

Contribution of the Leibniz Association to the Public stakeholder consultation Interim evaluation of Horizon 2020

The Horizon 2020 interim evaluation takes place only three years after the launch of this seven years program that has seen some completely new elements and priorities being introduced. Thus, it remains a challenge to assess the success and shortcomings of Horizon 2020 after just a short running time and its legal framework leaves only very little room for real improvement. The interim evaluation and open consultation, nonetheless, will be decisive for the next European Union Framework Program (EU FP) funding period, which furthermore might fall into a yet fragile and very uncertain socio-political landscape.

The Leibniz Association's position paper reflects the experience of its member research institutes of the first two years of Horizon 2020. It is also to be considered as a contribution to the reflections on the design of the future EU FP.

Sustainable investment in research and innovation

Within the logic of Horizon 2020 the focus of thematic calls is on innovation actions with TRL's above 5 that require an almost systematic participation of industry partners. However, this innovation approach is not only limited to the Industrial Leadership pillar but also being largely applied to most of the calls within the Societal Challenges. This provides a very short-sighted perspective as it puts the focus on output-based research results and addresses technological developments and solutions that allow for market-uptake within the next five years. It thereby disregards the fact that curiosity driven research is an important innovation driver. The type of actions being funded in Horizon 2020 do no longer include sufficient collaborative research activities which would provide the basis for the development of new technological solutions in a longer-term perspective of ten or twenty years. As a result, the Horizon 2020 monitoring report 2015 shows a decrease in participation as well as received funding of research organizations.

To obtain and maintain the necessary level of scientific output, sustainable investment in research and innovation, therefore, calls for

- *more substantial support for curiosity driven collaborative research within the scope of the European research program's thematic agenda;*
- *political rethinking and societal acceptance that short-term and long-term impact of fundamental research remains difficult and very often impossible to measure;*
- *the inclusion of a "Proof of Concept" funding line within the Societal Challenges could be an instrument to encourage collaborative research between academic and industrial partners;*
- *grant-based R&I funding, as a shift towards loan-based financing would limit and even prevent the participation of many universities and research organizations which cannot accept loans;*
- *a long-term strategy for further investment in research infrastructures (RI) on the European level as RI enable European researchers to conduct R&D that contribute to Europe's leading-edge science and technology.*

The social, economic and human dimension of Europe

In many research projects, approaches based on the social sciences and humanities (SSH) form an integral part of research projects across all disciplines, thus, an interdisciplinary approach to research is day to day business for many scientists. The “embedding” exercise that has been introduced in Horizon 2020, therefore, has been a necessary step to overcome silo-thinking in European research activities. This process, however, has not yet been successfully accomplished and still more needs to be done as concerns a) the definition of topics with SSH related elements and b) the integration of researchers communities from different disciplines.

- *The Leibniz Association calls upon the European Commission to continue its efforts to integrate research communities representing different disciplines and their contributions from the definition and formulation of research topics throughout the entire lifecycle of a project, thus allowing for long-term knowledge-driven and sustainable cooperation among researchers from different disciplines.*

Questions of social and human order represent a natural and necessary element of the problem solving approach of any societal challenge. However, political, social and economic developments, migration flows, poverty and extremism all over Europe and beyond have, in all times, required understanding our historical past and political systems, human behavior, social order and educational and cultural aspects. This calls for a differentiated approach with a focus on the particular research issue to be able to prevent or to overcome crises and to develop perspectives for societies in the future.

- *Consequently, the Leibniz Association, with regard to the design of the future funding program, calls upon the European Commission to continue its support for research issues of social and human order and a budget that reflects their importance to our society.*

Maintaining excellence, avoiding a two-speed-Europe

Since the EU’s expansion towards the East in 2004 and 2007, ten and more years have passed without real breakthrough progress as regards the success rate of the formerly named new Member States within the EU FP. The causes are, to a large extent, structural and to be found within the countries concerned, thus, solutions have to be found there, too. Nevertheless, the European Union has its share of responsibility and, at the least, cannot turn a blind eye to the difficulties some of its member countries are facing. The teaming approach has been a first step that might reveal promising, but this will not at least also depend on long-term investment from the countries concerned.

- *An increase in funding, in particular for the twinning program, would allow for establishing and developing sustainable research collaborations among researchers throughout Europe and help strengthening the research potential of the countries concerned. Also, the RISE instrument within the Marie Skłodowska Curie Actions could put a special emphasis on collaboration and exchange programs with EU-13 partner countries. A good example for such a funding scheme is the German ERA Fellowship Program.*
- *While the excellence principal must continue to prevail throughout the entire research funding landscape in Europe, a top-up funding for partner organizations from the EU-13 could help integrate them into existing transnational funding programs like JPIs, ERA-NETs, KICs or others, where they do not yet participate but where this would represent true added value for both sides.*

Open Science

The European Commission's Digital Single Market Strategy aims at building a competitive data and knowledge economy in Europe. As one of its elements, the new Open Science paradigm will transform research through ICT tools and bring it closer to society. The European Cloud Initiative shall enable to share knowledge, access research results and process research data following the FAIR use principles (findable, accessible, interoperable, reproducible).

- *The Leibniz Association encourages the European Commission to further support the promotion of the FAIR use of research data and the concept of a Federated European Data Infrastructure that would benefit from existing expert knowledge, approved processes and ongoing multi-national project collaborations. The Leibniz Association also recommends extending the EOSC initiative to the G-7 and G-20 Member States.*

Better coordination and alignment of EU and Member States' funding programs

The growing European Union, an increasing EU budget for research and innovation with more and more participants, internal reforms and, finally, the economic crises in 2008 have obliged the European Commission to strive for more efficiency and streamlining of funding, for better synergies with and coordination of national and European funding and, last but not least, to externalize many of its funding activities. As a result, and contrary to what was initially intended, researchers and research managers are facing a far too complex funding landscape with duplications in different funding schemes inside and outside Horizon 2020, with lack of transparency as regards the program's funders, target groups, uncertain funding mechanisms and often intransparent evaluation processes.

For the benefit of researchers, research managers – and funding bodies – the European Commission should,

- *further develop the widely accepted and recognized Participant Portal as a one-stop-resource for the entire range of European and transnational research and innovation funding programs and initiatives (ERA-NETs, JPIs, JTIs, KICs, EIP activities, PPPs etc.) where further and detailed information on each of the initiatives could be found;*
- *further enhance coordination between Member States and the European Commission with regard to those funding instruments that require commitment of both sides in order to allow for sustainable funding and project planning;*
- *in cooperation with Member States, align funding strategies (including roadmaps) and modalities and develop multi-stakeholder governance mechanisms;*
- *further continue the exchange of knowledge and practice on the design of the rules for participation and details of project management with research managers.*

The EU FP has undergone incremental changes in FP6 and FP7 and it has seen significant new features in Horizon 2020. Now it is time for continuity, assessment and further improvement of the existing on the one hand, as well as for a re-thinking of the European and national agendas and priorities on the other hand.

The Leibniz Association

The Leibniz Association connects 91 independent research institutions that range in focus from the natural, engineering and environmental sciences via economics, spatial and social sciences to the humanities. Leibniz institutes address issues of social, economic and ecological relevance. They conduct knowledge-driven and applied basic research, maintain scientific infrastructure and provide research-based services.

The Leibniz Association identifies focus areas for knowledge transfer to policy-makers, academia, business and the public. Due to the importance of the institutions for the country as a whole, they are funded jointly by the Federation and the *Länder*, employing some 18,600 individuals, including 9,500 researchers. The entire budget of all the institutes is approximately 1.7 billion Euro.

Contact Leibniz Europe Office:

Claudia Labisch
Head of Office
labisch@leibniz-gemeinschaft.de