organising competitions for funding of leading-edge basic and strategic research
- Specific European programmes for research training and mobility in order to increase the number and the quality of researchers for the future
- Support for a wider access to international, large-scale research programmes as well as to major European and international research facilities and infrastructures
- New mechanisms for fostering collaboration schemes involving national research councils, with the aim of improving cooperation and inspiring multidisciplinary research
- The ERC, while building upon the strengths of European research, should also in the medium term inspire and guide the development of competitive research capacity in weaker areas, geographically or thematically.

The role of universities both in research and in the education of new generations of researchers is crucial for the ERA. Even if the development of universities and higher education and the training of researchers continue to be a national concern, the ERC can by its granting procedures raise standards of research and guide the education of new generations of researchers.

The ERC could also help strengthening the research base in Europe for solving major international problems, especially in relation to the difficulties faced by the developing countries. It could have a leading role in European inputs to the international research scene.

#### Ownership and working methods

The ERC must be created by the European Union and thus by its heads of state and it must be approved by the European Parliament, as a major new European entity and an important instrument for building up the ERA.

The associated states should be invited to participate. The ERC should be politically accountable to the EU and the wider European society for its funding principles, its priorities and its actions.

However, the ERC must operate as a scientifically autonomous body and its work should be based on the advice and guidance from the European research community. It is both advantageous and necessary to exploit the capacity for self-government of the research community. This will be essential if the ERC is to obtain trust and credibility within the scientific community.

A policy for cooperation and division of labour between the ERC, the national research councils, the EU Framework Programme and other European research organizations is important. Such an overall policy should be a specific part of the charter for the ERC and should be developed and pursued by the ERC in its key actions. The ERC should draw on the best experts and may find them through national and other bodies.

However, a healthy competition between the R&D funding organizations and a multichannel funding system may also be desirable in order to develop good working methods.

The administration of the ERC should be lean. The work methods and processes must be flexible, transparent and well adapted to the varying needs and circumstances in different research areas and disciplines. The funding decisions must be based on international peer review.

Evaluation and monitoring of performance are of crucial importance. Programmes undertaken by the ERC should have well-defined objectives in terms of impact and results. New programmes should not be undertaken unless a clear decision about the evaluation of them has been made.

#### Funding

The ERC should be set up to guide and manage a European Basic Research Fund, which receives its budget from the EU.

Its budget should come from a specific line in the budget approved by the European Parliament. How this can be realized depends on the EU Treaty. As things stand at present it will have to be *a specific line in the budget for the EU Framework Programme*. In this way it is possible to establish the ERC as an independent entity within the EU budget but at the same time defend the operational autonomy and flexibility which are so important for the quality of its work and for its credibility in the research community.

Appropriate funding is needed. The ERC should not be created at the expense of existing and well functioning national or European R&D activities. Therefore the ERC should be established only if additional and substantial funding for basic research is provided in the EU budget. However, parts of the present funding schemes of the EU Framework Programmes which are of a basic research character (e.g. parts of the Networks of excellence, of the Marie Curie, and of the ERA-NET funding schemes) may be transferred to the new ERC and become part of a first step in its development.

The total national funding of university research and of national research agencies in Europe is in the order of  $\in$  40 bn per year. If a European scheme is to have an impact on the national research efforts it is estimated that 5 percent of this amount, around  $\in$  2 bn per year, is needed. This is well in line with the increase of R&D funding stipulated in the Barcelona declaration as what is needed to achieve the objective of the Lisbon declaration.

In Barcelona it was decided that public R&D spending in Europe before 2010 should increase from 0.7 to 1 percent of GNP. This means an increase up to approximately  $\in$  30 bn per year over the period. Evidently most of such an increase should be at the national level. However, funds should be found for an increase at the European level as well, and some of it should be used to set up and run the ERC.

#### Organization

The organization for the ERC should be light. It should include a Senate, a Board of Directors, staff and an Advisory Forum.

The members of the governing body of the ERC, the *Senate*, should be appointed by its sponsors and thus be accountable to the political system. They should be proposed by a committee composed of some of the most eminent researchers and research policy-makers in Europe and they should in the main them selves be eminent researchers from academia and industry. The members of the Senate should work in their personal capacity. Among the members there must also be highly respected personalities with a deep knowledge of research management and with a high standing in the political system and in the wider society.

The Senate acts as the main decision-making body and as the guarantor of the independence and credibility of the entire institution. It carries strategic decision-making functions, appoints the Chief Executive and the members of the *Board of Directors*, consisting of the Chief Executive and the deputy directors. The Senate decides upon the strategic plans and the overall priorities in accordance with the political will behind the funding of the ERC. It approves of the principles of procedure for the operations of the institution. It approves the overall budget. In fulfilling these functions, the Senate should allow for flexibility in implementing new initiatives. It also guarantees that all operations are appropriately evaluated.

The Senate must provide the ability for the ERC to interact with the wider spectrum of scientific and political institutions, stakeholders and representatives of European society at large, and ensure the capacity to carry out its activities in accordance with the principles of scientific autonomy, academic quality assurance, and research-based priority setting.

In order to facilitate interaction with other stakeholders and with the wider scientific and research funding community in Europe, an *Advisory Forum* should be established. Its advice will provide important feedback from the European scientific community and other stakeholders. The Advisory Forum would also facilitate the establishment of non-permanent *committees* and *panels* of the highest academic level for different *funding initiatives*, for *peer review* and for *evaluation*.

#### The first steps

The ERC should be built up over time in well-defined stages. One possibility is to limit its work at the start to one or a few of the tasks outlined above, and in a next step expand the work to other tasks.

#### Sunset clause

The setting up of the ERC should be seen as temporary until it has proved its value. Its work and impact should be evaluated after e.g. 7 years and, depending on the outcome of this evaluation and the situation at that time, a decision should be taken to close it down or to continue its operation, possibly with major alterations of its charter and modes of operation.

### Conclusion

If Europe wishes to achieve the goals set by the Lisbon summit to become the most competitive and dynamic knowledge-based economy in the world, the creation and funding of the European Research Council is a crucially important step to take at the European level. The ERC should be a specific and autonomous entity

- set up to guide and manage a European Basic Research Fund, which receives its budget from the EU
- accountable to the EU and to other possible funding partners for its funding principles and priorities
- guided by the European scientific community, and
- with a mission for funding internationally excellent research covering all disciplines via a competitive process of international peer review.

#### Questions and comments can be directed to the secretariat:

mail@ercexpertgroup.org

#### Remarks on the plans for the final report from the Expert Group

The final report will be based upon the consultations undertaken in the autumn 2003 using the present report. It will contain a more detailed description of the view of the ERCEG concerning the need and evidence base for the proposal as well as more precise recommendations with regard to the impact we expect to achieve.

The report will provide more details about the proposed tasks for the ERC. It will consider to what extend project funded by the ERC should be trans-national. This will involve a careful consideration of how to establish the priority settings by the ERC in a transparent interaction with the European research policy makers and a proposed policy for the interplay with national research funding organizations.

Finally the report will outline the next steps to be taken on the political level towards the establishment of the ERC.