

The Research Council of Norway's main recommendations for EU's post 2020 research and innovation programme

The EU framework programme for research and innovation is an indisputable success as a mean to improve the quality of research and innovation in Europe, to integrate European, national and regional research and innovation systems, provide critical mass for addressing major societal challenges, enhancing productivity and boost competitiveness. The Research Council of Norway (RCN) would like to give the following recommendations to further strengthen the impact and relevance of the next framework programme for research and innovation ("FP9").

FP9 should:

- ✓ ***Be based on excellence and impact in research and innovation***

Excellence and impact is strongly interlinked, and should not be evaluated/valued separately. Excellence should be the key principle for allocation of funding in FP9. A strong emphasis on impact is crucial but it needs to be acknowledged that R&I have a broad range of short- and long-term impacts: scientific, societal, economic, political and cultural. Societal impact can be further improved by stronger emphasis on mainstreaming social science and humanities, responsible research and innovation and gender issues.
- ✓ ***Be an integrated programme for research and innovation***

The integration of research and innovation in Horizon 2020 has delivered on goals related to competitiveness and societal challenges and should be continued in FP9. FP9 will need to balance the need to retain and increase support to top-level basic and applied research with support to innovation and actions closer to the market. Projects at intermediate TRL-levels act as a bridge between basic research and innovation, and are necessary to have high quality projects at the higher TRL levels.
- ✓ ***Be designed with a view to European added value***

A clear European added value should be a precondition for all FP9 instruments. Transnational and multi-sectoral collaborative projects bringing together contributions from researchers, entrepreneurs, societal actors and industry have a strong European added value and should be at the core of the FP9.
- ✓ ***Be easy to use***

Even though Horizon 2020 has succeeded in simplification of application and reporting procedures compared to previous framework programmes, there is still room for improvement. We believe that there is potential to further simplify to make FP9 more accessible from the participants' point of view, including newcomers. Simplification can be done both regarding the complexity of instruments and funding models, audit procedures and communication with potential applicants. However, reporting of data (and metadata) needed to produce high quality indicators on FP9's contribution to important policy issues, such as sustainability, climate change, RRI, interdisciplinarity and gender, must be assured.

✓ **Support excellent bottom-up research and innovation**

The funding of bottom-up excellent research and enabling technologies is one of the great successes of Horizon 2020. Research activities such as the ERC, FET and MSCA are considered well established and valuable and should be strengthened in FP9. The support of research infrastructures, as a fundamental part of the European research system, should also have high priority in FP9. Supporting European research infrastructures is one of the areas where the European added value of FP9 will be considerable.

If the present H2020 pilot phase of the European Innovation Council (EIC) will be continued as a separate pillar in FP9, we think the EIC should focus on bottom-up innovation activities for SMEs. Due consideration should be made to the European added value of EIC's activities. Support to single beneficiaries might be justified for upscaling and market introduction for SMEs with a European or global potential.

✓ **Address societal and technological challenges by longer-term projects and missions**

Research and innovation responding to societal and technological challenges should be a major part of FP9. The long-term challenges Europe is facing, are largely of a global nature, and they are closely linked. To be tackled, these challenges require dedicated and coordinated efforts from the global research and innovation community. The efforts should aim to actively contribute to the UN Sustainable Development Goals (SDGs).

A mission-based approach can increase the impact of European research and innovation. Open, participative co-design of missions might also increase legitimacy and public support for R&I and be an excellent tool for explaining the benefits of research to the broader society. Missions must be high risk – high gain to stimulate ground breaking and transformative R&I. However, missions cannot be the only instrument to address societal and technological challenges. We do also need broader R&I projects to address long-term challenges.

The RCN supports the four top thematic priorities for FP9 as stated in Norway's positions on thematic priorities, instruments and partnerships in FP9:¹

- Green innovation and competitive low carbon energy
- Blue Growth - Oceans
- Societal security, resilience and social cohesion
- Digitalisation and digital transformation

While clearly not an exhaustive list, we believe that these four priorities represent areas which require greater attention and joint efforts at the European level in FP9.

✓ **Support further development and implementation of the European Research and Innovation Area**

The implementation and further development of ERIA should be strengthened and mainstreamed in FP9. FP9 rules and procedures should be designed to ensure implementation of the six ERA priorities, along with promotion and support to alignment of national ERA activities.

¹ https://docs.wixstatic.com/ugd/1a9f7e_731143be9196425fb464da2d1e87f30a.pdf

✓ **Support transparent and inclusive partnerships**

The RCN supports the recommendations given in Science Europe's policy brief on Public-to-Public Partnerships (P2P) and the Next Framework Programme.² This implies a two-fold strategic approach to the design and evaluation of future P2Ps. FP9 should facilitate:

- A top-down process that earmarks multiannual co-investment for large-scale P2Ps in few prioritised areas and supports them with an overarching strategic agenda.
- A genuine competition amongst bottom-up initiatives, of smaller scale and driven by EU Member States and countries associated to the FP.

Successful joint programmes, like Eurostars with high leverage effect of the FP funding, good outreach to the European SMEs through the national funding agencies and funding of excellent projects where research performing SMEs are in the lead, shows what is possible to achieve through P2Ps. Some good examples can also be derived from existing JPis to be followed up in the new European Partnership Initiatives.

Public-Private Partnerships (PPP) should be based on strong commitment from industry and focused in areas where industrial R&I cooperation across borders is crucial. Calls for proposals from PPPs should always be open for all relevant actors, if they are members of the partnerships or not. It is important to keep a balance between the amount of funding channelled through these initiatives and ordinary calls through the framework programme, giving enough room for more independent, innovative and curiosity-driven research.

✓ **Strengthen the interplay between education, research and innovation³**

Future policies and instruments should strengthen the emphasis on connecting even stronger all three sides of the knowledge triangle. Hence, FP9 should include educational dimensions, the education and training programme should further integrate research and innovation instruments, and FP9 and the education and training programme should be designed to facilitate and promote synergies between the two programmes.

✓ **Be a platform for cooperation outside Europe**

FP9 should be open to the world and be an attractive arena for international R&I-cooperation for excellent researchers and innovators from all countries. International cooperation in research and innovation is important for quality in research, for innovation and for exports and trade. A strategy for international cooperation should be an integral part of FP9. Scientific and Technical Cooperation agreements with the main international cooperation partners should as far as possible include reciprocal co-funding mechanisms for funding of third country partners in FP9 projects. Targeted funding to facilitate international cooperation in FP9 should also be available.

² https://www.scienceeurope.org/wp-content/uploads/2017/11/SE_PolicyBrief_P2P_Partnerships.pdf

³ For further elaboration on the need to strengthen the interplay between education, research and innovation in general, and particularly in the next European education, research and innovation programmes, please see the "Norwegian input to FP9 and the next European education and training programme": https://docs.wixstatic.com/ugd/1a9f7e_b9fafadc12434191a5b0dba4c12b2b9d.pdf