

Bundesrat

16 December 2016

Resolution

of the Bundesrat

Bundesrat resolution on the European Commission consultation regarding the interim evaluation of the Horizon 2020 Framework Programme for Research and Innovation

At its 952nd session on 16 December 2016, the Bundesrat adopted the resolution contained in the Annex.

Annex

Bundesrat resolution on the European Commission consultation regarding the interim evaluation of the Horizon 2020 Framework Programme for Research and Innovation

1. The Bundesrat notes that the promotion of European research and innovation strengthens national research and innovation systems, thereby globally consolidating Europe's overall position in this field. The Horizon 2020 Framework Programme is the most important instrument at European level for shaping the European research area. Its launch was successful but adjustments are necessary in various fields and must be reflected in any future framework programme.
2. In the view of the Bundesrat, the extremely high oversubscription to Horizon 2020 proves that the funding for the programme is not sufficient, and this has been aggravated by the redeployment of research funds in the current programming period. It therefore expects the future framework programme to have adequate financial backing in order to substantially reduce the high rejection rate of very good funding applications.
3. The Bundesrat calls on the federal government to do its utmost to ensure that no further funds from Horizon 2020 are used to top up the European Fund for Strategic Investments (EFSI) or are redeployed to other programmes. This also applies to the new version of the EFSI after 2018 since, contrary the Commission's announcement, only a very small proportion of EFSI funding will actually go to research and development projects.
4. The Bundesrat observes that research projects are increasingly being cofinanced by means of credit lines, venture capital and other financing instruments. This path is open to German public universities only to a very limited extent. It therefore requests the federal government to oppose distortions of competition in this field.
5. The Bundesrat also calls on the federal government to support more flexible programme design to make it possible to respond rapidly to current issues such as migration and immigration. The 'societal challenges' section should take more account of the policy priorities of the Europa 2020 strategy.
6. It calls on the federal government to do what it can to ensure that funding for basic research and application-oriented basic research is further boosted and that this is also considered outside the European Research Council and the Future and Emerging Technologies funding line.

7. An essential pillar of EU research funding is tried and tested cross-border collaborative research with the focus on applied research. In addition, new funding instruments were created in Horizon 2020, such as the small and medium-sized enterprise (SME) instrument, that are intended to help make disruptive innovations more rapidly marketable. A future framework programme for research and innovation must first address successful application-oriented collaborative research and back this traditional strength of European and non-European collaboration in a targeted way. Secondly, the efforts made to support in particular also small and medium-sized enterprises in bringing innovations to market faster must be vigorously pursued.
8. The Bundesrat requests that a good balance between technology-oriented basic research and business-related innovation themes be worked towards in calls for proposals in Horizon 2020.
9. The Bundesrat is of the opinion that the development of new technological solutions is enormously important for overcoming the great societal challenges. It stresses at the same time that research and development in the social, economic and human sciences is essential in this connection. Interdisciplinary calls for proposals addressing the social, economic and human sciences are therefore increasingly necessary under Horizon 2020 and any successor programme as well as autonomous calls for proposals for those research fields.
10. The Bundesrat welcomes the fact that the Commission has considerably simplified and accelerated procedures for Horizon 2020. It asks the federal government to do what it can to ensure that the process is constantly reviewed with a view to further improvement in terms of simpler, more legally certain and more transparent rules. This also involves, among other things, avoiding further fragmentation of the framework programme and limiting the diversity of the forms of funding. Efforts to simplify the procedures must be continued in any future framework programme.
11. In order to secure social and political acceptance of EU research funding throughout Europe also in the future, the participation of scientists from the EU13 countries in Horizon 2020 and any successor programme must be significantly increased through appropriate measures.
12. The Bundesrat points out that the synergetic use of EU Structural Fund resources and EU research funding called for by the Commission is difficult to implement in practice. It asks the federal government to do what it can to ensure that the various funding instruments are better coordinated in good time before the start of new funding periods.
13. The European Innovation Council (EIC) proposed by the Commission should strategically combine the existing activities under Horizon 2020 to promote innovation and act as an advisory body for the Member States, the Commission and organisations funding research in future programme design. The main task of the EIC should be to make an effective contribution to implementation of disruptive innovations in particular and to facilitate cooperation between innovation-minded scientists, start-up

founders and enterprises. The Bundesrat stresses in this connection that good cooperation or alternatively an appropriate balance is necessary between the European Research Council (ERC), which is geared to strengthening basic research, and the EIC; competition between the two bodies would be counterproductive.

14. The Bundesrat is of the view that defence-oriented research should not be integrated in Horizon 2020 or any successor programme owing to its particular requirements and objectives.
15. It reserves the right to again adopt a position at a later time on the interim evaluation and on further developments regarding a successor programme to Horizon 2020.
16. The Bundesrat is sending this position directly to the Commission. Explanatory Statement:

On 20 October 2016, the Commission published a public consultation on the interim evaluation of the Horizon 2020 framework programme for research and innovation. For this reason, the Länder have developed a position intended to be included in the national and European opinion survey.

The programme was launched at the beginning of 2014 and has a life of seven years and an initial overall budget of just under EUR 80 billion. Its goal is to promote smart, sustained and inclusive growth in Europe through investment in research and innovation. It is the most important instrument at European level for developing the European research area and it funds activities over the entire length of the innovation chain from basic and/or frontier research to application-oriented research to the preparation of marketable products and services. As the world's biggest research and innovation programme, Horizon 2020 facilitates additional cooperation and exchange across national borders. In this way, national measures are effectively coupled to European initiatives.

The Länder are convinced of the positive effect of European funding for research and innovation. However, the extremely high oversubscription shows that the general funding of the programme is not adequate, which has been aggravated by the redeployment of research funds in the current programming period. An initial assessment shows that different aspects of the programme are in need of improvement.

1. Programme participation and oversubscription

The volume of applications for Horizon 2020 far exceeds the available funding. This has led to, among other things, a decline in the approval rate to approximately 13 % (Seventh framework programme for research and technological development approximately 20 %). These low chances of success prevent numerous highly qualified scientists from participating in the programme. The method of drawing up the work programme for Horizon 2020 and the 'commitment' linked to it limit the programme's capacity to respond rapidly to current issues. For example, demographic developments are mapped under the theme 'demography'; however, this does not adequately address the serious problem of migration and immigration that faces

Europe. Therefore in addition to adequate funding – within the budgetary ceiling – additional flexibility in programme design is necessary. The two-year work programme cycle allows the stakeholders concerned to prepare their applications in good time and should therefore be retained.

2. Financial arrangements for Horizon 2020 and the following framework programme

The ERC, the Marie Skłodowska-Curie actions (MSCA) and the investment in European large-scale research infrastructures are guarantors of the success of European research funding. The programme section ‘societal challenges’ reflects the political priorities of the Europa 2020 strategy and deals with important issues for which citizens expect science and policy to provide solutions. The cross-border cooperation in collaborative research promoted in this programme field must therefore be expanded in the same way as financing for basic research.

Recently, the Commission has tended to support production-oriented applied research through credit lines, venture capital and other finance instruments instead of through funding. Credit-financed research funding of this kind constitutes a serious competitive disadvantage for German universities and research institutes because as a rule they are not entitled to raise loans. A highly critical view must be taken of the use of these new funding instruments.

The funding available for research and innovation must actually be used for those purposes in a targeted manner. The Commission’s proposed expansion and extension of the EFSI beyond 2020 – i.e. beyond the current funding period – is therefore rejected.

The EFSI has brought no advantages for German universities and research institutes, despite all declarations to the contrary. In contrast, a new cut in Horizon 2020 would have significant negative impacts on research and innovation.

So far, EFSI projects for a total of EUR 12.8 billion (according to the Commission’s press release of 1 June 2016) have been approved. Only a very small proportion of these projects are pure research and development (R&D) projects. This is not consistent with the Commission’s original promise to also reinvest the money redeployed from Horizon 2020 in the same fields through the EFSI.

It has not been demonstrated that the leverage of the EFSI fund will add anything to the instruments already available in Horizon 2020. The inadequate assessment of possible reinvestment in R&D by the Commission and the European Investment Bank (EIB) also contributes to this uncertainty. There must be more transparency here as well as better designation of all R&D investment under the EFSI.

The EU and its Member States can hold their own in the global competition of ideas and economies only through more investment in science, research and innovation. Every euro invested here is therefore an investment in the future of the EU. The budget increase between the 6th research programme and the 7th research programme and between the 7th research programme and Horizon 2020 was approximately

30-40 % of the current volume of the programme, although those rates of increase were not genuine budget increases since they were mainly achieved by incorporating parts of external programmes. A comparable budget increase would also be desirable for the next funding period of 2021 to 2027.

3. Fundamental research

In the past decade, the ERC has – like the Marie Skłodowska-Curie programme – established itself as a world renowned European beacon for the promotion of excellent basic and frontier research. ERC funding contributes to the European corpus of basic research from which disruptive innovations could spring. By funding individual top scientists and their ideas, the ERC constitutes an important locational advantage in international scientific research and therefore creates an undisputed European added value.

Moreover, the ERC is an integral part of the excellent basic research which, as the first link in the value creation chain, forms the basis for innovation in research and industry and is thus crucial for the competitiveness of Europe. Ground-breaking discoveries in basic research cannot be planned and will be encouraged through a high degree of freedom and a wide horizon.

Universities in particular play a paramount role in basic research and in many EU projects guarantee a supply of ideas for new developments. In the future too, excellence should remain the primary selection criterion for funding.

A corresponding budget increase to meet the future challenges of basic research should therefore be pursued even after Horizon 2020. It is a positive sign that at least the ERC and the Marie Skłodowska-Curie programme will be excluded from the cuts applied in the EFSI.

Overall, care should be taken to ensure a balanced distribution of funding between basic research and business-oriented innovations. Additional appropriations should also fund basic research outside the ERC and FET.

4. Societal challenges/collaborative projects (inclusive social, economic and human sciences)

An essential pillar of EU research funding is tried and tested cross-border collaborative research with the focus on applied research. The additional new funding instruments created in Horizon 2020, such as the SME instrument, intended to help make disruptive innovations more rapidly marketable, are also important and indispensable. Cross-border science and economy networks in which outstandingly qualified scientists participate also need funding using appropriate instruments. A future framework programme for research and innovation must therefore cover the whole spectrum: it must first address successful application-oriented collaborative research and back this traditional strength of European and non-European collaboration in a targeted way. Secondly, the efforts made to support

in particular small and medium-sized enterprises in bringing innovations to market faster must be vigorously pursued.

The great challenges of the future cannot be overcome solely through a high degree of technological development. Social, economic and human sciences are just as indispensable in this respect. The funding of research must take this into account. Equivalent interdisciplinary calls for proposals targeted at social, economic and human sciences, recognising in particular the independent conceptual role of such sciences, are useful and important in this regard. The particularly high oversubscription rates, particularly in the 6th Societal Challenge ‘Europe in a changing world - inclusive, innovative and reflective societies’ in the 3rd pillar of Horizon 2020, which is primarily directed at social, economic and human sciences, shows that it was even less possible than in other thematic areas to satisfy the interests and the offers from science to make a contribution.

5. Simplification, legal certainty and forms of funding

The innovations in the administrative areas, both in the application phase and in project implementation, are intended to significantly simplify and accelerate procedures.

The introduction of the ‘participant portals’ in particular has partially eased the work process and clearly optimised communication through automation. However, the fact that queries to the Commission are answered only very slowly and that not all EU programmes can be dealt with using this tool is regrettable. It is not possible to simply take over the application data entered in the participant portal and use it for the award of the contract. This leads to unproductive duplication of effort. The use of the portal is not self-explanatory and must be simplified. Further optimisation of procedures and processes is necessary.

To avoid expense in the submission of applications, more use should be made of the two-stage application procedure. However, in this regard the submission of applications in the first phase must be mandatorily regulated (for example, through the submission of roadmaps) and the approval rate of 33 % in the second phase must be adhered to, as the Commission plans. Moreover, the problem of differing assessments in the 1st and 2nd stages must be solved (for example by setting up a clearing office). In any event, the two-stage procedure cannot in itself resolve the imbalance between the volume of applications and the available resources.

The introduction of the uniform rate of funding and the flat rate for overheads as well as the eligibility of universities for VAT refunds in the financial implementation of projects are expressly welcomed. However the flat rate of 25 % in the case of indirect costs does not generally cover the necessary expenditure for the project. The billing of infrastructure costs – internal invoices for services – as direct costs requires considerable administrative effort. The abolition of the annual adjustment for staff costs creates enormous problems for universities because it gives rise to financial losses that contribute to the unprofitability of projects.

It is still necessary to lay down clear and comprehensive rules at the start of a new framework programme for the billing of reimbursable costs. This is particularly true for staff costs and charging for internal services in order to avoid system failures in the calculation from the outset. There is an urgent need for legal certainty on this point for participating researchers and their institutions.

The uniform funding rate per project, which reduces administrative costs and simplifies participation in the framework programme, is particularly welcome. However, in view of the number of forms of funding and instruments, optimisation opportunities exist.

Further fragmentation increases the complexity of the framework programme, which has clear repercussions on advisory activities and the submission of applications. The federal government and Länder have reacted to this with highly effective provision of advice. In cooperation between a number of partners from Member States and Associated States, which is for the most part necessary and desirable, the diversity of the forms of funding should be further limited.

Further diversification through additional or specific adjustments to certain forms of funding should be avoided in favour of the consistent application of the rules of participation.

6. Widening participation

The innovation gap in the EU is a policy challenge that the EU must confront. In order to secure social and political acceptance of EU research funding throughout Europe in future financing periods too, it is crucially important to secure a significant increase in the participation of scientists from the EU13 countries in Horizon 2020 and any successor programme.

The instruments used by the Commission have not yet achieved this objective. Therefore, new innovative participation methods must be developed to guarantee increased participation of EU13 scientists. In this connection, use could be made of existing macro-regional approaches, ideas and structures, such as for example, in the EU's Baltic Sea Strategy, as a 'test bed for the European Research Area (ERA)'. Any widening must not be achieved not through a quota system but rather through positive incentive systems. In this regard, the relevant criteria of excellence in EU research funding should be retained.

7. Trends in Horizon 2020 - EIC as a new instrument

The EIC proposed by the Commission should operate as a 'one stop shop' for the field of innovation and bring together the relevant activities existing under Horizon 2020. The EIC should support innovation to the same extent as the ERC supports excellent science. However, it is currently still not clear how such a council would be set up, what its tasks would be and what excellent innovation funding would look like by analogy to the excellence approach of the ERC.

The EIC should strategically combine the existing activities to promote innovation under Horizon 2020 and provide advice to the Member States, the Commission and organisations funding research in the design of future programmes.

The main task of the EIC should be to make an effective contribution to accelerated implementation of disruptive innovations in particular and to enable and facilitate cooperation between innovation-minded scientists, start-up founders and enterprises. Competition between the ERC, which aims at reinforcing basic research, and the EIC must absolutely be avoided; good cooperation or a balance between the two bodies is necessary instead.

For example, collaborative research involving small and medium-sized teams from business and science: It represents a link between basic research and innovation research in existing businesses and/or business start-ups. This indispensable instrument should be strengthened under Horizon 2020.

As already mentioned, the replacement of grants by loans for public research institutes must be rejected. The EIC cannot therefore operate as a funding instrument but at best as a platform that helps to plug innovation gaps. However, this is conditional on the EIC having the necessary expertise available.

8. Synergies between Structural Funds and Horizon 2020

A growing number of calls for proposals require the use of EU Structural Fund resources. However, the demand for synergy between Horizon 2020 projects and EU Structural Fund projects is difficult to meet in practice. The two very different funding instruments need to be better coordinated with one another. Moreover, a longer run-up would have been helpful to allow the Länder to respond in good time to the new requirements with their programmes.