Deutsche Forschungsgemeinschaft

Statement by the Deutsche Forschungsgemeinschaft on the Proposal of the European Commission for HORIZON 2020

In 2011, the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) has already put forward general recommendations for future research and innovation funding by the European Union.¹ Against the backdrop of these still effective recommendations, the DFG now presents its position on the proposal of the European Commission for HORIZON 2020, the next Framework Programme for Research and Innovation from 2014 onwards.

Interaction between national and European funding systems

The EU Framework Programmes for Research are an important tool for advancing the European Research Area (ERA), an objective to which the DFG is in principle supportive just as its partner organisations confederated in Science Europe. Realising the ERA to its full potential will require an enhanced cooperation between national and European research and funding systems. However, already established science-driven collaborative arrangements should not be hampered by further European top-down harmonisation efforts. Diversity and competition between funding programmes at the national and European levels remain indispensable as basis for the necessarily differentiated and customised support of the various scientific communities across Europe. In this way, HORIZON 2020 will contribute to an increase of funding opportunities for European science and scholarship, especially in basic research. Another step to further improve the efficiency of EU research funding could be the creation of a truly science-driven framework in HORIZON 2020 in areas such as co-funding, externalised programme management and science driven ERA-Nets. In addition, the Commission’s intention to strengthen interactions between HORIZON 2020 and the Structural Funds needs to be highlighted here as it represents a welcome strategy to effectively leverage the funding opportunities for research and innovation in Europe. The DFG would welcome such an integrated approach as it could lead to a widened participation in HORIZON 2020 across all EU member states. For this purpose, the European legislation for the post-2014 period of the Structural Funds should provide a mandatory and preferential

authorisation for supporting research and innovation activities. Furthermore, in order to achieve the expected synergies between HORIZON 2020 and the Structural Funds, a proper alignment of funding priorities and responsibilities has to be ensured by setting up appropriate consultations mechanisms between all stakeholders.

**Importance of basic research**

Innovation and basic research go hand in hand. Basic research provides the underpinnings for all applications and is the first link of the innovation circle. The proposed structural and financial reinforcement of funding for basic research in HORIZON 2020 could make a difference with regard to the prospective Innovation Union. The planned creation of a single programme priority “Excellent Science” as well as the announced budget increase for the ERC (accompanied by its untouched autonomy) marks a desirable progress in EU research funding. At the same time, the EU Commission is planning to establish an integrated funding structure under HORIZON 2020 to finance the entire innovation chain, from basic research to applied research to market launch. The DFG believes that the thereby intended intensification of market-oriented research activities can succeed only on the basis of continuously differentiated and excellence-driven funding opportunities for basic research. The exploration of the scientific foundations of future innovations is a major task of public research institutions, especially universities. Therefore, basic research is not exclusively restricted to a certain programme priority (“Excellence science”) but should also remain fully eligible for funding in all parts of HORIZON 2020, especially under the “Societal Challenges” priority.

**Strengthening the principle of competition**

Open competition to raise funding for the best ideas contributes significantly to the dynamics of scientific progress. Crucial for an effective competition are consistent and high standards, and (given a global research system) transnational mechanisms for reviewing and financing cross-border research. HORIZON 2020 provides the organisational and financial framework for such cross-border competition to identify and support excellence in research. The European Research Council (ERC) is a successful example of this type of competitive stimulus, which ought to feature more prominently in other areas of HORIZON 2020 as well. Along these lines, the priority of research-oriented and innovation-related criteria and procedures in the review and selection of projects should be further strengthened in other parts of HORIZON 2020 according to the ERC principles. In the area of programme implementation and monitoring, expanded participation by representatives of the scientific communities in the relevant advisory committees (programme committee configurations) of HORIZON 2020 should be made possible.
Safeguarding good scientific practice
Ensuring quality in research and in the training of early-career researchers is essential for the long-term stability and innovative strength of the entire research system. At the national level, the DFG has contributed significantly to the establishment of accepted guidelines for good scientific practice, and it will continue to pursue this task also at the European level, together with its partner organisations confederated in Science Europe. These activities should be complemented at the EU level by efforts to develop and implement common criteria for defining, handling and punishing cases of scientific misconduct. Therefore, the safeguarding of good scientific practice and the sanctioning of scientific misconduct should be taken into account with regard to the design of the participation and funding modalities under HORIZON 2020.

Dissemination and re-use of research results
Taking into account the European Commission’s Open Access Pilot in FP7, the EU-funded “Open Access Infrastructure for Research in Europe” (OpenAIRE and OpenAIREplus), and the various open-access-related studies and surveys the Commission carried out, the DFG strongly encourages the Commission to implement mechanisms ensuring that research results from Horizon2020 will be made available in open access, ensuring the full re-usability of publications and research data. It needs to be stressed that open access is aimed not only at the optimum accessibility of publications and research data, but also at subsequently re-using scientific information in other contexts without financial, technical or legal barriers. Therefore, the Commission should encourage the dissemination of research findings, publications and data under open licenses that provide clear and unambiguous rules for the prospective reuse by third parties. Moreover, in addition to standards and an exchange of best practices for data sharing, a unified legal framework should be created to regulate data reuse across research systems and borders.

Integration of basic-research-related activities
The combination of funding activities related to bottom-up research (ERC, Marie Curie Actions, Research Infrastructures, Future and Emerging Technologies) under a single programme priority “Excellent Science” appears to be an adequate solution. However, there is still potential for improvement regarding the interoperability of the various funding lines under this programme priority. To achieve synergies, a complementary division of responsibilities between the respective funding lines would be helpful. For this purpose, HORIZON 2020 should provide for a consultation mechanism to ensure mutual coordination of funding portfolios under the programme priority “Excellent Science”.
Science-driven programme implementation
The delegation of EU funding programmes to external implementation structures (externalisation) and the establishment of partnerships (public–public or public–private) should not be an end in itself to reduce administrative costs, but should be primarily geared towards the needs of research actors. In this sense, HORIZON 2020 should set the framework for future externalisation measures to ensure the coherence of EU funding structures as well as unhindered access for all research stakeholders (including universities) to such externalised funding programmes. Additional externalisation measures should be taken only if added value for research is apparent and appropriate administrative structures are in place. Such structures should be equipped with expertise related to research funding as well as science-driven and transparent decision-making and control mechanisms. Any further externalisation plans should therefore take into account the expertise and competencies of the research organisations already established in the respective fields.

Co-funding of national programmes (especially COFUND)
The co-financing of grant schemes by EU funds has the potential of achieving additional synergies for a common research area in Europe by pooling resources and establishing cross-border standards. As part of the Marie Curie Actions, COFUND enables the co-financing of internationally oriented graduate programmes; a mechanism whose effectiveness has already been proven according to a recent study\(^2\). As a general recommendation, the Marie Curie programme as a whole needs to be reinforced in order to safeguard at least continued funding levels under HORIZON 2020. Especially COFUND should be equipped with additional funds to increase its potential impact on the European research funding landscape. Furthermore, it should be considered to enable synergies between COFUND and the EU Structural Funds in order to widen the participation in HORIZON 2020 and to leverage the financial resources for the support of researchers at an early stage of their career. Regarding an effective implementation of COFUND, the sound involvement of national research organisations remains a core requirement. The DFG has already gained broad expertise in this field based on the successful experience of its funding scheme for “International Research Training Groups”. As a basic requirement, science-driven review and funding procedures should be even more consolidated as a common rule under HORIZON 2020 in general and especially regarding CODUND. In this way, future European funding mechanisms under HORIZON 2020 will suitably complement the existing funding landscape without compromising already well-established standards and procedures of

\(^2\) FP7 Marie Curie Life-long Training and Career Development Evaluation: Individual Fellowships and Co-funding Mechanism (Final Report, February 2012)
national research organisations. The DFG is therefore prepared to contribute to further COFUND activities under HORIZON 2020 which should be accompanied by science-driven conditions with regard to the implementation of COFUND both at the European and national level. In this manner, COFUND would facilitate the DFG’s intention to spread common high-quality standards and procedures as well as to test innovative cross-border funding models to support researchers at an early stage of their career across Europe.

Reimbursement of costs (Rules for Participation)
The planned simplification of the reimbursement system and especially the comprehensive introduction of flat rates for indirect costs are promising steps into the right direction. The use of flat rates to fund indirect costs has already proven to be a research-friendly reimbursement system. However, the level of the currently proposed flat rate (20 percent of the eligible direct costs) should be reviewed in terms of its sufficiency to cover the indirect costs incurred by research institutions. In particular, the already very tight core funding for publicly financed research institutions (especially universities) should not be subjected to additional burdens by the introduction of a flat rate for the reimbursement of indirect costs. As an exception, public research institutions, especially universities, already able to identify their real costs should be entitled to reimbursement of the real indirect costs incurred and declared.

Adjustment of advisory structures
The successful participation of research stakeholders in the EU Framework Programmes requires appropriate advisory structures at the national level due to the special administrative demands of such transnational funding programmes. The advisory environment (e.g. the NCP networks) should therefore be adjusted early on to the partial restructuring of programme structures under HORIZON 2020. The relevant discussions between the EU Commission and the member states should also and especially involve national research organisations. The establishment of a single programme priority for bottom-up research projects (“Excellent Science”) also highlights the expertise needed to provide target-group-specific advice on this part of HORIZON 2020, especially to universities. Research organisations with experience in this area should therefore remain in charge of providing assistance and advice on basic-research-oriented programme elements also under HORIZON 2020.