

Editorial

Towards a European Research Council (ERC)

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The project of giving the responsibility of distributing research grants to a European Research Council (ERC) is currently the subject of intense discussions in scientific and political circles in Europe. The EMS supports this project, and encourages all its members to promote it at political and scientific levels in their countries.

Briefly put, the ERC would be both an advisory council and a funding agency at the European level, with the specific aim of developing fundamental research in all disciplines.

A two-year history

The idea of an ERC, catering for fundamental research in Europe, was officially launched at an international conference in Copenhagen in October 2002, during the Danish EU presidency. An expert group was created by the Danish Minister for Science, Technology and Innovation, Helge Sander, under the leadership of Federico Mayor, and the group made explicit proposals in December 2003.

Meanwhile, thanks to the role taken by the European Life Science Forum (ELSF) and other organisations of life scientists and to the unbounded energy of Luc Van Dyck, the scientific community caught on to the idea and formed an informal platform of discussion, the Initiative for Science in Europe (ISE), and had further debates on the aims and the means of such a structure. They quickly had the idea to expand their vision to all sciences, including social sciences and humanities, and naturally mathematics.

At the time, the idea was wild: the European Union's activities were limited to research applicable to industrial development, with a component of training through the Marie Curie actions, and it was believed that the EU could not do anything else without violating the subsidiarity principle, implying that basic research should remain national. However, at a meeting in Dublin in October 2003, Achilleas Mitsos, Director General with the EC Directorate General (DG) Research, announced that the Commission supported the idea of an instrument for basic research and, for this purpose, would request a specific credit line from the EU budget.

The question of budget is of course a major problem, even though the EU member states committed themselves to reach the Barcelona objective (3% of the National Product to be invested in research - 1% public and 2% private funding) by 2010. However, if in 2002 all states agreed to have a much increased research budget by 2010, most decreased theirs within a few months!

Still, rowing against many currents, the group pursued its effort in favour of establishing an ERC, with the effect that it now appears as a real and solid perspective.

Clearly, the European Commissioner for Research, Philippe Busquin, has played an important role in this process by introducing the idea of a European Research Area and promoting it vigorously inside the EU. Under his guid-

ance, the Commission made the explicit request that for the next financial period starting in 2007, the budget of research handled by the EC should be doubled. The budget of the Framework Programme (around four billion euros per year) would thus be supplemented by an equivalent budget, a large part of which would be attributed to the ERC.

At this stage, the research ministers of Europe support the project, but the finance ministers will have to include it in their global perspectives.

Basic principles

For the time being there is reasonable agreement (at all levels) on the principles to be implemented in the ERC.

The ERC would be in charge of basic, fundamental, scientist-driven research. Indeed, it is (finally!) admitted that this type of research is a necessary investment with a long-term perspective that also has to be supported at the European level.

Researchers would apply for grants from the ERC, and the selection would be based only on scientific quality, by a rigorous peer review process.

There would be no notion of "juste retour" for the states funding the ERC through their EU contributions, and no criteria other than the scientific excellence, which in itself provides the added value for Europe.

A scientific council would be appointed, and be put in charge of managing the ERC without political interference, for instance on the choice of subjects.

The ERC should be funded thanks to the increase in the part of the EU budget going to research, and absolutely not by diminishing the corresponding amounts from those of the national research agencies.

The budget should be commensurate with the ambitions of the project. Current discussions (but not by those who will have to find the money!) mention amounts between one and four billion euros per year.

A serious problem is the risk of oversubscription. In the EU Framework Programmes, the rate of success of applications is sometimes down to 5%, which leads to the discouragement of the best scientists. The scientific council of a future ERC will have to handle this problem, but avoid artificial rules resulting in the exclusion of some proposals. It may think of putting a limit to the size, rotating subjects or using other means - but overcoming this difficulty without perverting the project will be necessary.

EMS and ISE

The ISE started informally with a dozen European associations. On October 25th 2004, alongside a meeting held in Paris, it was more officially created, and the EMS is one of its members. In fact, it is the only body representing mathematicians in this structure.

The ISE was created around the idea of supporting the ERC and will continue monitoring



this initiative. It will also act as a reflection platform for the development of science in Europe in the future.

Its web site is <http://www.initiative-science-europe.org>

What you can do?

Right now we are in a position of great uncertainty. The idea of an ERC has moved from nothing to a fully-fledged project, with backing from the European Commission and (probably) the Council of European Ministers. However, whether the necessary budget will be made available is doubtful. A strong political argument has to be developed by scientists, in particular in the larger states of the EU, which at this stage do not approve of the idea of increasing the EU budget, thereby preventing the doubling of the research budget. The next few months will be crucial, and a determined action is required in the member states whenever an opportunity arises.

The idea that basic research is key to the future success of Europe is now better acknowledged, but further efforts are needed to convince the larger states that part of the scientific activities are better handled at a European level, and that a financial effort to make this possible at the right level must be made now. It is almost sure that the European Parliament will have a say in the process, and at this moment very few of the members have formed an idea on the project. It may be a good time to approach them, and discuss this issue with them. This could be a good starting point for further contacts since, as mathematicians, we could make our case in the context of a comprehensive project where all sciences are involved, but nevertheless of prominent significance for us, in view of the almost evanescent support now available for mathematicians in the Framework Programme.

References

More information on the project and its evolution can be found in the ELSF brochure <http://www.elsf.org/elsfbrochures/elsferc03.pdf>, and the site <http://www.elsf.org/elsfercc.html> provides access to a large collection of documents.

A letter of support for the ERC plan, signed by representatives of 52 associations, was published in August in Science, see http://www.initiative-science-europe.org/forms_maps/Science.pdf

A web search on ERC and ISE will show that the debate on ERC is developing, and that the advisory board of the Commission (EURAB) is very much in favour of the project, but sadly that some scientific bodies in large member states refuse to give up some of their national power.