

# Footing the bill

Where will the money for the European Research Council come from?

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When the discussion turns to the creation of a European Research Council (ERC), a series of questions spring to mind. Answering some of them is now almost trivial—for example, “Why is an ERC needed and timely?”—whereas the answers to others, being more political, are certainly more difficult to envisage for most practising scientists. This is notably the case for the questions: “Who will be the ERC’s founders?” and moreover, “Who will pay?” Indeed, the financial aspect is probably the most sensitive and challenging issue associated with the creation of an ERC because it may determine the political support required, as well as the timetable for its establishment and the ambitions of its programmes. And those who are ready to pay are scarce.

Several funding possibilities can be envisaged, with varying probabilities of becoming reality. Charities, for example, may certainly become one of the funding sources, although probably neither a reliable one in the long-term, because of unpredictability, nor a main one, as funds may need to be targeted to specific programmes in line with the missions of the charity. Industry is also considered by some—wishful thinking—to be a potential source. European Commissioner Philippe Busquin commented at the Danish Presidency Conference in October last year, “A certain amount of fresh funding is [...] essential, and it could and should be provided to a significant extent by businesses, for example, through foundations.” But during the meeting organized in Paris by the European Life Sciences Forum (ELSF) in February 2003 (Breithaupt, 2003; van Dyck & Peerenboom, 2003), both Hans van den Berg, from Akzo Nobel, Arnhem, The Netherlands, and the Animal Cell Technology Industry Platform, Rotterdam, The Netherlands, and Horst Domdey, from the company Bio<sup>M</sup>, which promotes the BioTech Region in Munich, Germany, clearly stated that, although it supports the ERC concept, industry cannot be the main funder for economical reasons. Others

also ask why companies should finance an ERC when they are already paying taxes. In looking for financial support, it is thus necessary to turn to the usual players: the national research councils, the member states and the European institutions.

Should national research councils contribute to the budget of the ERC? I would argue against it; at least they should not be major contributors. What our research needs to be competitive is more money—importantly, new money—and a variety of funding schemes and opportunities. Reshuffling funds between national councils and a new European body would not solve the problem, and it may put political constraints on the ERC. Moreover, the research funding situation varies among EU states. In 2000, Finland dedicated 41% of its civil research and development (R&D) budget to project funding, whereas France reserved only 7% of its funds for research projects, the rest being mostly used for institutional funding, according to the 2002 report from the Koordinierungsstelle EG der Wissenschaftsorganisationen. Figures for other EU countries are somewhere in between. Because of these different organizational structures, it seems clear that the room for manoeuvre with respect to contributing to an ERC is pretty restricted in some countries. Conversely, the mutual opening up of national research programmes and their better coordination, which is advocated and supported by the European Commission (EC), might, in the minds of some, ultimately result in the fusion of all or some aspects of the national research councils, and thus substitute for an ERC. This will probably never happen and is also not desirable: both types of institution may

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have an overlapping clientele, but they respond to different needs. For instance, national councils serve, at least in part, more political goals, such as the development of national R&D niches.

Should European governments directly sponsor the ERC? At the Barcelona Summit in March 2002, it was agreed to raise the EU’s overall R&D spending from 1.9% to 3% of gross domestic product (GDP) by 2010 to reach a level comparable to that of the US, and many see room for financing the ERC through this budget hike. A closer look at what was agreed in Barcelona, however, tempers this optimism, because to reach the 3% target, 1% should come from public spending and 2% from industry. Frank Gannon, the Executive Director of EMBO, recently compared current governmental research spending with the Barcelona target and calculated the deficit that remains to be realized by each country (Gannon, 2003). In the light of this exercise, one might conclude that if a fraction of these additional resources was allocated to the ERC, the funding problem could be solved. However, the current spending across the EU is very diverse, with, at both extremities, the Finnish government already allocating 0.96% of its GDP to financing R&D, whereas the Irish government commits only 0.26%. It has already been recognized by the EC that the 3% and 1% targets are global ones for the EU, and that many countries such as Spain, Greece, Portugal and Italy, which have low public research budgets and whose research systems desperately need more funds, will not reach these by 2010. Furthermore, given the economic context, one has to be realistic: apart from the fact that reaching a

political agreement on the funding of an ERC would be an uncertain and cumbersome process—even if the commitment was there—both France and Germany, the main potential ERC contributors, exceed the 3% public deficit threshold of the stability pact and are decreasing rather than increasing their public spending—ask any French scientist! To bypass this problem, it has been suggested that R&D expenditure could be subtracted from the calculation of public deficit, but it may take quite a long time before a (hypothetical) political agreement is reached. As for the new EU member states, they would be better advised to invest what money they have available in their own research systems, which are often in a calamitous condition. Thus, the solution is not really expected to come from national governments in the foreseeable future, although these governments should be held responsible for the papers they sign, and the 1% GDP target of public funding for research should not be allowed to be easily dismissed.

Another possible sponsor is the EC, which could fund an ERC either directly through its framework programme (FP), or indirectly through other EC sources. But the EC has already indicated that no money could be diverted from the current FP6. In a generally well-articulated document, a High-Level Working Group established by the European Science Foundation (ESF) surprisingly proposes that some FP activities should be transferred to a new body—specifically some aspects of the Marie Curie fellowship programme, the New and Emerging Science and Technology (NEST) programme and the initiatives covering access and support for research infrastructures (ESF, 2003). This would have the advantage of creating an embryonic ERC in a short period of time and crediting it with some money. However, several objections can be raised: first, this would not represent a fresh, additional resource. Second, even if this was legally possible in the short-term, it is not what the scientific community expects in terms of new opportunities. Third, the target groups for these three

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programmes, which are very much in line with the mandate of the EC with respect to research and technology policy, include industry, small and medium enterprises (SMEs) and bigger companies, and therefore it makes little sense to transfer them to a body in charge of supporting basic, primarily academic, research excellence. Last but not least, does it make any sense to create a whole new structure and administration to run well-established and successful initiatives such as the Marie Curie programme? A clear principle should be that the specificities and complementarities of each 'institution'—the ERC, the national councils' research programmes and the EC's FP—should be respected. Duplication of activities and similar modes of working should be avoided. In my view, an ERC should have the objective to foster investigator-driven, long-term research excellence through European-wide competition for research grants and awards. By contrast to the ESF proposals, I believe that within an ERC programme, networking and inter-, multi- and trans-disciplinary aspects should be spontaneously dictated by need, and should not be a prerequisite as they are in the FP. Similarly, enabling transnational access to research infrastructures should remain a prerogative of the FP; an ERC should allow infrastructures to obtain additional resources to pursue or develop new research programmes and services through competitive schemes.

**D**uring his final address at the ELSF meeting, Commissioner Busquin highlighted another possible funding source, which may be the most realistic as European countries would not have to open their own wallets directly: the EU general budget. The financial perspectives (that is, the budget breakdown) for the period 2006–2013 are being discussed at present. One thing has already been agreed: although the general budget will increase, notably through the incorporation of new EU members, the money available to the common agricultural policy, which represents about 45% of the total EU budget at present, will remain constant over this period. This will therefore liberate significant funds; a fraction of these could be allocated to research and technology and would be sufficient to fund the ERC.

However, there is a prerequisite to this: the competence assigned by treaty to the EU with respect to science must be altered. Several categories of competence can be

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allocated to the EC, for example, exclusive EU competence or competence shared with member states. The 1992 Treaty of Maastricht introduced the principle of subsidiarity to ensure that action takes place at the most appropriate level in those areas in which competence is shared between member states and the EU: provision is made for action at the EU level only if the EU is able to act more effectively than the member states alone. At the ELSF meeting in Paris, Commissioner Busquin pointed out that, on the basis of the Treaty of Amsterdam (EU, 1997), research and technological development is classified with education (Article 149) and culture (Article 151), for which it is stated that: "Action by the Community shall be aimed at encouraging cooperation between member states and, if necessary, supporting and supplementing their action" in defined areas. Indeed, most scientists now know that Article 163 states: "the Community shall have the objective of strengthening the scientific and technological bases of Community industry," and they also know how it is interpreted (van Dyck, 2002). It may thus be necessary to change the Treaty on the EU so that its budget can legally fund basic research. On this point, Philippe Busquin urged scientists to lobby the European Convention, chaired by former French President Valéry Giscard d'Estaing, which gathers representatives of the member states and the candidate states, their national parliaments, the European Parliament and the EC, to debate the future of the EU and draft a Constitutional Treaty (see the website at <http://european-convention.eu.int/>). So far, I can only find a reference to R&D in a working group report on complementary competences, where it is stipulated that "in the case of complementary competence, member states retain full power, which does not prevent the introduction of assisting and coordinating measures at European level, for instance the Erasmus programme for student exchanges." Would this be enough to allow funding of an ERC? The European Convention must submit its proposal in June; there is still hope, but time is running out.

Conversely, if the EC is serious about its support for an ERC, as stated repeatedly by Philippe Busquin and EC staff members, it would probably have the political power to convince the European Convention and/or the European Council (the heads of member states) to introduce the required alterations into the Treaty or to facilitate an interpretation of the text that allows funding of an ERC.

**W**hat do we do in the meantime? In this case, it comes down to the issue of the founders of the ERC, but these are not obvious either. Certainly, they would not include the EC itself, at least not through its FPs. Successive FPs do not have the continuity that is required for an ERC, as they are tools implemented to achieve political objectives and are therefore periodically revised. By contrast, the European institutions could establish a specialized agency, like the European Food Safety Authority, to execute programmes for the EU on its budget, which could also be complemented by other sources. However, it seems that this possibility has not been seriously considered so far, or is perhaps not thought of as optimal for the bottom-up mechanism expected of an ERC. The report of the ESF High-Level Working Group suggests two other possible scenarios: the creation of a new organization that would cover all scientific disciplines, including humanities and social sciences, possibly with the ESF being the assembly of the future ERC; or the transformation of an existing one—probably the ESF—into an ERC. In any case, the ESF report stresses the urgency of the situation, taking into account both the need for an ERC and the time that will be needed for the political and legal processes to take place. There might, however, be a median way, specifically adapted for some scientific disciplines, such as physics or the life sciences: organizations such as CERN or EMBO could be transformed into discipline-specific ERCs that would be headed by an assembly based on the ESF, which has the moral authority required. This federal model has great advantages: these organizations have the recognition of their peers and the necessary expertise. Most importantly, they already exist and are ‘ready-to-use’: a pilot phase of 3–5 years could be undertaken without delay, allowing time to establish similar bodies under the auspices of the ESF for communities, notably the humanities, that are less structured at the European level at present. It would also provide the opportunity to deal

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with the structural (governing board and general assembly), legal and financial aspects of establishing a new instrument, including the control by the European Court of Auditors if the money comes from the EU budget, to define the relationships between discipline-specific ERCs and the general assembly and between the various discipline-specific ERCs themselves, and to evaluate the distribution of the budget between disciplines. Finally, it would provide time to better define other roles of the ERC, for example, as an advisory board, or its part in the establishment of major research infrastructures.

For this scenario to become a reality, two conditions must be met. First, the budgets of the organizations that will initially serve as discipline-specific ERCs must be increased by their governing organizations to allow the implementation of pilot programmes. This, however, should not require major investment at this stage. Second, a clear definition of what the pilot programmes should be and how they should be administered and delivered is needed. Because scientists have been one of the driving forces behind the ERC concept since its inception, and because they will be the primary users, the ELSF is organizing a meeting at the end of May 2003 that will gather together about 70 prominent scientists and stakeholders. The aim is to draft detailed proposals for three topics that are central to the implementation of an ERC: first, support through research grants, including eligibility criteria and action priorities; second, support for infrastructures, including the centres of excellence; and third, the ERC delivery mechanisms, including project evaluation and reporting procedures.

This essay may sound quite pessimistic but it is, in fact, resolutely optimistic. What we need to do is to show policy makers that the ERC is needed and would provide added value to European research. In this respect, basic research is increasingly seen as an essential component of innovation that cannot be efficiently fostered through the policy-oriented EC FPs, which follow rather short- and medium-term objectives by placing most of their emphasis on the relationships between industry and public research.

Furthermore, the ESF Position Paper (from the High-Level Working Group) and the report on the ELSF meeting ([www1.embo.org/erc/archive/ERC-EBN.pdf](http://www1.embo.org/erc/archive/ERC-EBN.pdf)), for example, list additional convincing arguments for the creation of an ERC in the global context of the European Research Area. The next step is to find an ERC funding mechanism that would not solicit the fragile finances of most European countries, which may act as a political repellent. The possibility of funding the ERC out of the EU general budget, highlighted by Commissioner Busquin himself, could bring about the right solution. Finally, and most importantly, the financial issue may come down to the very concept of the ERC and the definition of its missions, which will determine the amount of money that is needed. Certainly, an ERC with several billion Euros is not needed straight away; one could start with a relatively modest budget and scale it up when the concept proves its viability and demonstrates achievements. The discussions have not yet been exhausted, but on this basis, establishing an ERC may be an accessible objective in the short term.

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