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On the Interim Evaluation of Horizon 2020

Starting point

The EU Commission is currently preparing an interim evaluation of Horizon 2020. The Alliance wishes to become involved in this process at an early stage.

Horizon 2020 was launched in 2014 with the aim of achieving the following political objectives: to consolidate scientific excellence, to tackle Europe's major societal challenges, and to promote economic growth.

The results of the FP7 ex-post-evaluation show that the emphasis was clearly less on achieving thematic objectives than on quantitatively assessing publications, patents and return on investment. The Horizon 2020 interim evaluation should instead focus on the issue of whether and how the programme contributes to implementing the aforementioned objectives.

European Research Area (ERA)

The first objective of Horizon 2020 is to consolidate the scientific and technological foundations through the creation of an ERA, and to implement the requisite strategic priorities. For the past five years, the progress of said implementation has been regularly evaluated using a process which is complex for all stakeholders. It was only in May of last year that the member states (MS) adopted their joint ERA Roadmap. Since then, it is apparent that the ERA and its priorities have barely been mentioned in the EU Commission's discussions surrounding research policy, and that new strategies are already under consideration in the context of the Horizon 2020 interim evaluation. The Roadmap of the MS and the most recent ERA Progress Report (2014) clearly show that the shaping of the ERA is an open-ended process which is impossible to complete, and that the MS as well as the EU Commission must continue to pursue the stated objectives.

Major societal challenges

The second objective is to tackle the grand societal challenges facing Europe and the world. These challenges have been defined on the basis of the political and socio-economic necessities for supporting EU policy areas such as Energy, the Environment, Transport, etc. Two years after the launch of the Framework Programme, they have lost none of their urgency. The implementation of the Energy Union is one example of the importance of EU-strategy-based collaborative research, as is the objective of committing 35% of the Horizon 2020 fund to climate-related research. Collective research into major challenges which cannot be overcome at the national level represents major added value at the European level, and must utilise the full potential of research and innovation processes.

Furthermore, new challenges faced by Europe, such as migration and asylum, make it clear what sort of contributions the social sciences and humanities (SSH) can make to solution-finding. Yet the SSH have thus far been marginalised in Horizon 2020. Firstly, they should be an integrative and equal component of all societal challenges ("embedding"). Secondly, the preservation of the EU and the discussion surrounding a shared European social and cultural area are a challenge in their own right, for which independent, internationally implementable SSH research in Europe is vital.

Economic growth

Horizon 2020 is a core element in the implementation of the Europe 2020 strategy, which includes the Innovation Union flagship initiative. Innovation projects within Horizon 2020 are intended to generate economic growth and employment, and to consolidate the Union's competitiveness. In the course of the financial and economic crisis, the EU Research Framework Programme was increasingly formulated as a programme designed to provide economic stimulus. Sustainable drivers of innovation are created in the long term through the optimal interplay of knowledge- and application-oriented research. To achieve this, it is vital that the entire research and innovation process be taken into account, including an approach to impact which goes beyond short-term economic stimulus. Collaborations between universities, research institutes and businesses are important sources of innovative impetus in a knowledge-based economy. This is why the key areas in the Framework Programme should not focus on groups of participants separately but instead consider them in their entirety. This principle should also apply to the organisation of the announced European Innovation Council.

Funding programmes and instruments

Collaborative research was originally the main instrument for EU research funding. It enables the networking of outstanding minds in the public and private sectors, and promotes the integration into European networks of new stakeholders from regions with lower research performance and non-European countries. The European added value provided by collaborative research has been proven time and again across all EU framework programmes, which is why it is vital that it remains the main instrument of EU research funding as the programmes' integrative element, and be financially expanded.

Since the 7th Framework Programme, the *European Research Council (ERC)* has established itself as a brand which promotes excellence in Europe. To ensure that this funding programme can be successfully continued throughout the entire duration of Horizon 2020 and beyond, the ERC budget must at least be maintained.

Supporting the provision of access to *research infrastructures* across Europe's borders is an important success of the EU framework programmes, but is suffering from subcritical funding.

Innovation partnerships and programme initiatives: One of the results of the paradigm shift which has taken place within the EU's research funding policy in the last decade is the creation of many new research tools and concepts (JTI, PPP, JPI, EIT, EIP, etc.). This should reduce the fragmentation of the ERA and generate synergies with the national funding systems. Yet the majority of these instruments and concepts still function according to their own respective funding schemes, which impedes participation. The objective must be to apply the Horizon 2020 rules of participation to all funding instruments within the programme (or as many as possible), with the exception of the ERC. This should particularly apply for Joint Technology Initiatives (JTIs). The industry-dominated innovation partnerships offer research stakeholders few to no opportunities to help shape content. Furthermore, many of the instruments themati-

cally overlap, which calls into question the increase in efficiency originally strived for. It is therefore crucial that they be critically evaluated.

In Horizon 2020, project funding is increasingly being provided by means of *financial instruments*. Yet credit-based financing of research projects is only worthwhile at the absolute end of the innovation process. Furthermore, it is not legally permitted for public research organisations in Germany and other member states. A framework programme for research and innovation should therefore continue to be primarily grant-based. For these same reasons, the European Fund for Strategic Investments (EFSI) does not represent an alternative to many public research institutes, and should therefore under no circumstances continue to be financed by transfers from Horizon 2020 funds.

International cooperation is an important element in strengthening competitiveness and ultimately the ERA. Unlike FP7, Horizon 2020 does not contain any specific lines of support for international cooperation. This has already led to a decline in the participation of international partners in the Framework Programme. We therefore welcome the new initiative "Open to the World", which must, however, not only stand for science diplomacy but also provide active, targeted support to international collaborations in research and innovation. The 5G initiative for collaboration with Japan could serve as a model for such strategic focuses and their implementation.

Conclusion

In order to achieve the political and strategic objectives set out in Horizon 2020, it is vital to prevent the divide between research and innovation from growing any wider. This process can only be halted by providing the appropriate funding to the entire research and innovation process. Collaborative projects which strategically cover all stages in this process can play an important role here.

Yet the Framework Programme for Research and Innovation is not only an important strategic and political tool – it also and above all represents enacted European collaboration and communication in an era when the European Union is under threat from economic, political and societal crises. Not least for this reason, the Framework Programme must continue to make a contribution to safeguarding the performance of the European science systems.

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