

POSITION ON FP9

Ensuring a smooth pathway from fundamental research to disruptive innovation

Past EU Framework Programmes for research and innovation have been fundamental in establishing and developing the European Research Area (ERA). The Ninth Framework Programme (FP9) should drive ERA forward by ensuring that Europe's excellent research leads to excellent innovation. In order to achieve this, FP9 needs to help optimise the framework conditions and instruments for both research and innovation – and to promote and support the interlinkages between them.

Leading universities of science and technology are at the centre of translating scientific knowledge and technological progress into innovative solutions for the benefit of society. The EuroTech Universities Alliance provides a unique framework for four leading universities of technology to combine their complementary strengths across the entire research and innovation cycle. By connecting our innovation eco-systems across borders, we contribute to Europe's leadership in technology and the diffusion of innovation. Based on this holistic view and contribution, we advocate that FP9 should:

1. **Guarantee the best conditions for supporting cutting-edge research**
2. **Drive competitiveness through a holistic approach to education, research and innovation**
3. **Enhance innovation eco-systems and R&I systems**

1. Guarantee the best conditions for supporting cutting-edge research

Much of the fundamental research at universities serves as a stepping stone towards other discoveries – which in turn give rise to applications directly beneficial to our everyday lives. FP9 needs to further stimulate cutting-edge research on fundamentally new ideas that prepare the grounds for the innovations of tomorrow.

Safeguard the European Research Council and the Marie Skłodowska Curie Actions

The instruments provided by the European Research Council (ERC) as well as the Marie Skłodowska Curie Actions (MSCA) have given an important boost to cutting-edge research and top-quality research training and should be further promoted under FP9. We particularly welcome the return of the ERC Synergy Grants as an enabler for excellent collaborative research in any given field. To boost Europe's position in excellent research, FP9 should be open to the world. In particular, non-EU Member States should also be able to contribute to and benefit from the success of the ERC.

Safeguard the FET Open principles and budget

A substantial budget also needs to be allocated to a specific scheme based on the current Future and Emerging Technologies (FET) Open principles: interdisciplinary collaborative research with a radical vision and a breakthrough technological target that is exclusively defined bottom-up. Horizon 2020 is unique in providing funding for cross-border collaborations of this kind. However, given significant budget limitations coupled with oversubscription, FET Open has not been able to harness the full potential of Europe's research community. This needs to be properly addressed in FP9.

Describe impact at mission-level

The instruments used in the thematic part of FP9 which addresses societal challenges should give the research and innovation community the flexibility and freedom to define how they will contribute to solving the challenge in question. Describing impact at mission-level also helps to facilitate cross-disciplinary thinking and the involvement of different actors.

Support attractive research careers

To guarantee research of the highest quality, European research careers need to be sufficiently attractive in a highly competitive global market. Building on the successes achieved at doctoral and postdoctoral level, the MSCA COFUND scheme should increase the focus on Assistant Professorships. This would create incentives for European universities to develop improved and more sustainable career perspectives in university research for promising young talent.

2. Drive competitiveness through a holistic approach to education, research and innovation

As lynchpins connecting education, research and innovation, universities have a crucial role in driving Europe's competitiveness. FP9 presents an important catalyst to empower universities across Europe to modernize and to further support the exploitation of EU funded research with high innovation potential.

Provide a dedicated support instrument for university networks

We fully support the European Commission and Council's discussion on the need to support university networks with a view to achieving the scale and synergies necessary to make the European research and education offer more globally competitive. FP9 should provide a dedicated support instrument for in-depth university networks to promote the modernization of universities in Europe. Essentially, such an instrument should be long-term in focus and give universities the freedom to decide flexibly how to best develop creative approaches to inter-connect their activities across the knowledge triangle, breaking down the silos between education, research and innovation.

Provide follow-up funding mechanisms for research with high innovation potential

By introducing the Proof of Concept and launchpad schemes, the ERC and FET have introduced follow-up funding mechanisms to exploit the commercial and societal impact of EU funded research. An instrument providing follow-up support to innovations triggered by all parts of FP9 should be introduced. Based on our experience in MSCA Innovative Training Networks and COFUND programmes, we strongly recommend to also consider innovators supported by MSCA for preferential access to follow-up funding. This would effectively build a bridge between research training and entrepreneurial activities and help to build a more open mindset among young researchers towards entrepreneurial careers.

Provide grants for university-based innovators

We fully support the recommendation of the High-Level Group of Innovators on the European Innovation Council (EIC) to recognise the need to fund early stage technology. To support the pathway from breakthrough research to market and societal value, FP9 should not only support private companies including start-ups, but also award person-based grants to individual innovators affiliated with research institutions. Based on our experience within the EuroTech Universities Alliance, we advocate that groups of collaborating innovators also be eligible for support.

An innovation grant scheme for early stage technology would constitute a truly novel approach in European innovation support, effectively closing one of the crucial gaps in the value chain. Focusing support on incorporated candidates only would leave valuable innovation potential untapped.

EIC grants should be seen as add-on to other FP9 funding mechanisms in support of cutting-edge research. The budget allocated to such a new tool should, therefore, be in complementarity to collaborative research support in FP9.

Support student competitions

Over the last years, the European Commission has tested innovation prizes as a means to reward and empower European innovators. The portfolio of instruments should be extended with student competitions at bachelor's and master's level, which so far have not received major attention in the EU's funding landscape. Projects such as Solar Decathlon would, however, provide a unique and highly visible, media-friendly tool to tap the innovation potential of bright young minds and pave the way for more "born European (global)" companies.

3. Enhance innovation eco-systems and R&I systems

A promising approach to secure higher impact from research is offered by Europe's innovation eco-systems. The powerful relation between excellent scientific research and education at universities leads to creative and disruptive technological innovation within these ecosystems thanks to the transfer of scientific knowledge to the next generation of researchers, entrepreneurs and skilled employees for industry. FP9 should play an important role in connecting Europe's innovation eco-systems. By doing so, it will support the scaling-up of Europe's industry and promote a more balanced development of the European Research Area and diffusion of innovation.

Spread excellence by driving ERA

HORIZON 2020 has made important steps forward in promoting research collaborations across and between all EU Member States. FP9 should go one step further in driving ERA forward by also promoting incentives to modernise R&I systems by facilitating e.g. creative approaches to integrate education, research and innovation. Focusing on the ERA objectives will help accelerate the necessary structural changes and the development of locally relevant best practice. At the same time, adequately funded schemes that incentivise all players to work together in connecting innovation ecosystems will also promote a more balanced development of ERA. Within these schemes, co-funding by FP9 and the Structural Funds should be seamless. More generally, co-funding from Structural Funds could be envisaged for other parts of FP9, especially the mono-beneficiary type of grants.

Sharpen the Digital Innovation Hubs Scheme

The digital innovation hub scheme piloted under Horizon2020 is a welcome initiative. In order to enhance universities' potential impact in providing new disruptive technologies to the market, the current scheme's scope should be broadened, and its budget increased. Even if the primary target of funding is to facilitate the creation of a European hub of hubs, the objective of delivering strong visibility with maximum geographical outreach and coverage of technology areas needs to be supported by an increase in budget.

THE EUROTECH UNIVERSITIES ALLIANCE IS VERY OPEN TO DISCUSSING THE ABOVE VIEWS IN MORE DETAIL WITH KEY STAKEHOLDERS AND DECISION MAKERS.

About the EuroTech Universities Alliance

The EuroTech Universities Alliance is a strategic partnership of leading universities of science and technology committed to excellence in research and jointly developing solutions to the grand challenges of society. The members are: Technical University of Denmark (DTU), École Polytechnique Fédérale de Lausanne (EPFL), Eindhoven University of Technology (TU/e) and Technical University of Munich (TUM).

By promoting in-depth collaboration across research and education, as well as nurturing innovation and entrepreneurship, the Alliance combines the complementary strengths of its members to achieve multi-scale initiatives of high impact to society and industry. The Alliance engages with all societal actors to raise awareness of the opportunities offered by science and technology.

In 2017, the Alliance has launched a vision for a Joint Innovation Concept, connecting the four high-tech innovation hubs to solve societal challenges.

For more information, please contact:

Emily Palmer
Head of Brussels Office
EuroTech Universities Alliance
Square de Meeûs 23
1000 Brussels
Phone: +32 2 274 0532
Mobile: +32 472 584 463
Emily.Palmer@eurotech-universities.eu
www.eurotech-universities.eu

 [@EuroTechUA](https://twitter.com/EuroTechUA)