Berlin is one of the largest and most diversified scientific hot spots in Europe: Three state-run universities, four art colleges, four universities of applied sciences, two confessional universities of applied sciences, 30 private institutions of higher education, more than 60 (non-university) research institutes and 42 technology centres form an excellent scientific landscape for more than 200,000 people from around the world to study, teach, work or do research. Most of Germany’s major research organisations and communities have their main office or a branch office in the German capital region, representing the whole range of scientific topics at an excellent level. This diversity not only fosters interdisciplinary, cross-sectoral and international cooperation, but also leads to a creative atmosphere that triggers the creation of jobs and growth. More than 50,000 jobs are due directly or indirectly to Berlin’s knowledge-based economy and the outstanding research done by Berlin’s national and international students, post-doc researchers and high-level scientists.\(^1\)

Within this setting, Berlin’s institutions of higher education and research actively and committedly participate in the European Research Programmes, especially in the Horizon 2020 programme (H2020) as the world’s largest programme for global cross-border scientific cooperation in the civilian sector.

The European Research Programmes with their outreach all across Europe and to the world are a cornerstone of the European Union’s scientific and economic success. In its first three years, H2020 has been proven to stimulate not only close interaction between the academic and the entrepreneurial world, but also to reinforce the European and international dimension of scientific cooperation committed to excellence and transdisciplinarity – also within and to the benefit of the scientific landscape of Berlin.

Therefore, on the occasion of the upcoming interim evaluation of H2020 and the already ongoing discussions about the shape of its successor programme, the Berlin Senate and Berlin’s institutions of higher education and research would like to share their thoughts and ideas on the future of the Research Framework Programmes and their contribution to the European Research Area.

1. **Building the Next Framework Programme on Thorough Evaluation**

We recognise and acknowledge that the last Work Programme of a funding period is used as a test bed for future orientation of research and innovation funding. This allows for piloting and adaptation. In the past, those pilots were started after the interim evaluation of the current Framework Programme. As timelines have changed with the current funding period, we regret that forward-looking activities and piloting are well under way before H2020 has seen its interim evaluation.

We therefore think that the H2020 3rd Work Programme (2018 to 2020) should not automatically anticipate or pre-set the architecture, funding schemes or funding criteria of a new Framework Programme.

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\(^1\) About Berlin as a high-quality scientific location: https://www.berlin.de/en/business-and-economy/science-innovation/
The outcome of pilot projects targeting a new Framework Programme must first be carefully and thoroughly evaluated, thus enabling reliable conclusions as well as results-oriented planning of a new set of programmes.

Further, consultations on a future Framework Programme and related programmes or topics must be open, transparent and content-oriented without pre-determining their outcome or limiting options. We hope to be able to rely on the known and proven opinion-forming procedures used in the past to establish the next generation of programmes.

2. Structure and Instruments of the Future Framework Programme

We value the European Commission's commitment to constantly improving and further developing the Framework Programme, its structure and its functioning. We therefore believe that the following recommendations will help to enlarge the scope and efficiency of a new Framework Programme.

- Keep the Balance between Basic and Applied Research and Innovation
  We appreciate the European Commission's work to bridge the gap between research and the market and thereby strengthen Europe's competitiveness and its ability to tackle future challenges. Taking this into account, we recommend bearing in mind that basic research is the basis for all applied research and innovation and thus the pre-condition for high technology and societal and environmental developments. The path to market is a circular one and requires different stops along the way. Stretching the curve from knowledge generation and scientific findings to the product, from research to innovation, means respecting the relevance of basic research and launching corresponding programmes that address these specific needs and requirements. When H2020 was first introduced in 2014, it aimed at covering the whole value chain in order to tackle societal and economic challenges the EU is currently facing. However, we have witnessed a strong shift from research to innovation within H2020. Aligning too many collaborative projects with a high technology readiness level leaves a substantial gap in the value chain, especially on the basic and applied basic research side. It would therefore be desirable to re-balance TRLs towards basic research.

- Streamline Programme Lines and Elements
  From our point of view, the rather too complex structure of H2020 and related programmes (ERA-Net, JPI, Art. 185, JTI, ETP, EIP, EFSI, etc.) needs drastic and systematic streamlining. In particular, wherever possible, we should avoid having the same scientific topics addressed by different programmes, sub-programmes, programme parts or lines. The overall number of H2020-related programmes publishing calls for proposals should be reduced, and their respective rules should be aligned with the H2020 rules for participation. The externalization of funds, too, has led to a fragmentation of the H2020 programme, as well as to a lack of transparency. Therefore, the externalization of initiatives and funds should be strictly limited to a few programme lines with additional value in their relation to H2020 or its successor. The procedures and rules of the Framework Programme should be modified, and we therefore welcome the efforts of the European Commission to unify/standardize the rules for participation for all externally managed funds. However, this process should be intensified and further extended to all initiatives connected to the Framework Programme.

- Prevent Fragmentation and Detachment of Programme Parts
  Other policy areas – e.g., EFSI guarantees or defense-related research – have turned or currently are turning to the H2020 programme in search of financial resources for their own
programme lines. In order to prevent the fragmentation of the coherent unity of the H2020 programme, we strongly object to diverting parts of H2020 to other purposes.

- **Maintain Collaborative Research as Core Element and Backbone of the Entire Framework Programme**

  Collaborative research between European higher education and research institutions and private companies is at the core of European Research Framework Programmes, generating a clear added value through the exchange and joint use of knowledge, methods and data. The collaborative projects initiate and set up international cooperation that often lasts beyond the duration of a specific project. Therefore, collaborative research cooperation contributes significantly to the advancement of science and should remain the core element of future programmes. It thus not only has its set place within the programme structure, it should also be strengthened.

  We strongly emphasize that quality research – apart from the minimum criteria for participation – cannot be a mere question of project size or participant numbers and should not be pre-determined by programme regulations. There should always be enough flexibility to enable the conclusion of content-driven approaches.

  Especially basic research-oriented collaborative research requires programmes that do not pre-define the content of funding applications too narrowly or restrictively. Within programmes that aim at strengthening basic research, not the *impact* should be the decisive evaluation criterion, the emphasis rather needs to be put on excellence.

- **Promote Excellence and Young Researchers**

  Excellence is one of the main pillars of H2020. The success story of the European Research Council (ERC) is a European flagship that sets the standards for research worldwide. This unique feature/selling point must be ensured and continued by all means.

  The Marie Skłodowska Curie Actions (MSCA) are the most important part of H2020 geared at supporting the education of young researchers. Within the knowledge triangle of Education-Research-Innovation, applied research and innovation in particular are “a top H2020 priority,” while doctoral and postdoctoral education as an investment in the future are not treated quite the same way and consequently do not benefit from the same financial support through the Framework Programme.

  We believe that a well-functioning knowledge triangle of Education-Research-Innovation can only be based on the strong pillar of young researchers’ education. Therefore, the MSCA should be strengthened and further developed.

- **Ensure Reliable Planning**

  We appreciate the introduction of biennial Work Programmes under H2020, as this facilitates the planning processes. Therefore, future Work Programmes should always be at least biennial. Reliable planning also includes ensuring that funds allocated to the Research Programme are not diverted to other purposes at a later stage.

- **Rethink Synergies between Different Funding Instruments**

  In times of financial constraints, the idea of better using and more efficiently combining the different European funding instruments is understandable. However, the European Commission’s proposals for more synergies between H2020 and the European Regional Development Fund (ERDF) and the European Social Fund (ESF) are being made at a point when the Operational Programmes for the current funding period have already been written and the region’s money has already been dedicated to certain topics. This must be changed in the future if we want real synergies. On top of that, the legal basis of H2020 projects and the legal basis of ERDF/ESF projects are not compatible. Synergy means the creation of a whole that is more than the sum of its parts.
Turning to another financial source when the first one is not sufficiently endowed does not lead to the creation of real synergies.

3. Budget and Financing

We are aware of the delicate situation created by budget negotiations for a Framework Programme of such enormous scope and complexity, especially in times of tight public budgets. Nevertheless, we believe that in order to boost the programme’s overall impact and success, the following three recommendations need to be implemented:

- **Raise the Overall Budget**
  Currently, the European economy is expected to grow approximately 2% per annum. The budget for H2020 was based on financial figures from 2013. Budget considerations for the next Framework Programme being finalized in 2020 would end up budgeting €90 billion, as though there had only been GDP growth of 2% for the past 7 years as a whole. Research – as the most important driving factor for economic growth and for the creation of jobs – needs to be placed on an even broader basis in order to fund at least the projects that have received the highest possible evaluation score. We therefore think that the overall budget for the future Framework Programme should amount to at least €100 billion.

- **Maintain the Funding Principles**
  We recognize the Commission’s efforts to introduce new financing methods and instruments for attracting more, especially private, investments to the field of research and innovation. Nevertheless, we have serious concerns about the suggested introduction of loan-based funding. As numerous participants, such as higher education and public research institutes, are not allowed to take out loans, they risk being excluded more and more from participation in calls for proposals. This is true in particular for all publicly funded German research institutions and universities. The future Framework Programmes should therefore remain first and foremost grant-based, instead of being slowly transformed into loan-based “investment acquisition programmes.”

- **Increase the Success Rates**
  The interest in H2020 has increased significantly compared to its predecessor Programme FP7 (2007 - 2013). The high participation rate has proven that there is great demand for European/transnational collaborative research. Unfortunately, the low number of successful project applications risks discouraging potential participants/actors and researchers from applying for European funding. We are pleased that specific measures, such as two-step applications, have already been taken. However, these measures should be reviewed regarding their efficiency and should be further developed. A success rate of at least 1:3 for the second stage should be achieved.

4. Simplification and Administration Procedures

We very much appreciate the Commission’s ongoing efforts to simplify procedures and reduce the (administrative) burden for beneficiaries. It would be of great help if the Commission could take the following recommendations into account:
• **Upgrade the Participant Portal**
The use of the Participant Portal for an increasing number of tasks related to proposal submission, grant preparation and grant management is an excellent example of successful simplification. The electronic workflow, without the need to send original signatures for proposal preparation and grant management, greatly facilitates the related processes. The immediate and simultaneous notification of beneficiaries and the availability of all relevant documents through the Participant Portal constitute noticeable improvements. We thus encourage the European Commission to use and further upgrade the Participant Portal in the future. This should also include extending the Participant Portal to all H2020-related programmes.

• **Expand Simplification in Administration and Financing of Projects**
The classification of VAT as a potentially eligible cost is a major advantage over FP7 rules for many universities and research organisations. There are, though, several administrative and financial aspects for which further simplification would be highly desirable, in particular related to personnel costs, time recording requirements, internal cost allocation and use of equipment (see annex for further recommendations on simplification). In general, a broader acceptance of the beneficiaries’ usual accounting practices would certainly lower both administrative burdens and financial error rates in the Framework Programmes.
Annex: Recommendations for Technical and Administrative Simplifications

1. Reimbursement Rates and Indirect Costs
In FP7, varying reimbursement rates, cost models and overhead rates for different funding instruments (collaborative project, coordination & support action, Marie-Curie, ERC), beneficiaries (academic, SME, industry) and activities (COORD, SUPP, RTD, MGT) often led to a certain degree of confusion, both for scientific as well as for administrative staff. The identical reimbursement rate and cost model for all beneficiaries within one project have therefore significantly simplified matters in H2020.

One might argue, though, that the sudden abandonment of the option to charge real indirect costs goes too far, as such a simplified method to calculate indirect costs is not always in line with the beneficiary’s usual accounting principles. Therefore, participants whose accounting system allows the allocation of real indirect costs to individual projects should be able to choose between the 25% flat rate for indirect costs and the use of real indirect costs with a lower (70%) funding rate to account for the principle of cost sharing.

2. Personnel Costs
The requirements for calculating personnel costs are complex and thus error-prone. In addition, the principle of using the hourly rates of the last closed financial year is in contrast to the beneficiaries’ usual accounting practices and creates an additional administrative burden.

A broader acceptance of the beneficiary’s usual accounting principles would facilitate the administration of projects and consequently reduce the error rate. Furthermore, the calculation of the personnel costs is fictive and therefore contradicts the principle of “actual costs.” These errors need to be corrected.

3. Time Recording Requirements
The simplified time sheet model and the option to replace the time sheets with a declaration in special cases do not, in our opinion, contribute to an overall simplification because the simplified time sheet model does not include the reporting details that are requested when completing the Use of Resources table where an allocation of person months to work packages is required. This requires additional details on the monthly activities, which counteracts the simplification and complicates matters.

When applying only the monthly declaration for 100% staff, the reporting requirements cannot be met, because the working hours must be quantified for each work package. This problem must be resolved.

4. Internally Invoiced Cost
In FP7, internal charges for facilities, equipment and other internally established costs could be charged to projects, provided beneficiaries could show an auditable trail. In H2020, though, internally invoiced costs need to follow the H2020 rules, including the time recording requirements for personnel. This poses a heavy administrative burden on the beneficiaries concerned, and thus we fully support the “Joint statement on the current problem of internal cost allocation (ICA) in Horizon 2020,” which is led by the Helmholtz Association and signed by representatives from numerous universities and further (research) organisations, amongst them a number of institutions from Berlin.

5. Use of Equipment
In H2020 depreciation costs of equipment have to take into account the full capacity of the instruments. This requires detailed logbooks for all pieces of equipment, even when they are used exclusively for the project. Again, this is a high additional administrative burden on the beneficiaries. We ask the European Commission to annul the annotations to article 6.2.D.2 AGA.

6. Full Access of the LEAR to All Proposals of an Institution
Although the Participant Portal offers a number of highly useful tools, it would be appreciated if the LEAR of an institution were to be immediately informed of which proposals are being prepared and submitted by an institution and had access to the entire proposal data, including the Evaluation Summary Reports (ESR).