

6 May 2025

To the Presidents of the EU Institutions:

President Roberta Metsola,

President António Costa,

Prime Minister Donald Tusk,

President Ursula von der Leyen,

Dear Sir/Madam,

With the next multiyear funding framework for research and innovation approaching ever closer, the European Union is at a critical juncture to enhance its competitiveness and growth while demonstrating global leadership on R&D. In light of the ambitious Competitiveness Compass, we write in support of maintaining the EU's next-generation research and innovation programme as a stand-alone Framework Programme 10 with a ring-fenced budget targeting 3% of GDP.

During the presentation of her program in the European Parliament in July 2024, President Ursula Von der Leyen stated that Europe needs to put "research and innovation at the heart of our economy". Yet the EU is investing significantly less than other global powers, for example 2.24% of its GDP on R&D in 2022 compared to 3.5% in the U.S., and below the 3% target for more than two decades. For each year the EU under-invests in R&D, the innovation gap with third countries widens. We must seize this rare window of opportunity to act upon the call from President von der Leyen and gain momentum towards our goal by building on the legacy of self-standing Framework Programmes.

Public investment through FP10 will continue to drive the research needed to develop, support and implement EU policies while tackling global challenges. The importance of basic and applied R&D cannot be overstated, given its impact on **energy efficiency and net zero emissions**. From improving renewable energy sources to advancing smart grid technologies, key enabling technologies like optics and photonics offer innovative solutions that can significantly reduce energy consumption. They play a crucial role in fulfilling the European Green Deal and the EU's commitment to the Paris Agreement goal of achieving net zero emissions by 2050.

Although the EU framework programme for R&I makes up only about 10% of total EU spending on research and innovation, it has played a key role in strengthening Europe's scientific leadership and creating socio-economic benefits by bringing together the best minds from around the world. By investing in R&D, the EU fosters a **highly skilled workforce**, equipping students with the expertise needed for rapidly evolving STEM fields. This investment is essential for ensuring a continuous pipeline of talent in fields such as photonics, artificial intelligence, and quantum computing, which are key to driving future innovation. By nurturing talent in these cutting-edge fields, the EU not only strengthens its industrial base but also secures its long-term competitive advantage in the global market. Ensuring that future generations have access to top-tier education and research opportunities will directly contribute to the EU's growth, helping meet the needs of the future labour market.

Our healthcare system remains a top concern as the EU population over the age of 65 is projected to double by 2045. Faced with the associated challenges of this demographic trend, we must urgently work

to improve **disease prevention, early risk assessment, and improved well-being**. Concerted efforts to further research and develop biophotonics in the context of Framework Programme 10 will enhance methods of instant disease detection and treatment at the point of care. Europe's robust innovation ecosystem, including traditional firms, startups, and research institutions, positions it uniquely to lead in this large and expanding market, valued at around €50 billion worldwide as of 2021.

Now more than ever, a strong and well-funded public R&D programme is critical to **Europe's defence and security**. The armed conflicts at the EU's doorstep highlight the urgent need for Europe to safeguard its technological sovereignty and maintain operational superiority against potential adversaries. The EU's unique strength lies in its collaborative approach, with synergies between industry and academia as a distinct comparative advantage and a fundamental pillar of Europe's competitiveness. By pooling research, innovation and resources as one common European market rather than twenty-seven national markets, Europe can effectively shore up its defences. Emerging technologies like AI and quantum computing will be instrumental in this regard, so FP10 will be most impactful by harnessing the value chain's full spectrum of knowledge to develop dual-use science and technology, rather than limiting itself to civil research. A collaborative, holistic approach will ensure that Europe remains at the forefront of defence innovation.

The European Commission cannot afford to curtail its technological leadership at a time when innovation is determining with unprecedented speed the winners and losers of the new technology-driven economy. To maintain this leadership, it is crucial that the EU increases its investment in R&D to the target of 3% of GDP to ensuring sustainable growth and competitiveness. A stand-alone Framework Programme 10 will not just be an investment in a specific field, but a strategic commitment to achieving the broader goals of the European Union—above all, the continued peace, security and prosperity of its people.

Signed,

Mr. Rainer Erdmann, Chief Executive Officer, PicoQuant GmbH

Dr. Wilhelm Kaenders, Chief Technical Officer, Founder & President, TOPTICA Photonics AG

Mr. Mischa Kohler, Managing Director, TRUMPF Laser UK Limited

Dr. Ralf Kuschnerreit, Member of the Executive Board, JENOPTIK AG

Mr. Jussi-Pekka Penttinen, Chief Executive Officer, Vexlum Ltd.

CC:

Ekaterina Zaharieva
Commissioner for Startups, Research & Innovation
European Commission
1049 Bruxelles/Brussel
Belgium

Marc Lemaître
Director-General for Research & Innovation
European Commission
1049 Bruxelles/Brussel
Belgium