



14/06/2024

VTT's Key Considerations for the Next EU Research and Innovation Funding Programme (FP10)

VTT Technical Research Centre of Finland has a long-standing engagement with the EU Framework Programmes for Research and Innovation, including Horizon Europe. We have seen their instrumental role in driving solutions for societal and technological challenges. The EU Framework Programmes are not only financial instruments. They are also strategic tools, crucial for integrating multi-national and multi-stakeholder actors into European innovation value chains while leveraging national research, development and innovation excellences on the global stage for Europe's socio-economic resilience and sustainability.

In a world increasingly driven by technological and societal shifts, the European Union's strategic approach to research, development, and innovation is necessary to ensure the sustained industrial competitiveness of Europe and the well-being of society.

1. Ensuring a Robust, Balanced, and Stable Budget

EU's industrial competitiveness and wellbeing largely depends on how European research and innovation actions succeed in developing, maturing, upscaling, implementing and commercializing innovative sustainable solutions. Given the pivotal role of technologies and technological infrastructures in tackling global challenges, there is a clear and pressing need for increased public and private investments in research, development, and innovation. A sufficient, balanced, and stable budget is needed to support excellent, cross-border, high-impact RDI activities and to encourage private investment. This will ensure that the EU does not lag behind global competitors and can effectively respond to emerging challenges and opportunities by building on its strengths.

2. A Strategic, Integrated Approach Across Policies

The next EU framework programme for research and innovation must be deeply integrated with the broader EU political and strategic agenda. In light of pressing geopolitical, environmental, and industrial challenges, there must be cohesive links between research, industrial, energy, climate, defence and regional policies, among others. This approach ensures that the research, development, and innovation community is not only aligned with but also proactive in addressing the urgent needs of Europe across all time horizons—in the short, medium, and long-term.

3. Adopting a Portfolio Approach for Greater Impact

To maximize the impact of EU funding, a portfolio approach within and across RDI programmes is essential. This involves better coordination among various EU funding programmes with RDI components to bridge the gaps between research outcomes and their practical applications. This would ensure that promising technologies move seamlessly from the Framework Programme (FP) to the next steps of development and commercialization in e.g. Innovation Fund, Digital Europe or European Defence Fund. An essential component of this is maintaining a dynamic feedback loop within the EU FP between projects and strategic programming. It is crucial, that this process is facilitated by the

European Commission Services and Executive Agencies in close collaboration with the beneficiaries and stakeholders.

4. Strengthening Transnational Collaborative Research, Development and Innovation Actions

Collaborative research is vital. By reinforcing transnational collaborations across all TRLs and enhancing public-private partnerships, we leverage diverse expertise and resources and create new competences to tackle complex challenges. Instruments like the European Partnerships have been essential in harnessing the full spectrum of the innovation value chain, facilitating common research and innovation agendas. These partnerships enable stakeholders to share risks and optimize resources, effectively tackling industrial and societal challenges and accelerating the journey of ideas to market-ready solutions. While for some other instruments like the EIT KICs and EU missions, their added value is not clear in the current implementation structure, and they should be thoroughly reviewed. A holistic review of all EU RDI instruments to create the smoothest path from idea to deployment and the strongest and most resilient transnational innovation ecosystems in Europe is needed for planning an effective FP10.

Recommendations for the next generation of European Partnerships:

- Reinforce the strategic policy advisory role of partnerships to mobilize the entire innovation value chain to answer critical challenges and integrating it within the RDI funding programmes.
- Flexibility in implementation, and transnational as well as international cooperation must be supported.
- Synergies and a portfolio approach are critical to reduce duplication and scattered activities with stakeholders' platforms for common objectives and research agendas at EU level.
- The PPPs addressing the industrial dimension need to have clear commitments from the industry and readiness of the industry to come in with their financial and in-kind engagement and investments.
- Decrease administrative burden and unnecessary reporting to allow to focus on the implementation, on building synergies and on the acceleration of results and impact.

Recommendations for the EU missions

- EU missions should aim at connecting people and streamline results from EU relevant partnerships and clusters as well as from other national and regional schemes.
- Funding for non-research related activities should clearly come from outside of FP10, and opportunities and incentivization for synergies of funding (e.g. through ERDF, private) should increase.

Recommendations for the EIT KICs and European Innovation Ecosystems

- Renew the European Innovation Ecosystem programme to invest in the creation, development and orchestration of innovation ecosystems in a holistic way, involving all relevant actors and including the skills agenda. The new programme should focus on supporting the transfer of projects results funded under the clusters, on localising the applications (regional synergies) and on reinforcing the role of research and technology infrastructures to build and strengthen innovation ecosystems. This revised European Innovation Ecosystem programme could integrate the best features of the EIT KIC, especially the Skills Academies, and create a strong cycle between research, education and innovation based on local innovation ecosystems without the KICs' administrative complexity, and unwanted distortions from the KICs funding model.

5. Investing in Top-Tier Technology Infrastructures

Europe must invest in world-class technology infrastructures, which focus on maturing, testing and upscaling of new technologies, innovations and solutions, such as testbeds, pilot lines and demonstrating facilities as well as highly advanced digital infrastructures. Technology infrastructures are more than facilities; they are ecosystems that enable to develop, mature, test, and upscale green and digital solutions closer to real-world conditions, including small-scale production and

demonstration to lower the risk before entering the market. They are needed not only to prove the functionality and economic feasibility of the new technology, but to expand European strategic industrial capabilities and resilience.

In FP10, a dedicated funding programme should be established to coordinate and support European investments in technology infrastructures and facilitate access of users (innovation ecosystems, industry, SMEs, start-ups and public sector) to answer their specific RDI needs, promote technological advancement and foresight, and enhance collaboration networks and piloting capacity locally and across the Europe.

6. Simplifying Access to Funding

The current landscape of EU funding is dauntingly complex. A “funding map” would improve the beneficiaries’ understanding of the opportunities. We also need to streamline and harmonize the application and implementation processes to reduce administrative burdens and encourage more entities to participate. [Recent feedback from the RTO community](#) points out that the implementation of lump-sum funding requires significant overhead, highlighting the need for a more applicant-friendly approach.

7. Establishing Coherent Rules and Addressing Co-funding Challenges

It is imperative to synchronize EU funding rules between different EU RDI funding programmes and alleviate the complexities of co-funding mechanisms. EU FP rules should be applied also in EU other programmes (e.g. cohesion funds), for example in some calls that are designed for synergies. Equally, national, or regional funding used as co-funding in EU RDI project should be able to adopt EU FP rules. National funding agencies need clear, flexible guidelines well in advance to align their procedures with EU calls for co-funded actions. Addressing these challenges will simplify the funding landscape, making it more accessible and effective for all stakeholders.

Finally, research and innovation activities alone cannot ensure the creation and uptake of disruptive innovation. EU policy and legislation should also be developed, implemented and assessed in view of encouraging innovations that help realise the EU’s environmental, social and economic objectives, and to anticipate and harness future technological advances. Research and technology organisations’ deep technological and sectorial experience should be used more to advice on the implication of regulation on innovation and on the strategic use of standardization.

Conclusion

As we look towards shaping the next EU Framework Programme for Research and Innovation, our goals must be ambitious yet attainable. We don’t need drastic changes in FP10. Through sufficient funding, strategic policy integration, collaborative efforts, industrial co-investments, attracting, developing and retaining top experts, research and technology infrastructures, streamlined processes and innovation-friendly regulation, we can foster an ecosystem that not only supports innovative research but also translates these advancements into tangible, impactful solutions. Let’s commit to an approach where policy, research, and innovation converge to create a resilient, prosperous Europe.

VTT Technical Research Centre of Finland is a visionary research, development and innovation partner for companies and the society. VTT brings together people, business, science and technology, to solve the world’s biggest challenges, creating sustainable growth, jobs and well-being together with our customers. We create systemic and technological breakthroughs that bring fundamental transformation and renewal to industries and societies. VTT is owned by the Finnish state and has nearly 80 years of experience in cutting-edge research.