An independent evaluation offers a critical look to six years of ERC Proof of Concept grants

Independent experts find evidence of a sound and effective funding scheme building a bridge between research and innovation

On 21 March 2018, the European Research Council (ERC) published an empirical assessment by independent experts on the Proof of Concept grant (PoC) scheme launched in 2011.

The ERC, set up by the European Union in 2007, is the first pan-European funding organisation for excellent frontier research. Every year, it provides attractive long-term funding awarded on the sole criterion of excellence, enabling the best investigators in Europe and their research teams to pursue ground-breaking research in any field of science and the humanities, without predetermined priorities or themes. A part of the EU research and innovation programme Horizon 2020, the ERC has three core grant schemes: Starting Grants, Consolidator Grants and Advanced Grants, with a budget of over €13 billion for the years 2014–2020.

Absolutely convinced that frontier research is decisive in laying the foundations for the industries of the future and therefore should be funded as a long-term investment, the ERC Scientific Council also believes that the value of ERC-funded research should not be seen only in the long-term. With this in mind, it decided to facilitate the work of those ERC grant holders who, in a bottom-up way, seek to investigate the commercial and societal potential of their research. Since 2011, in addition to the core grants, the ERC awards top-up Proof of Concept grants, enabling researchers to explore the innovation potential of their scientific breakthroughs and bring the results of their frontier research closer to practical developments that impact people’s daily lives.

The PoC grant scheme is funded with just 1% of the total ERC budget and is open only to ERC grant holders, who have to demonstrate a link between the idea to be taken to proof of concept and the original ERC grant. Up to now, around 10% of core ERC-funded projects were awarded at least one PoC project.

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• Steady increase in the number of applications (from ≈ 140 to ≈ 500 per year),
• ≈ 20% of ERC grants produced PoC applications;
• ≈ 10% of ERC grants were awarded PoC grants;
• ≈ 770 PoC projects funded by end-2017 (average: 35% success rate).
In 2017, the ERC Scientific Council decided to take stock of the PoC scheme and assess its impact with the support of a group of independent experts. The resulting report, entitled “An Empirical Assessment of the ERC Proof-of-Concept Programme”, aims to assess whether the PoC scheme actually helps researchers demonstrate the commercial and societal potential of ideas stemming from their frontier research projects and to provide evidence on the current and expected performance of the PoC awards. The report’s findings inform the ERC Scientific Council’s decisions on the performance to date of the PoC awards and identify potential improvements to the current approach. A survey of ERC grantees, in their capacity of potential PoC applicants, was used as the main data source for the assessment. The survey resulted in 1,821 responses, 446 from ERC grantees who applied to PoC (242 funded and 204 not funded) and 1,375 from grantees who never applied to PoC. As a control group, the survey targeted the 115 non-funded PoC that continued valorisation activities and 75 ERC grantees who never applied to PoC and used other non-ERC valorisation funding sources for their projects.

The main conclusions of the study are that the programme is sound in concept and effective in practice. By most measures, from IP creation to companies’ formation, to attracting additional funding, it is performing very well indeed. This reflects in no small part the underlying quality of the ERC funded research and its potential for commercial and societal impact. Importantly, the programme’s positive impact in terms of mind-set and confidence among the researchers is potentially one of the most enduring impacts of the awards, contributing to a cultural change among the research teams.

- PoC projects have a higher likelihood of generating new patent applications and new patent grants when compared to a control group. More than 42% of the PoC projects report at least one patent application as a result of the project, as compared to 17% of the control group.
- The likelihood of a licensing agreement as a result of the PoC project is significantly higher (17.3%) than in the control group (9.3%).
- 45 PoC grant holders (20% of all respondents) report in the survey that their project led to the creation of a new company, while only 8 respondents in the control group (6.4% of cases) report such an achievement.
- In 49% of cases, PoC researchers were involved in expert panels or policy committees, in relation to the projects’ results. In 20% of responses the results served as a source of inspiration in the policy decision-making.
- PoC grantees are more successful in terms of higher technology transfer outcomes as compared to the control group.

The report also provides valuable recommendations on how to improve the quality of the ERC operations for the benefit of ERC grantees.

The ERC Scientific Council comments on the report and the recommendations are published together with the assessment report.

- ERC Scientific Council comments to the report and recommendations

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