

Science Europe Response

to the European Commission consultation on Horizon Europe Co-design 2021-2024

Brussels, September 2019

Science Europe is the association representing major public organisations that fund or perform excellent, ground-breaking research in Europe. It collaborates with the EC to strengthen the European research landscape and the ERA. The cross-cutting factors identified in question B.5 are of utmost importance for Science Europe and deserve the following response:

Adequate balance of research and innovation

In order to meet its ambition, Horizon Europe (HEU) should embrace a broad concept of impact. In each cluster, the objectives must be broad enough and not limited to short term impact.

Europe should dare to explore unexplored paths and support riskier experimentation that may only lead to applications in the distant future. In order to achieve breakthrough results and innovation,

HEU should support R&I at all Technological and Societal Readiness Levels in all clusters. Fundamental research, in particular, must be supported and its essential role, for research but also for innovation, must be acknowledged.

Gender aspects in R&I content

Science Europe supports the better integration of sex and gender dimensions in the design, implementation, and content of research and experimentations. This increases the quality and societal relevance of results. Sex or gender bias must also be reduced in the design and selection of research priorities. The Gendered Innovation project, previously funded by the EC, provides very relevant tools to address these issues (<https://stanford.io/2k1Oloq>).

Gender aspects, and more generally, diversity and equal opportunities for all, must also be encouraged by HEU. Science Europe encourages the EC to promote its 'Practical Guide to Improving Gender Equality in Research Organisations' (<http://scieur.org/gender-guide>) which provides tools to address persistent issues and monitor progress. Science Europe is also currently helping develop new gender guidelines that will be issued by the Global Research Council and could be useful for HEU.

SSH across clusters

SSH are key to comprehend the social forces that shape society, and are essential research disciplines to address the various facets and the complexity of global and technological challenges. They should

thus be given a strong role in all clusters, including partnerships with a societal relevance, and be considered as key components, in true interdisciplinary approaches. The targeted impact of each cluster must therefore include societal goals.

Open Science practices

Science Europe supports the efforts of the EC to encourage Open Science and looks forward to continuing a close collaboration on Open Access to research publication and research data management (RDM).

To facilitate the harmonisation of RDM in Europe, while taking into account discipline-specific differences, Science Europe encourages the EC to use its 'Practical Guide on Research Data Management' (<http://scieur.org/rdm-guide>) and 'Guidance Document Presenting a Framework for Discipline-specific Research Data Management' (<http://scieur.org/guidance-rdmops>).

Cooperation with the world

Science Europe urges the EU to foster collaboration with strong research performers based in non-EU countries. The participation of researchers and innovators from these countries, such as Norway, Iceland, Switzerland, and potentially a post-Brexit UK, provides real added value and must be encouraged.

Fostering excellence by promoting collaboration

Studies argue that Europe's decreasing competitiveness is not only explained by the lack of mechanisms to translate research into innovation, but also by the lack of excellence in European scientific research.* HEU can help reverse this by funding only cutting-edge R&I throughout the entire programme, including instruments of Pillar II and Part IV (where the evaluation criteria of scientific excellence should be strengthened). This should be complemented by mechanisms to support knowledge transfer and exploitation.

*See: Dosi, Llerena, Sylos-Labini (2005), Science-technology-industry links and the "European paradox"[...] & Rodríguez-Navarro, Narin (2017), European Paradox or Delusion—Are European Science and Economy Outdated?

Pillar I Excellent Science

This pillar must support excellent research and researchers in all disciplines. Impact should not be pre-defined in terms of thematic achievement or contribution to certain challenges.

The targeted impact for this pillar should instead be the development of excellence at European level, the attraction of the best researchers to Europe, the provision of opportunities for researchers at all stages of their careers, and the development of world class research infrastructures. Furthermore, Pillar I's bottom-up character must be preserved and its budget must be significantly increased.

The success of the ERC relies on the highest degree of independence, the use of excellence as the sole evaluation criterion, and the full freedom given to researchers in the submission of research ideas. This must be maintained in HEU.