

Proposal for strategic portfolio management in the 10<sup>th</sup> EU Framework Programme for Research and Innovation

This paper supplements the "German discussion paper in preparation for the 10<sup>th</sup> EU Framework Programme for Research and Innovation" of the Federal Government, which was published and submitted to the European Commission by the Federal Ministry of Education and Research in May 2024. It is thus part of a series of papers by the BMBF that more closely address individual aspects of Germany's provisional position on the next EU Framework Programme for Research and Innovation.

Support for transnational cooperation has proven to be of added value in European R&I funding and is indispensable in tackling global challenges. The funding of cross-border collaborative projects must therefore continue to be the centrepiece of the EU Framework Programme for Research and Innovation. However, FP10 must pursue a more strategic approach to fully realise the effectiveness of R&I for Europe's global competitiveness, technological sovereignty and green and digital transformation, to strengthen democracy, security and social cohesion in Europe and to systematically address the manifold current and future challenges. Research and innovation support in cross-programme thematic areas must therefore be focused through the strategic management of priority topics. The development, implementation and comitology approach of this portfolio management must be closely coordinated with the member states and associated countries from the very beginning in order to ensure the coherence, complementarity and efficiency of funding at all levels.

A strategic focus of funding on key thematic areas creates planning certainty for applicants and provides for a critical mass in global competition. In this context, the aim must be to reduce the fragmentation of funding – at European level and with regard to the national research policies of the member states. This is also recommended in the report of the expert group on the interim evaluation of Horizon Europe chaired by Manuel Heitor and the report by Mario Draghi on EU competitiveness.

## 1. Current status and challenges

Over the past decades, the EU framework programmes for R&I have developed into a **complex system of instruments and thematic priorities** which enables targeted funding. However, this has resulted in the following obstacles in particular:

- 1. A **lack of strategic priority-setting** in the face of the great number of funding instruments
- Insufficient strategic coordination between the funding instruments, in particular with regard to structuring the interfaces between different programme areas (pillars) and between the European and national levels
- 3. A lack of clarity, which makes it difficult for applicants to identify and benefit from suitable funding opportunities

A similar analysis can also be found in the Draghi and Heitor reports. These problems have an adverse effect on the effectiveness and accessibility of European R&I funding, in particular with regard to thematic collaborative research in Pillar 2 of the current Framework Programme:

The six thematic clusters in Horizon Europe with their 39 areas of intervention (3–10 per cluster) in some cases lead to a very high number and broad range of topics for a single cluster. In some cases, this also entails great administrative effort for the EU member states and the European Commission, for example because players from different units must take part in the thematic programme committee meetings. The hope was that pooling topics in a single cluster and thus a single programme committee would produce synergy, but this has not always been the case. Furthermore, with a limited budget, the large number and broad range of topics regularly leads to low success rates, which impacts applicants' readiness to take risks and propose genuinely new and innovative research approaches. The current structures also make it difficult to prioritise the needs for R&I with regard to the European added value while taking systematic account of relevant national funding activities.

The current programme lacks overall coordination and suitable interfaces between the various instruments

and pillars. So we cannot be sure that the wording of calls for thematic collaborative research takes adequate account of all relevant information across the programme, including the results of open-topic funding through the EIC, ERC and Marie Skłodowska-Curie Actions as well as the activities of European partnerships and missions. This poses the risk of parallel **funding** and prevents us from deriving the full benefit from the complementarity of the various different instruments. Efforts are still insufficient to ensure the systematic follow-up and valorisation of suitable project results from basic to applied research and ultimately market-relevant research to cover the entire innovation chain. The aim must be to better link excellent interdisciplinary and transdisciplinary basic research and applied research with innovation and transfer support so as to improve the impact of funding and accelerate the valorisation process. At the same time, the influence of the member states and thus the possibility to better coordinate national and European **activities** has been dwindling, particularly in clusters covering a wide range of topics.

Individuals and institutions wishing to participate in the programme sometimes have difficulty identifying the area in which "their topic" can be funded under the EU Framework Programme. The ex post evaluation of Horizon 2020 already identified the great complexity of funding mechanisms as a major obstacle to implementation (also mentioned in recommendation 9 of the Heitor report). Simplification must be achieved at the level of programme implementation as well as in the programme structure.

## 2. Portfolio approach

The answer to these challenges should not be to minimise the thematically focused parts of the programme while expanding open-topic research in the EIC and ERC. The funding of transnational collaborative projects in common priorities of the member states must continue to be the centrepiece of the Framework Programme. The current structures and instruments of Pillar 2 of Horizon Europe also constitute a natural basis for developing the new approaches needed to address the above-mentioned difficulties. The aim must be to ensure an effective, coherent and accessible thematic R&I funding under FP10.

We propose the following portfolio management approach to provide for the resource-efficient implementation of the thematic priorities in FP10 and improve their coordination within the programme through the creation of interfaces between the funding instruments:

The portfolio management approach involves a shift of perspective in the Framework Programme - from a primarily instrument-based approach to a topic-based approach. In the BMBF's understanding, portfolio management in the EU Framework Programme for Research and Innovation means that EU legislation would define a number of impact-oriented topics for thematic research and innovation funding in an ex ante effort at programme level and that funding calls would be issued on these topics in various areas and instruments of the Framework Programme. The resulting research and innovation projects and the thematically related projects from open-topic (bottom-up) funding - for example from the ERC and EIC - would be assigned ex post to these portfolios and linked with accompanying measures for networking.

## 3. Objectives

A portfolio approach in FP10 is expected to lead to the following improvements with regard to enhanced efficiency of and access to European R&I funding:

**Prioritisation and focusing**: The focus on major European priorities in R&I is to boost the effectiveness of funding for research and innovation. For this purpose, the envisaged portfolio approach in FP10 would bring together all activities within the key thematic areas of the programme. A focus on key topics would also serve to increase the EU Framework Programme's visibility.

Efficiency boost: The aim of the portfolio approach is to support greater efficiency in the use of resources by considering any funding for the same or similar topics from various instruments across the entire Framework Programme for Research and Innovation. This will help us make better use of synergies and avoid parallel funding. In addition, coordination of European and national research funding is to be improved. This would require integrating member state involvement as a strong component of portfolio management.

Simplification: When writing their proposals, applicants do not usually think in terms of an instrument or technology readiness level but a research or innovation topic or a business idea. A Framework Programme structure based on priority topics would facilitate access to funding for first-time applicants in particular. A topic-based approach would also facilitate cooperation with stakeholders.

Strengthening transfer: A strategic portfolio approach that is actively pursued and supported by thematic measures at programme level should help accelerate the transfer of ideas from basic research into application and valorisation. This includes removing any regulatory obstacles to innovation in cooperation with the institutions responsible for the various specialised policies as well as generally supporting the consideration of research results in relevant policy areas. Cooperation between various projects and players in the respective portfolio is strengthened, which helps to better identify synergies and to disseminate and follow up on possible innovations.

## 4. Design

Portfolios bring together all activities in a specific thematic area and include the results of open-topic funding and national activities. The portfolios are to further develop the thematic collaborative research currently funded under Pillar 2 of Horizon Europe and link it more closely with the other pillars of the programme without challenging the open-topic bottom-up character of funding in established programmes such as ERC, MSCA, research infrastructures and EIC. Topic-specific collaborative funding of research and innovation should only be allowed within the thematic portfolios. In particular EU missions, partnerships and KICs of the EIT would

be assigned to thematic portfolios and developed further with a focus on increasing efficiency and synergy.

As a matter of principle, the portfolios of FP10 should be **defined in the legislative process for the entire duration of FP10** with the possibility of midterm adjustment in the comitology procedure.

The number and topics of the portfolios should be chosen with care. The portfolios should demonstrate greater differentiation than today's six clusters in order to enable coordination by portfolio managers of the European Commission as experts in the respective field within the comitology procedure involving the member states. At the same time, the topics should not be defined too narrowly so as to allow thematic areas to be addressed in a holistic manner. A corresponding design must include thematic priority-setting and a focus on needed R&I which promises a special added value when carried out at European level and which is of particular relevance for the transformation into a European model of prosperity that unites competitiveness, security, cohesion and compliance with Earth system boundaries. The portfolios will cover thematic areas which, for strategic reasons, require a critical mass in international competition and in the face of pressing societal challenges. This prioritisation will also ensure that the overall coordination effort will not increase despite greater thematic differentiation of the portfolios compared to the current cluster implementation.

**Portfolio implementation** must be supported and monitored by the member states through suitable committees in the comitology system, also with a view to ensuring adequate links with national processes. Any supplementary expert councils that may be set up will only play an advisory role.



