

Brussels, 21.1.2019 C(2019) 121 final

Dear President,

The Commission would like to thank the Senát for its Opinion on the proposal for a Regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination {COM(2018) 435 final} and the proposal for a Decision of the European Parliament and of the Council on establishing the specific programme implementing Horizon Europe – the Framework Programme for Research and Innovation {COM(2018) 436 final}.

The 'Horizon Europe' proposals build on the premise that research and innovation can deliver on citizens' priorities, boost the productivity and competitiveness of the Union. Horizon Europe is based on three pillars (Open Science, Global Challenges and Industrial Competitiveness, as well as Open Innovation), accompanied by different actions to reinforce the European Research Area.

The Commission is pleased to have this opportunity to provide in the attached annex a number of clarifications regarding its proposals and trusts that these will allay the Senát's concerns. The Commission hopes that these clarifications address the issues raised by the Senát and looks forward to continuing the political dialogue in the future.

Yours faithfully,

Frans Timmermans First Vice-President Carlos Moedas Member of the Commission

Mr Jaroslav KUBERA President of the Senát Valdštejnské naměstí 17/4 CZ – 118 01 PRAGUE 1

## Annex

The Commission has carefully considered each of the issues raised by the Senát in its Opinion and is pleased to offer the following clarifications.

On strategic planning: The Commission agrees that the proposed strategic planning exercise for the development of the work programmes in Horizon Europe should be transparent and open to the involvement of stakeholders, as is spelt out in the Commission's proposal, in particular annex 1 of the Specific Programme.

On research infrastructures: Large European Research Infrastructures that are of evident European added value and shared by several Member States are identified by the European Strategy Forum on Research Infrastructures (ESFRI) when updating their Roadmaps. The process of identifying such Infrastructures for the Roadmap entails the analysis of the science case, political support, governance and business plan for the construction and operation, including the sharing of costs between the Member States. The Commission can provide support to the preparation of the construction of these Research Infrastructures and to the strengthening of their sustainability. Under the current Cohesion Policy framework 2014-2020, European Structural and Investment Funds can also be deployed, where appropriate, to support research infrastructures, provided the existence and adoption of a national or regional smart specialisation strategy and a multi-annual plan for budgeting and prioritisation of investments linked to Union priorities, and, where appropriate, the European Strategy Forum on Research Infrastructures. The Commission, however, cannot provide support for the operational costs of these Research Infrastructures as this is a Member State responsibility.

On the European Union added value of the Framework Programme: The European Union added value of funding research and innovation at Union level was analysed in detail in the Interim Evaluation of Horizon 2020, and extensive proof of significant added value was identified for the Framework Programme as a whole. This was particularly the case in aspects such as the cooperation links established as a result of the collaborative projects, but also in the Continent-wide competition for excellence provided by the primarily mono-beneficiary instruments such as the European Research Council. This issue was also one of the key criteria for the ex ante impact assessment carried out as part of the preparations for the Horizon Europe proposal.

On the links with education: The linking of science research and innovation with education is an important principle underpinning the rationale for framework programmes, and is addressed in particular with the European Institute of Innovation and Technology (EIT) and its pan-European partnerships between leading universities, research labs and companies, the Knowledge and Innovation Communities, developing the so-called 'knowledge triangle'.

Successive framework programmes (and in future Horizon Europe) have provided support to the <u>social sciences and humanities (SSH)</u>, both in their own right and integrated in other areas of research and innovation in order to enhance the impacts to be achieved within a systemic approach.

On the participation of Universities: Under Horizon 2020, around EUR 14 billion of total European Union contribution to higher and secondary education has been devoted to about 13.000 funded projects. Under the pillar 'Strengthening the European Research Area', Horizon Europe introduces a concept of modernising academic research and innovation through incentives and reward mechanisms that promote the uptake of open science and open innovation practices and entrepreneurship. The objective is to address the needs for academia to embrace open science and open innovation practices such as open access, findable, accessible, interoperable and reusable (FAIR) data, cloud pilot uptake, research integrity, but also to open science skills and competences, innovative inter-disciplinary research, inter-sectoral, digital and entrepreneurial researcher skills. These objectives are complementary to the European Universities pilot, where long-term strategies for top-quality education, research and innovation will be promoted. Horizon 2020 already supports scientific excellence in Europe and has contributed to high-profile scientific breakthroughs. But we need to raise our game breakthrough market-creating innovations, which will be vital for future growth and jobs. This is not about switching budget from fundamental research to innovation, but about generating more impact from innovation funding. The increasing impact could build on key ingredients in the success of the European Research Council, for example building a prestigious brand focused around excellence, with a strong bottom-up emphasis.

Horizon Europe's Open Innovation pillar aims at fostering all forms of innovation and strengthening market deployment. In order to develop and deploy breakthrough and market-creating innovation, the Commission proposes the creation of the European Innovation Council (EIC). The European Innovation Council will provide direct tailor-made support to breakthrough innovation through two main instruments – the Pathfinder and the Accelerator. The Pathfinder can also support universities through grants to high-risk cutting edge research projects from early technology to commercial stage.

The Commission currently envisages that research and technology organisations (RTO) and universities may apply for support from the Pathfinder under the European Innovation Council and may benefit from a grant up to 100% of the budget of the project from Technology Readiness Level (TRL) 1 to 5 and up to 70% for Technology Readiness Level 6. Yet, to achieve these goals, research has to be developed into innovation which in turn spurs new research.

<u>On synergies with the European Defence Fund</u>: Duplication between Horizon Europe and the European Defence Fund will be excluded.

On budget flexibility: The flexibility clause foreseen in article 9 paragraph 3 of the Commission proposal for the Regulation establishing Horizon Europe (FP) already limits the deviations (+/- 10%) that the Commission may propose within the annual budgetary procedure 'to respond to unforeseen situations or to new developments and needs'. Article 9§3 already excludes the Joint Research Centre and the part 'Strengthening the European Research Area'. However, excluding Pillar I from flexibility would substantially reduce the possibility to reply to unforeseen situations or new development as more than 30% of the total budget of the programme would be 'frozen'. It is important to note that the Commission can only propose deviations within

the 10% flexibility through the annual budgetary procedure, which remains eventually a decision taken by the Council and the European Parliament.

On the termination of actions: The possibility to terminate an action if it has lost its relevance is not new and already exists under Horizon 2020 (see Article 50.3.1(h) of the Horizon 2020 model grant agreements, stipulating that the Commission may terminate an action when the action has lost scientific or technological relevance). In the light of the principle of sound financial management, it is meant to avoid that the Union continues funding actions which have lost their relevance. Economic reasons and the relevance as part of a portfolio of actions were added as possible reasons for termination, in particular, in the case of the European Innovation Council and missions, to cover actions where the relevance of an action is linked to those aspects. In accordance with Article 133 of the Financial Regulation, the beneficiaries will be given the opportunity to submit observations before any decision to terminate is adopted and such a decision will indicate the means of possible redress. Any costs incurred by the beneficiaries up to the moment of termination are eligible if they comply with the costs eligibility requirements.

On the European Open Science Cloud: As outlined in its Communication on a European Cloud Initiative, the Commission is seeking to create a fit-for-purpose pan-European federation of existing research data infrastructures, with a view to moving from the current fragmentation to a situation where data is easy to store, find, share and re-use. Consequently, resources are not likely be devoted to the construction of new infrastructures. The Commission is already providing and planning the necessary financial support to implement the European Open Science Cloud(EOSC) along the policy orientations of the Communication by means of projects under Horizon 2020. Actions were included in the Work Programme 2016-2017, and in the Work Programme 2018-2020, for an aggregate budget of about EUR 600 million. This includes the launch in 2018 of the "Implementing the European Open Science Cloud" (INFRAEOSC) dedicated call, which will support notably the integration of services and the federation mechanism.

Currently, the Commission is exploring funding options for the European Open Science Cloud under Horizon Europe, bearing in mind the desirability of having public and private stakeholders co-designing and co-ordinating their Research and Innovation priorities together with the Commission.

On United Kingdom participation to Horizon Europe: Horizon Europe, which will be based on excellence, openness, and impact, will in particular significantly generate new knowledge and technologies, promote scientific excellence and have a positive effect on growth and jobs as well as have a significant social and environmental impact. Its international out-reach reflects the Union's ambition to foster worldwide collaboration in research and innovation and determination to being open to the World.

Once the legal bases to be adopted by the Council and European Parliament are sufficiently stable, the Commission will begin exploratory talks with interested third countries in order to prepare for negotiations of agreements covering their participation in the European Union programmes linked to the new Multiannual Financial Framework

2021-2027. Once the United Kingdom has become a third country, it would be eligible for association to Horizon Europe and the Euratom Programme in line with these conditions.

<u>On Open Science</u>: The Commission is pleased with the support of the Senát towards open science and the principles to make research data findable, accessible, interoperable and reusable (FAIR principles) and takes note of its concern for a need for adequate funding for relevant activities in Horizon 2020.

The Commission has been a strong proponent of open access and open science and a frontrunner in developing relevant policies for funding and recommendations to Member States. The Commission has systematically and substantially funded, since the beginning of Horizon 2020, projects and infrastructures across the Union to strengthen open access and open science policies, practices and increase the institutional capacity for publishing, mostly through the work programmes for research infrastructures and e-infrastructures, as well as from the work programme on science with and for society.

Importantly, the Commission has earmarked funding for a publishing platform in support of the grantees' ability to fulfil its open access requirements without having to pay to publish in open access. Finally, data management costs described in grant applications and data management plans will be covered and detailed guidelines on eligible costs for findable, accessible, interoperable and reusable data will be provided.

Support to Research and Innovation in freshwater protection: Freshwater protection is indeed included in the Horizon Europe proposal. More precisely the intervention area "Biodiversity and Natural Capital" in Cluster 5 "Food and Natural Resources" will address a range of environmental issues, covering all types of ecosystems. Rivers and water natural resources are covered requiring a systemic approach for their protection, conservation and use. Regarding the quantitative dimension of water use, the intervention area "Circular systems" in the same cluster will address the challenges of water re-use and water savings.