



# A New Framework Programme for Research and Innovation (FP10)

Position Paper from the University of Bergen September 2024

## **ABOUT THE UNIVERSITY OF BERGEN**

The University of Bergen (UiB) is a modern, international research university. We are a classical knowledge- and culture-bearing institution founded on European democratic values, with academic freedom as a guiding principle. Long-term and fundamental research of high international quality and research-based education form the foundation of all our activities. Our wide-ranging academic expertise fosters the deep specialization and interdisciplinary collaboration which equip us to address current and future challenges.

UiB has participated in the EU Framework Programmes for R&I since their inception and is among the most successful universities in Norway in securing funding across the Programmes' funding portfolio. UiB emphasizes that the Framework Programme plays a critical role in supporting European and international research and innovation, promoting scientific breakthroughs, solutions to societal and global challenges and groundbreaking innovations.

## **INTRODUCTION**

Because of the central role that R&I plays in determining European competitiveness, it shapes the context for present discussions around the EU's next Framework Programme for R&I (FP10). The University of Bergen (UiB) strongly promotes a holistic, systematic approach to competitiveness and to the many contributions that can be made by R&I. This implies that we update our understanding of competitiveness to take into account the need for comprehensive, long-term sustainability. Delivering a strong budget for European R&I is critical for European competitiveness. UiB is a key initiator of the Research Matters campaign. This aims to mobilize and unite the European research and innovation community in advocating for a doubling of the FP10 budget and increase awareness of the vital importance of research.

In the current context, where we confront the complex and intertwined crises of climate change, biodiversity loss, and pollution, along with challenges connected to demographics, threats to democracy, and health and security risks, it is clear that our understanding of competitiveness cannot focus solely on growth and increasing productivity. It must also include firm positions on long-term sustainability, well-being, and societal robustness. This requires us to take into account the limited availability of natural, human, and other resources, the key societal roles of attractive jobs and social cohesion, and the need to address the complex interests of people as social, political, historical, and cultural beings to secure well-functioning and just societies. It is equally clear that multi- and interdisciplinary research and innovation, alongside research across all disciplines, will play a fundamental role in enhancing European competitiveness in this new, broader sense. This position paper presents UiB's recommendations for FP10.



## **KEY MESSAGES FOR FP10**

- Excellence: Scientific excellence and open competition should be guiding principles throughout FP10.
- Core European Values: UiB supports a renewed focus on democratic values, academic freedom, ethics, gender equality, and diversity in FP10.
- Boost the ERC and MSCA budgets: The ERC and MSCA are highly successful instruments that foster
  creativity and freedom in research by supporting excellent, researcher-initiated projects across all
  fields. As flagships of European research, these bottom-up programmes should continue with
  substantially increased budgets in the next Framework Programme to fully realize their potential,
  support research careers, and avoid leaving talent untapped.
- **Better balance in funding opportunities**: FP10 should ensure a balanced approach to funding basic research, applied research, and innovation, and adequate support across the entire R&I landscape from curiosity-driven to challenge-driven research and innovation.

Addressing the diverse challenges we face, such as climate change, healthy oceans, pollution, biodiversity loss, health risks, the need for better medical treatments, and the transition to renewable energy, requires a strong foundation in basic research. This is essential to enhance our understanding of complex systems and processes and serves as a prerequisite for innovation and the development of new technologies.

We therefore recommend introducing opportunities for **basic collaborative research** through **Research Actions (RA) in the successor to Pillar II in FP10**. These Research Actions would support explorative, challenge-oriented research projects with lower TRL-levels, facilitating collaboration among leading research environments across Europe. This approach would provide a critical knowledge base to inform responses to the global societal challenges addressed within FP10.

• Creativity, diversity, and freedom of research: providing research funding that allows for creativity, diverse perspectives, and freedom to choose research topics, approaches and methodologies is crucial for Europe. Such support has the potential to generate the solutions and innovations of tomorrow and to reinforce the foundations of European democracies, contributing to the open, knowledge-based policymaking that is central to European values.

FP10 should be designed to promote creativity and a diversity of approaches, enabling European research to reach its full potential. UiB recommends introducing more open, less prescriptive Calls in the successor to Pillar II, and a greater variety of project sizes, making room for smaller and more explorative projects in which researchers and innovators might test creative ideas on a smaller scale. This would allow for a diversity of approaches to a given challenge and potentially to a more comprehensive understanding and a greater number of complementary solutions. It would also facilitate greater engagement of younger researchers and new actors in challenge-oriented projects.

• Social Sciences, Humanities and Art (SSHA), psychology and legal research are essential for understanding and addressing societal and technological challenges. FP10 should ensure these fields are fully integrated into all challenge-driven elements, with dedicated calls for projects that allow these disciplines to define research topics on their own terms. This includes expanding opportunities for the humanities and legal and artistic research, which have been underrepresented in Horizon Europe and previous programmes. FP10 should also provide adequate funding for bottom-up fundamental research and interdisciplinary research and innovation within these fields, ensuring a comprehensive approach to tackling complex societal challenges.

- International cooperation: FP10 should harness international cooperation and competition to secure and enhance research quality, as far as is compatible with research security and ethical considerations. Any measure developed or employed in FP10 should be designed and implemented so that they do not jeopardize the possibility of R&I-cooperation between entities from the EU Member States and the EEA EFTA States.
- An integrative approach to innovation and knowledge valorisation: UiB recommends that FP10 strengthen innovation funding instruments and enhance valorization and impact by considering the broader contexts in which innovations take place. The success of technological and non-technological innovations and their resulting societal impacts are dependent on factors that include societal acceptance, economic effects, legal frameworks, environmental sustainability, security concerns, and unintended consequences. Innovation projects in FP10 should therefore be assessed against indicators that ensure excellence and originality, and also economic, societal and environmental sustainability (a techno-socio-sustainability approach) so that EU-supported innovations create effects that are aligned with European core values. To achieve these objectives, a multi-disciplinary effort is needed. FP10 funding instruments supporting innovation should therefore invite all disciplines to contribute.

FP10 should further take into account that valorisation may follow more diverse knowledge transfer routes than those primarily supported in Horizon Europe, and that the market may not always be the main driver for value generation. Other mechanisms of valorisation include social innovation, the erasing of inequalities, the strengthening of democracy, efficiency gains and savings in public and private organisations, and change of policies, regulations and standards. FP10 should therefore also target alternative knowledge transfer routes and support these through innovation funding instruments and dedicated support systems.

• **Simplification of rules and procedures**: FP10 should reduce the administrative burden for participants.

## • Easier access and increased transparency:

- The Commission should provide a clear and accessible overview of the different instruments available in FP10. Work programmes should be fully digitalized with effective filtering options to simplify navigation, making it easier for newcomers and smaller actors to participate.
- The Commission should have a continued focus on securing transparent evaluation processes in which applicants are given constructive guidance and feedback.
- In general, the Commission should make processes connected to the implementation of the programme more transparent – for example within Partnerships and in the shaping of thematic challenges in Pathfinder Challenges.
- **Dual use:** UiB recommends that FP10 remain a civilian programme and that R&I involving technology with dual use potential is supported through the European Defense Fund. Better synergies between FP10 and EDF may be sought through "spin-in" and "spin-out" calls in the European Defense Fund.

# RECOMMENDATIONS ON SPECIFIC PROGRAMME COMPONENTS

- MSCA: MSCA is a bottom-up research programme that promotes brain circulation in Europe and
  fosters cross-boarder connections. To further strengthen MSCA, the EU should consider introducing a
  steering model similar to the ERC's independent Scientific Council which effectively engages
  researchers in advancing research. Additionally, it would be advantageous to offer the possibility to
  extend the duration of a MSCA PF from two to three years to give early career researchers more time
  to consolidate their careers and become qualified for a tenure track or permanent position.
- Research infrastructure: European collaboration on research infrastructure is highly successful, providing obvious added value, and it is vital for the development of European science that this is highly prioritized in FP10. FP10 should seek to maximize national investments in research infrastructures through the continuation of a dedicated instrument for research infrastructures in FP10. The European Strategy Forum on Research Infrastructures (ESFRI) should prioritize long-term, sustainable funding for data steward initiatives. This would contribute to strengthening the European data stewards' community and enhance their ability to train the next generation of data stewards under the ESFRI implementation agenda.

Initiatives to support sharing of health data across Europe should be continued and infrastructure that facilitates sharing of health data should be prioritized.

- Missions: The Missions should be thoroughly evaluated before deciding whether they should continue
  in FP10. FP10 should in any event fund only Mission activities that clearly fall under the category of
  research and innovation activities.
- KICs: Knowledge and Innovation Communities should be structured according to a model that allows
  universities to play a role beyond the end of the Commission's funding period and to make their
  valuable contributions to the important functions of education, innovation and technology transfer as
  well as to life-long learning initiatives.

## • Partnerships:

- UiB recommends limiting the number of Partnerships in FP10 and only establishing Partnerships when such organization of the R&I effort provides a clear added value.
- Opportunities for participation and engagement for different types of actors, including universities, should be communicated in a more accessible manner.
- Co-funded partnerships should to a greater extent include Calls for projects with lower TRL thresholds.

### • Innovation projects:

- introduce a new techno-socio-sustainability approach in assessing innovation and building project portfolios;
- increase and diversify innovation funding to give all disciplines a stake in European innovation processes;
- establish and fund mechanisms that support innovation following different knowledge transfer routes that include, but go beyond, commercialization.
- UiB would welcome further incentives for researchers who wish to innovate. The ERC Proof of Concept works well and could be used as a template for instruments that could be made available for a larger group, e.g. beneficiaries of MSCA and RIAs.

# THEMATIC PRIORITIES

For the parts of the programme oriented towards addressing societal and global challenges, UiB wishes to emphasize the following thematic areas:

#### **CLIMATE CHANGE:**

R&I with a broad interdisciplinary approach is needed, including perspectives from health, SSHA, psychology and legal research. Research on the future ice-free Arctic and the development of integrated prediction systems that combine Earth system, Ecosystem and Social system models should receive particular attention.

#### OCEANS, CLIMATE AND THE BLUE ECONOMY:

Our oceans are deeply affected by climate change and face multiple other stressors. Interdisciplinary and intersectoral R&I and basic research are both urgently required to achieve a better understanding of how oceans and ecosystems, particularly coastal, Arctic, and deep-sea, are affected.

#### EFFICIENT ENERGY SYSTEMS AND ENERGY SYSTEM MANAGEMENT:

To efficiently harvest intermittent, renewable energy resources, and avoid over-investment in energy production, we need research into improved energy system management tools, as well as high quality input data.

#### **HEALTH:**

Health R&I in the fields of aging, infectious diseases, neurodegenerative diseases, child health, women's health, mental health, multimorbidity, digitalization of healthcare, health issues connected to climate change and migration, and precision and personalized medicine in relation to various diseases, including cancer, are all required.

#### **DEMOCRACY:**

Democracy-relevant R&I with a broad, interdisciplinary approach, covering democratic issues in societal transformations related to e.g. climate change and AI, including perspectives from psychological, legal, cultural, philosophical, historical, literary, linguistic, and artistic research is required. Research on priority setting should also be covered as key to handle limited resources in a sustainable way.

## **ARTIFICIAL INTELLIGENCE:**

Research and innovation on AI including disruption through AI and subsequent consequences is required. This entails a multi- and interdisciplinary approach, in which perspectives from legal and psychological research and the broad range of relevant SSHA-disciplines are included.

