



SWEDISH RESEARCH COUNCIL

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RECOMMENDATIONS FROM THE SWEDISH RESEARCH COUNCIL FOR HORIZON 2020 AND THE NEXT FRAMEWORK PROGRAMME

With these recommendations the Swedish Research Council wishes to contribute to improving the last years of H2020 and the design of the forthcoming framework programme.

The European Research Area is growing in importance and ERA activities outside the framework programme such as tackling societal challenges increasingly interact with framework programme activities. The recommendations reflect this. The next framework programme needs continuity, stability and openness for synergies between different activities within and outside the framework programme in order to contribute to the goals of the European Union.

The Swedish Research Council, SRC, is a government agency that funds research and research infrastructure with around EUR 630 million per year. The SRC are advisors to the government on research policy and work to increase the understanding of the benefits of research.

Views and recommendations presented in this paper are the result of a comprehensive in-house consultation including NCPs, programme committee experts and the Swedish Research Council scientific committees, as well as a survey to the academic research community (247 submissions).

1. Excellence and fundamental research¹ will safeguard Europe's long term competitiveness

Excellence as the main guiding principle

The principle of excellence must be actively safeguarded throughout the framework programme. A crucial factor to achieve this is a robust and transparent peer review process based on solid ethical principles. Consensus review meetings must be held and the applicants should be provided with substantial feedback.

¹ Fundamental research means empirical and theoretical work driven by curiosity to acquire new knowledge in specific areas, without any direct practical application or use as main objective.



ERC should continue to be an excellence-driver also in the next framework programme with retained independence and a maintained substantial share of the budget.

Fundamental research is crucial in all areas of the framework programme

To prepare for an uncertain future, Europe must make sure that it supports fundamental research that generates new ground-breaking knowledge, including support to world class research infrastructures, global cooperation and optimal conditions for researchers as stated in the Lund Declaration 2015². Fundamental research must to a larger extent than now be an integral component of the whole framework programme. Creation and utilization of new knowledge is necessary at all stages of the innovation cycle and contributes to tackling societal challenges and strengthening Europe's industrial leadership.

Disruptive technologies typically emerge in an unpredictable manner and are dependent on fundamental research. This calls for a thematically unlimited funding system like FET Open. This format should be developed beyond the current ICT focus to become the primary support instrument for collaborative bottom up research.

2. A more coherent and focused take on societal challenges

Fulfilling the priorities of the Lund Declaration 2015

Addressing societal challenges at European level through collaborative efforts has a clear European and global added value. The Lund declaration 2015 outlines four priority areas to speed up solutions to tackle societal challenges: alignment, frontier research, global cooperation and impact. The next framework programme should build on these principles and in a more coherent way incorporate and relate to other ERA initiatives and stakeholders.

The framework programme should continue to support joint programming activities such as the Joint Programming Initiatives (JPI) and must consider these when structuring the efforts of tackling societal challenges. The European commission has an important role as facilitator to align national and European efforts. In this context, providing flexible instruments to support the needs of these initiatives is crucial.

Global cooperation is an important means to strengthen European research. Europe needs to connect with partners around the world, in advanced, emerging and developing countries to address societal challenges in partnership. The drop in global cooperation compared to Framework Programme 7 must be addressed and efforts should be made to increase participation of third countries and to encourage such countries to set aside matching funds.

The interpretation of the impact of research and innovation needs to be broad in scope and take into account a wide range of influences on society. This includes the application of research results in order to attain social, economic, environmental and cultural effects. Impact beyond academia refers to the dissemination, further refinement, commercialization, patenting, licensing or other practical use of research results.

The framework programme should continue the efforts to develop tools and methods for demonstrating the impact of research and innovation on society. Methodological diversity is

² The [Lund Declaration 2015](#) was presented at the [Lund Revisited conference](#) on the 4th of December 2015.



recommended for the proper assessment of the impact of research on society. Evaluation techniques and the availability of specific indicator sets should not drive assessments.

Interdisciplinary solutions

Society needs interdisciplinary solutions to the complex challenges that face us and the framework programme has an important role to continue supporting the integration of different research disciplines. The integration of social sciences and humanities needs further improvement in Horizon 2020 and thus represents an unexploited potential. For example, many of today's societal challenges are increasingly cultural in nature requiring the involvement of humanities research to achieve sustainable solutions. This calls for the current and next framework programme to strengthen the support for social sciences and humanities research, recognizing the great variation between disciplines like for instance law, educational science, economy, anthropology and the arts.

Register based research is often cross-disciplinary in nature and multinational register data should be utilized to a larger extent. Multinational register data are a unique resource. Such data have great potential to produce knowledge in a cost-effective manner contributing to answering research questions addressing grand societal challenges and increasing European competitiveness. The framework programme should capitalize on this opportunity.

3. Stronger together through smarter cooperation

Added value through cooperation and coordination

The European research and innovation programme needs to identify and focus on areas with a clear European added value to an even greater extent than now. One important role of the framework programme in this respect is to act as a facilitator to amplify the efforts of member states, thus allowing for improved alignment between national and European programmes. The complete R&D ecosystem of the ERA must be taken into account and the roles of the member states and the European commission clarified.

Access to high quality research infrastructures is essential to increase research quality and to secure European research competitiveness. The funding for research infrastructures needs to increase in order to support the design and preparatory phases of new research infrastructures as well as to consolidate, operate and upgrade existing research infrastructures. Specifically the need for reliable e-infrastructure and the demand for storage, calculation, and archiving of research data is growing. EU should strive to find common solutions within this area. ESFRI should continue to prioritize needs of research infrastructures at the European level including evaluation of current research infrastructures giving ESFRI an even more central role in renewing and securing the quality of European research infrastructures.

The Marie Curie Skłodowska Actions mobility programme of Horizon 2020 has proved to be a productive and popular instrument with clear European added value. The next framework programme should include a mobility programme that spans across the framework programme components, including research infrastructures and industry-academia collaborative partnerships.



There is a growing interest for public engagement, open science and open innovation at European level. The next framework programme should prioritise developing methods for co-creation, end-user involvement and dissemination of the findings of research according to Responsible Research and Innovation (RRI).

The framework programme also needs to be designed to include less research intensive member states and regions whilst maintaining excellence, thus safeguarding ERA coherence. To this end various measures need to be put in place, such as reformulating the remuneration regulations for grantees in order to counteract brain-drain from the less research intensive member states and regions.

Simplification of overall structure and instruments

The three-pillar structure of Horizon 2020, with its focus on excellence, societal challenges and industrial leadership respectively, brought about a much-needed clarification of the goals of the different priorities. A similar approach should be adopted for the next framework programme. The framework programme structure should be further optimised to enhance coherence and open up for synergies between the different missions.

The framework programme should contain a limited set of flexible instruments with defined aims and clear inter-relations. This set of instruments should include long-term support suited to the long term nature of initiatives like research infrastructure operational costs, longitudinal studies and joint programming initiatives. Funding instruments such as Research and Innovation Actions (RIA) should remain reasonably stable to facilitate active participation from the research community and to build upon results achieved in earlier collaborations.

It is essential that grants rather than loans remain the main funding principle. Close to market activities such as EFSI should be funded through other means than the Research and Innovation Programme.

More transparency for trust and partnership

Trust and partnership between stakeholders are essential factors for the success of the framework programme and the realisation of ERA. This requires further simplification and increased transparency regarding grant-related processes and governance. Here the programme committees play a central part, as they are the primary tools for the alignment of national and EU priorities and provide a link to national stakeholders. The programme committees must therefore be maintained and their role strengthened in the next framework programme. The process for drafting work programmes must be predictable, uniform and transparent, allowing time for development of views and the identification of synergies between the programme committees.

