

Recommendations from SUHF for FP9

Key messages

1. Excellence, in the sense of quality, should be the main criterion for funding of research and innovation of highest quality in all parts of the programme
2. Different funding schemes should be avoided to keep the framework programme as coherent and simple as possible, three pillar structure to be continued
3. Better balance between basic research and innovation in collaborative research
4. Low success rate and low transparency in developing of the programme is the most serious threat to the credibility and trust in the framework programme
5. Better integration of SSH research in programme priorities and projects
6. Widening participation in the programme with excellence as a continued main driver

Introduction

On behalf of Swedish universities, SUHF hereby strongly agrees that the best way to strengthen Europe's scientific and technological base is by encouraging universities, research centres, SME's, industries and public sectors to cooperate with one another in their research and innovation activities, and by supporting the European Union's framework programme's stakeholders to cooperate freely across borders and exploit the internal market potential to a maximum extent. The framework programme for research and innovation provides funding of international collaboration of ground-breaking research, innovation and common research infrastructures in order to strengthen Europe's competitiveness, growth and quality of life. As this type of funding is almost non-existent at a national level, it is essential and appropriate to provide at European level.

Basic research, which deals with fundamental aspects of phenomena, was the foundation for technologies in the past, and will continue to be essential for the development of new knowledge, new technology and social innovations in the future. We would like the next framework programme to recognise the fact that a strong research basis is a precondition for innovation in the short and long term perspectives, and that innovative research also includes social and societal innovations, i.e. goes beyond market exploitation.

Universities around Europe are the prime educators of the next generation of users and developers of new technology, new knowledge and new societal paradigms. In this sense academics lay the ground for a large part of the innovation process, but also for solving societal challenges with the rich sources of expertise and knowledge, which are gained at higher education institutions. Furthermore, no other institutions than universities have the same readiness, creativity and capacity to solve the presently unknown challenges of tomorrow. This capacity is due to the independence of universities and the curiosity that drives their activities. Universities' impartiality and independence are their main competitive advantages and therefore an important reason to include them in project proposals.

SUHF strongly supports commissioner Moedas proposals to increase the efforts to realize Open science, Open innovation and Open to the world. But to achieve these visions, the budget for framework programmes must increase substantially and at the same time prioritize what suits and is most valuable to accommodate in a future framework programme.

The current programme structure with its three pillars is strongly recommended to be kept for continuity.

To make the framework programme and its innovation actions more accessible for non-academic actors, it would be beneficial to increase simplification and coordination and to gather the innovation actions under one umbrella. If the establishment of EIC, European Innovation Council, for example shall bring added value and avoid duplication with already existing structures and initiatives, it would fit under such an umbrella program. The EIC should not be funded from the framework programme but from other funds (e.g. ESIF and national funds).

However, most importantly, especially in times when opinions and rumours are used as facts, is that the evidence-based knowledge produced at European universities and higher education institutions is clearly defended and advocated in the next framework programme and that this standpoint is reflected in both the framework programme's fundamental idea as well as through its priorities and rules for participation.

Key messages with clarifications

1. Excellence, in the sense of quality, should be the main criterion for funding of research and innovation of highest quality in all parts of the programme

Excellence, in the sense of quality, should be the main criterion for funding of all project proposals in all three pillars in the framework programme. Excellence as a marker for quality is essential also for collaborative investigator driven research and does not only count individuals scientific excellence. It should also serve as guidance for the evaluation of the implementation and impact criterion. In this way impact will become clearer and better adapted to the project management terminology most framework programmes stakeholders are used to. It will also simplify, and maybe also clarify, the evaluation process.

2. Different funding schemes should be avoided to keep the framework programme as coherent and simple as possible, three pillar structure to be continued

All suggested changes in funding schemes should lead to simplifications for all parties, not only for the Commission or one specific type of organisation. A common interpretation of the rules within the different DGs and agencies is necessary. Harmonisation of the rules and conditions within the FP and letting it be the model for all EU programmes funding research and innovation would facilitate for applicants. Furthermore, the consequences of any change must be thoroughly investigated before implementation. The current model with 100% funding of direct costs and a flat rate of 25 % of indirect costs is working well for non-profit public bodies like universities and research institutes and the level of reimbursement is acceptable. Participating organisations need real cost and reimbursement calculations for each project to be able to take part. Without that there is a risk that the projects aim for "safe" project objectives to ensure a smooth reimbursement process.

Among the suggestions for changes in funding models, lump-sums might be suitable for small projects with small-size participants, e.g. SME support. Loans can only be considered for for-profit organisations in late phase innovation actions. The use of cascade funding as well as big flagship-type consortia launching their own calls should be avoided. It reduces the transparency of the funding streams and is not contributing to the Commission efforts to simplify the participation in the programme.

We advise that the Commission maintains the current funding model for non-profit organisations such as universities and research institutes. Also it should be stressed that the current programme structure with its three pillars is strongly recommended to be kept for continuity.

3. Better balance between basic research and innovation in collaborative research

Basic research and innovation is the backbone of Europe's competitiveness and lays the foundation for technological and societal development. Funding for basic research in the current framework programme is concentrated to the Excellent Science pillar where the primary focus is to support excellent, individual researchers, not collaborative research projects. We strongly support the ERC, MSCA and FET programmes, and wish to see them further strengthened, but we believe that this concentration for basic research to one of the three pillars is unfortunate. It is a risk that the calls in the Excellent Science pillar will be all that is offered for basic research, with very low success rates as one consequence, hindering many great ideas to come true.

The calls for research proposals in the Industrial Leadership and Societal Challenges pillars often stipulate technology readiness levels (TRLs), and funding decisions are disproportionately skewed towards projects at the higher TRLs (five and above). However, in order to be at the forefront of innovation and deliver economic and societal impact, it is essential for Europe to support collaborative projects at the early stages of the research and innovation process. This also includes research within ICT, NMBP and Space which today, being placed in the Industrial Leadership pillar, has a too narrow focus on short-term technology development and should be opened up for new ideas and crucial contributions in the quest to solve the grand societal challenges. In order to secure a constant influx to the whole chain from basic and applied research to innovation we would like to see a more balanced mix of instruments triggering short and long term research and innovation goals. To achieve these goals, international, inter-sectoral and trans-disciplinary research collaborations are crucial. Hence, sufficient funding for collaborative projects at the early stages of the research and innovation process must be provided. The EIC should not be funded from the framework programme but from other funds (e.g. ESIF and national funds), creating more synergy between the various programmes.

4. Low success rate and low transparency in developing of the programme is the most serious threat to the credibility and trust in the framework programme

As oversubscription with low success rates so far has been an increasing problem in Horizon 2020 actions to increase success rates at a more reasonable level would be most welcomed in FP9. An average success rate of 14%, and sliding down, is dissuading researchers from participating in the programme. While an increased budget in total numbers, with more contributions from other parts of the EU-budget than the part dedicated to research and innovation, is the most effective way of raising success rate in the programme also improvements of the application process and transparency in developing work programmes can be implemented

Suggestions for improvements:

- Calls:
 - Transparency in the process of formulating the Work Programme can be improved. Current political issues are often given more attention than long term research needs. A better balance between short term and long term needs for research and actions to address societal challenges would be beneficiary. Also the societal challenges and needs of industry are in need of long term research.
 - Clearer and more precise project objectives and expected impact, to guide the applicants to the "right" call for them. Only objectives and expected impact that are achievable during the project lifetime should be included.
 - Repeat calls with broad topics in order to avoid the tendency to submit proposals that would benefit from being more mature – and in accordance with that be submitted at a later occasion
 - Continued focus on shorter lead time in the creation of calls as well as the evaluation process

- Proposals:
 - The amount of time needed on each proposal with the current proposal procedures is too long. less complex templates for proposals; for stage 1 proposals a specific template that focuses on the main project concept without being just one part of a full proposal, full proposals with a page limit of 25 – 30 pages
 - 2-stage proposals used more frequently, a planned success rate of 25 – 30 % for full proposals

5. Better integration of SSH research in programme priorities and projects

We think that more can be done to integrate research from the social sciences and humanities. SSH must be involved in all the phases of the process, including problem formulation, work programme drafting and topic design. Social science and humanities research have a very important role to play when it comes to solving the great challenges in our society. There is also a need for better knowledge of various fields within SSH, and how they can contribute with new insights and solutions. More often than not, SSH is seen as a sort of add-on consultancy service to interdisciplinary projects, making it difficult for SSH academic researchers to participate and contribute to new solutions.

In order to allow for proper integration of SSH research, effort should be made to include more of interdisciplinary research areas in the formulation of topics, and even more opportunities for SSH to take on more fundamental research questions of relevance to the societal challenges. We believe that a better inclusion of SSH research areas will broaden the understanding of impact and innovation in Societal Challenges and Industrial Leadership, to the benefit of the European research and innovation capacity. In this context a more mission-related approach could be one way to encourage more interdisciplinary research.

6. Widening participation in the programme with excellence as a continued main driver

It is critical for the future of Europe to increase the research and innovation capacity in all EU countries and regions. However, it is important to safeguard excellence as the main criterion for funding within the framework programme, there is no other way for Europe to be competitive but to support research and innovation of highest quality. We argue that suggestions like that of introducing targeted calls for EU13 support alongside calls in the three pillars, e.g. within the Marie S Curie Actions, which are open to all countries and where excellence is a cornerstone, would negatively affect the framework programme's importance as a quality driver and a stimulus for reforms at national and institutional level. Moreover, mixing the framework programme and other funding such as the European Structural and Investment (ESI) Funds, in the name of synergy, would be counterproductive. We would rather suggest evaluation and further developing current activities within the Spreading Excellence and Widening Participation programme and new initiatives like the ERC Visiting Fellowships initiative. Moreover, a greater share of the European Structural and Investment Funds (ESIF) should be spent on research and innovation and allocated to capacity building, career development and mobility.