

**EURAB WORKING GROUP 4****The European Research Council (ERC) - A Possible Implementation Model**

## Summary:

- EURAB reiterates its recommendation for the establishment of a European Research Council to promote European level competition and funding of investigator-led research at the forefront of science.
- EURAB expects the ERC to be the catalyst for rapid scientific progress in Europe and to be an essential part of the development of the ERA within the triad of education – research – innovation. It provides added value to the European research system and will be expected to bring a number of benefits (see para. 2).
- The ERC will operate as a funding agency and will not have responsibility for managing and executing research.
- EURAB recommends that there has to be a strong political commitment (at both European and national levels) to the launch of an ERC, so enabling a pragmatic implementation to take place, and the establishment of the ERC as a priority in future overall EU budget setting.
- The ERC should aim to support and develop European research leadership on the global stage and, eventually, become one of the more significant research funding agencies worldwide. The ERC, in addressing its responsibilities, has to give emphasis to new integrative approaches and avoid an overly cautious response. It should also address issues relating to research infrastructures, the individual researcher (at both junior and senior levels), collaboration and co-ordination and has to address science education.
- The ERC has to be open to the whole research community, academia, national research organisations, those funded through private trusts and must include scientists from industry.
- New funding has to be both substantial from the outset and come from EU resources in order to establish a strong ERC as an essential complement to the Framework Programme and national organisations in realising the ERA and European Council objectives. Additional national contributions, contributions from the Framework Programme, and, possibly, from other sources, such as private foundations/trusts and the private sector in general, should also be included.

- It is recommended that, as a matter of urgency, further work is carried out by appropriate European-based science bodies to develop examples of possible actions, plan overall financing over the next 10 years, and outline schemes for implementation in order to provide a full supporting case for the political launch of the ERC in 2004.

1. EURAB has previously recommended the creation of an ERC to promote European level competition and funding of investigator-led research at the forefront of science covering the complete spectrum of science, including engineering, the humanities and social sciences (EURAB Report 02.055 final). This recognises that a new European impetus is needed to mobilise and maximise European investment in research and to attain a World-leadership position. The ERC complements the Framework Programme and national research funding systems. Without it, European research will always remain fragmented and less effective despite the inherent intellectual capacity of its people. **Thus, the ERC is the catalyst for rapid scientific progress in Europe and is an essential part of the development of the ERA within the triad of education – research – innovation.**

The ERC will operate as a funding agency and will not have responsibility for managing and executing research. It will not duplicate the role of the EU Framework Programme and both complements and supplements that of the national funding agencies. At its core, its primary concern has to be the promotion of European scientific excellence.

2. An ERC will bring a number of benefits:
  - it will promote outstanding quality and excellence through competition at a continental (European) level. This, in turn, will create a more globally competitive European research community;
  - it will provide knowledge to tackle new and emerging problems and so lead to the production of novel ideas and discoveries for the benefit of the European society and its economy;
  - it will provide a more effective use of scarce research resources and so increase efficiency by helping to avoid fragmentation of effort and unnecessary duplication of funds by national authorities;
  - it will, in the long term, provide a science policy framework for the institutions of the European Union and so provide stability and a better overall view of European research developments and directions.
3. Two models have been proposed - the so-called "Big Bang" and the "Evolutionary" approaches. The "Big Bang" envisages the ab-initio creation of an independent ERC having a critical financial mass, to produce a major impact on the

European science system. Relevant existing schemes could be 'folded' into the ERC at a later stage. The "Big Bang" is a visionary step which has to be anchored firmly in both the political and research communities with their "ownership" from the very start.

An "Evolutionary" approach envisages the combination of existing schemes which address competitive research at a European level to achieve a critical mass to which new funding is added. However, it would still require the establishment of a proper legal structure and have a substantial core of EU funding to which the other schemes may be attached. This must not dilute in any way its role as the principal body supporting initiator-led research or to a system of "micro-management" of such European funds. While the relevant national agencies concerned have to be involved in this project so as to develop a symbiotic relationship with the ERC anything leading to a "confederal" (agency of agencies) structure for the ERC is not favoured.

4. The consensus which has emerged favours a combination of both models with the need to have a political "Big Bang" for the launch of the ERC. This is of primary importance in demonstrating a strong public commitment to the ERC. Thus, it can provide the ERC with its operating structure which can then be combined with a pragmatic implementation in a stepwise manner by bringing existing relevant schemes together under the ERC "umbrella" and establishing new additional funding.
5. The ERC should aim to support and develop European research leadership on the global stage and, eventually, become one of the more significant research funding agencies worldwide. An ERC has to cover both "competition" of European researchers and "collaboration/co-ordination" of both researchers and national funding agencies, with a strong emphasis on the former.
6. The ERC has to address:

Within the area of "competition", the ERC has to emphasise, above all, excellence as well as European added value through co-operative proposals and has to address those issues which have to be tackled at a European level. Overlap with FP is avoided as the ERC should be funding investigator-led initiatives which fall outside FP definitions. The FP will then be able to develop an enhanced focus on "top-down" programme in policy support and with a strengthened mandate in support of innovation.

The ERC has to give emphasis to new integrative approaches combining different disciplines and so foster multi-, inter-, and trans- disciplinarity at the European level.

It has to avoid the cautious (conservative) approach within the national and FP systems and see itself as a provider of "risk funding" although always taking scientific excellence as the base for its funding decisions.

This will be difficult to achieve but has to be at the heart of the ethos of the ERC.

It also has to be prepared to support the development of “new ideas”, through support for teams and meetings to stimulate creativity and prepare issues for future funding competition.

Therefore, the ERC has to be seen as a source of such creativity and should:

- support high risk programmes with substantial funding
- support large projects beyond the capacity of any one nation to take forward (either financially or intellectually)
- have the lead role in European inputs to global research issues (e.g. global environmental change research) to avoid fragmentation of a European 'voice'. Therefore, the ERC would take on leadership in relationships with other large funding agencies outside Europe.

7. The ERC will provide, on a competitive basis, research funds for users of established research infrastructures beyond access support. The infrastructures themselves would remain within their current organisational arrangements. The ERC would provide a focus for scientific advice about new facilities and could contribute financially to their realisation.
8. The ERC will have responsibility not only for supporting group research, as set out above, but also for fostering the individual researcher at both the younger researcher level and also at more senior levels, again, to encourage and foster European leadership and retain and attract the best brains to Europe in order to achieve leadership and sustain European research.
9. The second main strand of an ERC should be “collaboration/co-ordination” and here the work of the principal “research networking” agencies will need to be folded in to the ERC. This would mean that COST and ESF activities should be brought under the umbrella of the ERC.
10. Although education remains a national/regional competence, an ERC should have responsibility for promoting science or research education, in concert with national authorities, at all education levels. The aim must be to achieve a European ‘target’ of scientific and research literacy. This not only ensures that there is a well informed citizenry but that there is also a European scientifically and technically educated labour pool. For both issues, combining dissemination with education is vital.
11. Ultimately, these activities will require future focus and, inevitably, an ERC will have to devote some attention to science policy development. However, this should happen naturally. At the same time, the ERC will be able to respond to requests for research policy advice at the

European level and also provide an input to policy issues concerned with research in general at both the European and national levels.

12. The ERC has to be open to the whole research community, academia, national research organisations, those funded through private trusts and must include scientists from industry.
13. In terms of innovation, while having a different role from that of the FP, the ERC could have some responsibility for the encouragement of innovation, possibly by following the US model of the Small Business Innovation Research (SBIR), pioneered by the “basic” research agency, the NSF, and now the established practice in US government research funding.
14. An ERC should be founded on autonomous scientific decision making based on the peer-review process but accountable to a representative (political) governance structure. Such a political structure has to be at arms length from the science decisions. However, this structure can also serve as a route for the two-way transfer of ideas between the political and the scientific ‘worlds’. One model in which Science or Research Ministers form a ‘trusteeship’ council may provide sufficient accountability without undue involvement in the autonomous scientific decision making.

To have the confidence of the research community, an ERC must have senior scientists and science managers on its supervisory body but it will depend on having an excellent management structure with a degree of independence to the ERC officials.

15. New funding has to be both substantial from the outset and come from EU resources in order to establish a strong ERC, although additional national contributions, relevant programme contributions from the Framework Programme, and possibly some from private foundations/trusts and the private sector in general could be included.
16. The ERC is modelled on independent national research councils and grant agencies in terms of accepted best practice in research funding and the extension of the research council 'model' across Europe is desirable. Inevitably, there will be some overlap but, at the same time, it provides an additional funding opportunity. The relationship between the ERC and national research councils will require further definition but the ERC must quickly establish itself as the provider of highly prestigious awards based on the most rigorous selection procedure.
17. The ERC has to be a priority in future overall EU budget setting. Thus the “Big Bang” is politically necessary in order to establish the ERC within the future EU Financial Perspectives. There is now a “window of opportunity” for this to happen provided that there is this new political will to put into practice the ongoing development of the ERA. Funding and governance structures can then be put in place and relevant existing

schemes can start to be seen as initial steps to implementation (as existing budget lines, they can be incorporated from both EU and national funding) without undue difficulty. Initially the ERC has to concentrate on a few selected priority action lines across all fields whilst encouraging multi-disciplinarity. In setting these financial envelopes, the ERC has to be seen as an essential complement to the FP in realising the ERA and European Council objectives.

18. In order to further develop the ERC model, it is recommended that, as a matter of urgency, further work is carried out by appropriate European-based science bodies to develop examples of possible actions, plan overall financing over the next 10 years, and outline schemes for implementation in order to provide a full supporting case for the political launch of the ERC in 2004.
19. EURAB welcomes and endorses the activities of ERCEG in promoting and developing the concept of the ERC. EURAB also welcomes the input of other European organisations, which have developed and published detailed policy statements supporting an ERC. This demonstrates that there is a need and desire within the European research community for such a development which has to be matched politically.