



European Research Council
Scientific Council

Established by the European Commission

Building on a European Success Story to Further Empower European Researchers

Statement by the ERC Scientific Council on the position of the European Research Council in the next European Union Framework Programme for Research and Innovation

15 May 2017

In the space of ten years, the European Research Council (ERC) has become a real European success story. Its original set-up and governance add a new dimension to the European Union (EU) Framework Programmes, and the funding it provides for the best investigator-driven frontier research complements national efforts. The EU should build on this achievement and scale up the ERC. Beyond 2021, Europe needs to increase its overall investment in research and innovation to speed up its progress towards becoming a dynamic knowledge society empowering researchers to develop their boldest ideas broadly.

The ERC is based on a simple concept with an ambitious goal. Its backbone is a robust evaluation process which selects the best ideas put forward by daring scientists to push the frontiers of knowledge, drawing from a wider pool of talents and ideas than would be possible for national schemes. It grew steadily in the EU 7th Framework Programme and was consolidated in the next one, Horizon 2020, becoming a reference.

The ultimate goal of the ERC is nothing less than to raise the level, dynamism and creativity of the whole European research ecosystem. It does so by:

- Empowering a new generation of scientists and improving the attractiveness of research institutions across Europe. This is done by supporting the emergence and improving the career prospects of early stage researchers in Europe so as to attract, repatriate and retain the best scientific talent while promoting institutional change;
- Backing research leaders in Europe to push the knowledge frontier and to train and inspire others;
- Providing a reference point for all of Europe's national research entities and individual institutions encouraging further structural reforms, efforts, and investments across Europe.

The goal of the ERC is even more relevant today than it was when it was founded. The pace of technological change has increased to the point that the prosperity and well-being of developed societies depends even more on the ability to generate, share, access and use knowledge and to link it to innovation. Europe still lags behind in terms of world-leading centres of innovation, which develop around world-leading research institutions. Science in the broadest sense, from the natural and life sciences to the social sciences and humanities, is more important than ever to nurture truly open, pluralistic and reflective societies and to enhance Europe's competitiveness.

The EU proved capable of delivering on a very ambitious vision for such a project, based on two simple guiding principles: autonomy under the responsibility of a Scientific Council; and an unwavering focus on scientific quality, aiming for excellence. As a result, the establishment of the ERC under FP7, and its continuation under Horizon 2020, are recognised to have been major policy achievements of the EU implemented by the European Commission.

The ERC introduced three major policy innovations in the Framework Programme:

- Complementing national funding, by setting a new objective of significantly and directly strengthening Europe's science base, recognising its pivotal role in developing and attracting talent and investments, contributing to the solution of societal challenges and nurturing public debate;
- Providing flexible, long-term funding to develop ambitious projects proposed by high potential individual researchers of any nationality and in any field, giving them the freedom to take risks at the frontiers of science;
- Implementing the ERC at arm's length from the European Commission and the Member States, by entrusting its strategy to an independent Scientific Council, supported by a dedicated implementation structure, enabling it to focus solely on scientific excellence.

These three innovations were the result of an in-depth debate over several years, starting in the scientific community. The enthusiastic support of scientists subsequently led to an

intense discussion among policy makers and other stakeholders including industry. The idea of an ERC was then turned into a reality by the support of key individuals in the Member States and the European institutions.

After ten years, there is ample evidence that the principles which guided the establishment of the ERC have proven themselves. The ERC has been able to establish a global brand for high quality research. It has done this by creating a world class peer review system, and by developing efficient grants providing researchers with the means to focus on their research and the autonomy to pursue it according to their needs.

The ERC's high risk approach is already paying off, and several notable paradigm-shifting scientific discoveries have been reported, in areas from quantum computing to new types of vaccines. There are also clear signs that the ERC is empowering a new generation of researchers in a wide range of areas, having a major influence on institutions and driving policy changes at the national level.

The ERC is now recognised as an essential pillar of the European research ecosystem, and it has shown it can produce the desired structural impacts. We can safely claim that the ERC concept has been tested and proved. It is now time to consolidate the ERC's success by ensuring its continuity, agility and scale-up in the next framework programme.

1. Continuity

None of ERC's achievements would have been possible without an appropriate legal framework establishing the autonomy of the ERC. The ERC's independent Scientific Council ensures the quality of the ERC's operations from a scientific perspective and gives it credibility in the research community.

The legal framework also recognises that the ERC needs operational autonomy in line with its mission. The Horizon 2020 Specific Programme holds that the Commission "*shall ensure that the dedicated implementation structure follows strictly, efficiently and with the necessary flexibility the objectives and requirements of the ERC alone*". Indeed, during FP7 and Horizon 2020 the ERC's autonomy has allowed it to act as a laboratory for the whole Framework Programme.

The Scientific Council therefore calls on the European institutions to retain the legal provisions guaranteeing the autonomy of the ERC: the Scientific Council's scientific independence in setting the ERC's scientific strategy, the necessary operational autonomy for the dedicated implementation structure, and the obligation for Scientific Council members to be fully independent from external interests. These specifications form a consistent set of provisions which proved essential.

2. Agility

In order to move forward in the future it is vital that the ERC continues to show the necessary agility to respond to the changing needs of the European scientific community. In the past ten years, at times it has been necessary for the Scientific Council and the ERC Executive

Agency to defend the specificity granted to the ERC by the legislation and to justify many of the innovations it has introduced in EU-level funding¹.

Science is constantly evolving and the ERC needs to be able to support new and emerging fields of science and new ways of working, to communicate the discoveries of its grantees and to speak out on issues relevant to science. Over time, the Scientific Council may need to extend the portfolio of existing grants schemes and actions. For example, the Scientific Council is already exploring how to further support interdisciplinary efforts and to pilot a further opening of Synergy Grants.

The Scientific Council recognises that practical issues inevitably arise in implementing a large funding programme. It therefore wants to continue working constructively and flexibly with the European Commission and the other European institutions to build on the common experience gained under the current legislation. The ERC must have the freedom, and also the means, to continue to innovate and adapt its scientific strategy and the dedicated administrative structure the ability to implement it. This means being able to use tailor-made, bespoke tools and procedures when needed, and an appropriate degree of flexibility in managing its resources.

3. Scale-up

The magnitude and ambition of the ERC's task has been recognised from the start. Already in December 2003 the first major report² proposing an ERC estimated that to fully achieve its aims it would need to become one of the major funding bodies in Europe, with a budget corresponding to 5% of Europe's national research agencies. At the time of the report, the necessary scale for the ERC's budget was estimated to be €2 billion at 2003 prices and in a Union of 15 Member States.

The ERC budget will reach €2 billion only in 2019, but in the meantime its geographical scope has grown considerably. Currently this represents around 2% of EU public sector research funding, and at 17% its overall share in Horizon 2020 remains more or less what it was in FP7. The ERC can presently support only around 5000 running grants at a given time. In spite of its acknowledged success the ERC budget is still far below the levels envisaged in 2003.

At current budget levels, the ERC is not able to:

- Provide the means to fund all the proposals rated as excellent by its extremely competitive peer review process. Each call should have a minimum success rate of 15% and ultimately the ERC should be able to fund proposals assessed with the top grade 'A'. Currently, 30% to 50% of all 'As' remain unfunded in each call, amounting to over 1 300 proposals worth around €2.4 billion during the first eight ERC calls of Horizon 2020 (and this even when the ERC applies a very strict definition of quality for projects that already excludes high quality proposals rated 'B');

¹ For example, interviews in the selection processes, new formats for grant schemes Synergy and Proof-of-Concept, management measures ensuring the quality of the ERC's calls, flexibility in project planning (no milestones and no deliverables requested).

² European Research Council Expert Group (2003), *The European Research Council – A Cornerstone in the European Research Area*, Copenhagen: Ministry of Science, Technology and Innovation of Denmark.

- Take new initiatives related to new and emerging fields recognizing the increasing importance of interdisciplinarity. The ERC Synergy Grant calls will be reintroduced in 2018 at a time when the European Commission consultation on Horizon 2020 revealed a pervasive demand from stakeholders for flexible EU-level collaborative grants for bottom-up, blue sky research, tackling ambitious pluridisciplinary scientific objectives, and where previous pilot calls had success rates below 4%. Ensuring that the success rates of Synergy Grant calls are consistent with this priority is a necessity.

To cement its emerging catalytic role in the overall European research ecosystem, and to achieve the structural impact originally envisaged, the ERC needs a broader reach in terms of the number of Principal Investigators accessing its funding. This requires not only more agility, but also a minimum yearly budget of €4 billion for ERC. An increased budget should be seen as part of a broader effort to boost support to policy areas of high EU added value in the next Multiannual Financial Framework, in line with the conclusions of the European Commission's High Level Group on Own Resources³.

³ *“Two areas seem to be consensually identified as having a high potential added value: research and development, and internal and external security. Research and development is already an important element of EU spending, although research suggests that there is a worrying trend in favouring applied research, where immediate or short-term results can be used in industrial applications, rather than fundamental research, which requires a long-term vision and patience in relation to immediate economic benefits, but is the highest segment providing highest added value. Beyond this inherent problem of research policy, the fact remains that EU research and development accounts for a much more modest share of the EU budget than agriculture and cohesion policies. In a global context where EU research is compared to American, Indian or Chinese research, this should be one of the essential policy priorities in the future.”* — European Commission, *Future Financing of the EU*, Final report and recommendations of the High Level Group on Own Resources, December 2016.