POSITION PAPER

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Horizon Europe 2028-2034: Securing a strong, innovative industrial future

To retain global tech leadership and the ability to create new, innovative products Europe's technology industries rely on a strong EU Research & Innovation Framework– especially at a time when a growing innovation gap is opening and a lack of private R&D investment threatens to undermine EU industrial competitiveness. Europe remains strong in producing cutting-edge inventions, yet it often struggles to turn them into marketable products due to insufficient financial capacity.

Horizon Europe 2028-2034 must effectively address these challenges. To secure and strengthen Europe's innovative capacity and industrial competitiveness Horizon Europe should:

- **Establish an industry-led Technology Council that will serve to guide EU policy and ensure commercial viability and strategic use of resources**. The Technology Council will ensure that industry representatives from the entire value chain have a permanent and active role in the Programme's governance structure.
- **Create a new 'Industrial Innovation Booster' Instrument across Pillar 2 & 3**. The Instrument should drive industrial innovation to higher Technology Readiness Levels (TRLs) and unlock deeper collaboration between large industries, midcaps, SMEs, and start-ups/scale-ups.
- **Strengthen Public-Private Partnerships (PPPs)** with a greater focus on industry needs, with companies taking a leading role in defining agendas and choosing cooperation partners in the quest to bring research to market. PPP selection criteria should avoid overly sectoral approaches and instead strongly integrate key horizontal enabling technologies (such as advanced manufacturing, robotics, or photonics). Orgalim strongly rejects the idea of mandatory cash contributions in the co-funding rules.
- **Simplify & accelerate application processes** with flexible call topics, clear deadlines, and streamlined procedures for all types of companies.
- **Reject a funding rate cap of 70%** for companies, especially for low TRL research projects.
- **Increase the nominal budget to €200bn**, with 60% dedicated to applied research under Pillar 2 to secure adequate industry participation.

European Innovation as a driver of industrial strength in challenging times

Europe's technology industries – mechanical, electrical, electronics, digital, and related manufacturing – depend on a strong EU Research & Innovation Framework to sustain global leadership and support our continent's autonomy and prosperity. Today, the global competition for technological leadership is picking up speed while investment in Europe's technology industries – the EU's largest manufacturing sector – has been falling in recent years.[1] Mario Draghi identified the innovation gap and lack of private investments in R&D as two of the major causes of the lack of competitiveness of EU industry. **Indeed, inventions are not lacking in Europe, but they are not matched by the necessary financial means to transform them into tangible products and services with high market value for global exports.**

- The European Commission's proposal for Horizon Europe 2028–2034 (FP10) marks a positive step in response to the above challenges with a larger budget, simplified processes, and stronger lab-to-market tools.
- **Orgalim companies warmly welcome the continuity of the collaborative research pillar, which is an essential asset for industrial technology development in Europe**.
- **However, the programme still falls short of the scale, clarity, and industrial focus that European industry needs to compete with significantly larger US and Asian investments.**

This paper outlines what changes to EU research funding are required to secure Europe's long-term innovative industrial competitiveness.

Horizon Europe: an essential enabler of innovative industrial competitiveness

Horizon Europe is a key asset of the EU in its pursuit of technological leadership, resilience and competitiveness. For European companies, European R&I programmes are of fundamental importance as they enable the cooperation of the best researchers from all over Europe from universities, research institutes and industry. This collaboration is essential for industry as it creates a joint technological and scientific critical mass and impact which cannot be addressed at national level or by the internal R&I of companies alone. As a lighthouse, it also serves as a reference point for scientists, industry, and investors. **Horizon Europe is also crucial to fund early-stage, pre-competitive collaborative research in areas where the financial risks, technological challenges and externalities are too great for private company investments.** The scientific and technological results of Horizon Europe, together with its positive impact on the EU´s R&I-landscape, are leveraging private investments, both in innovation and in the EU as a location for research-intensive industries. EU R&I programmes also give a long-term perspective to Europe's researchers and develop ecosystems in existing, as well as emerging, technologies. This provides a common vision for next-generation innovative solutions which would not be possible without public funding.

Europe's ability to remain competitive in global technology markets depends not only on scientific excellence, but also on the flow of investment that helps promising technologies move from laboratory ideas to widely adopted solutions. Financing, risk, and market readiness evolve as technology matures.

The key to achieving successful innovation is to design and target public funding with the objective of attracting and leveraging private investment, especially in early stage emerging technologies and scientific discoveries, which foster breakthrough innovations. **To attract more private capital towards instruments and priorities of the EU, innovation projects must respond to long-term industry and market needs**. Funding decisions must be led by technological opportunities, societal and scientific goals, and based on excellence.

[1] 1 Orgalim Economics and Statistics Report, Spring 2025.

Therefore, the governance of EU funding, via the European Competitiveness Fund (ECF) and Horizon Europe, must be attuned to global technology and competitiveness priorities. **To this end, the ECF and Horizon Europe must have a robust governance framework for industrial participation to accurately address the needs of industry in terms of global competitiveness and innovation. This governance framework should also ensure the strategic coordination between the ECF and Horizon Europe Pillar 2 and make the promised 'single-entry point' a reality.**

Strengthen the Excellence Principle

To stay inspiring and relevant, and to ensure real added value for society and industry, EU research funding must always be based on excellence and a competitive selection of projects, using objective selection criteria and the excellence principle. Both Horizon Europe and the ECF have to be firmly grounded in the principle of excellence, and the concept of excellence should be clearly linked to the ability to attract private investment in R&D in Europe. For both instruments to address the challenges highlighted in the Draghi Report – particularly the need for increased commercialisation of research and a greater inflow of private R&I capital – the notion of excellence must be properly defined.

For applied research and innovation at TRL level 4 and above, excellence must encompass both academic excellence and market potential. The higher the projects are on the TRL scale, the greater the emphasis should be on market excellence and on the capacity to industrialise and commercialise knowledge in Europe.

Include Key Enabling Technologies as a priority

Whereas Orgalim supports the focus of the European Competitiveness Fund and its policy windows on strategic objectives of the EU, **we are greatly concerned about the lack of consideration of key enabling technologies in Horizon Europe.** Progress in cross-cutting, enabling technologies such as advanced manufacturing, physical AI, semiconductors, advanced materials and upcoming future technologies are crucial to close the innovation gap and to increase productivity in all industrial sectors. If Europe falls behind in these technologies or fails to provide a system where technologies can be combined to form new applications, the innovation pipeline will dry up. Therefore, we propose the inclusion in Horizon Europe of a horizontal, cross-cutting priority for Key Enabling Technologies and deep-tech development which supports the sector- and challenge-driven programmes and priorities.

Recommendations

Strategic Technologies in Pillar 2 and the ECF: getting the governance right to maximize impact

The approach in Horizon Europe Pillar 2 and the ECF strongly focuses on 'Strategic Technologies', defined top-down by the Commission.

Orgalim endorses the idea that the ECF should prioritise technologies important to the EU's strategic interests. However, a pure top-down governance line risks locking the ECF into certain directions and making the wrong choices (e.g. by neglecting essential crosscutting enabling and upcoming technologies). Therefore, defining these technologies should involve input from both policymakers and industry, as industry has a deep understanding of technological needs and is expected to drive investment and implementation.

The selection of technologies in R&I and industrial policy should focus on enhancing European strengths and achieving technological leadership. This demands long-term investment, ecosystem collaboration, and continuous development – no single entity can do it alone. Rather than imposing top-down lists of critical technologies, R&D and industrial projects, a formal governance model involving industry, academia, and institutes is essential. To this end, **we propose establishing an industry-led Technology Council (or adapting the proposed ECF Strategic Stakeholders Board) in order to guide**

EU policy with industry input (both as technology producer and technology user), ensuring commercial viability and strategic use of EU resources for lasting competitiveness.

The ECF and Horizon Europe must be guided by the flexibility and agility needed in policy development in order to respond to rapid global technological advancements and turn them into products and services in the market. Building on the existing European Industrial Forum, the suggested industry-led Technology Council or adapted Stakeholders Board would offer well-informed, unified, and broadly-based advice to support bridging the innovation gap.

- **Composition**: The industry-led Technology Council should include representatives from industry, technology, universities, RTOs, EU Member States, and the Commission. Industry C-level representatives from large companies, midcaps, SMEs and scale-ups should be selected to ensure a broad and balanced representation along the value-chain to cover European industrial strategy, providing a holistic perspective that avoids dominance by any single company or sector.
- **Link to existing forums**: the Technology Council will make use of the well-established European forums that develop strategic agendas for research and innovation, such as the Industrial Forum, the European Technology Platforms and the Alliances.
- **Outcome**: the Technology Council will advise the Commission and Member States on industrial policy measures, potentially leading to funded activities using the most suitable instruments; for example updated public-private partnerships, or Important Projects of Common European Interest (IPCEIs). Identifying capital-intensive, high-risk areas strategically important to Europe would be another benefit of using the described process, where strengthening industry involvement would be one important element to stimulate increased industry investments in R&D and production in Europe, building on the strengths of our innovation ecosystems. **Concretely for Horizon Europe, the Technology Council will assist the Commission and Member States in the design of the ECF policy windows work programmes that will lead the direction of Pillar 2 and Pillar 3 R&I activities.**

Create a new 'Industrial Innovation Booster' instrument across Pillar 2 & Pillar 3 for start-ups and industry

To close the innovation gap and accelerate commercialisation of research results, **a new 'Industrial Innovation Booster' tool should be established across Pillar 2 and Pillar 3 of Horizon Europe and complement the work of the European Innovation Council (EIC).**

Existing tools in Pillar 2 – such as the Public-Private-Partnership (PPP) model – remain essential for European industry and must be safeguarded and reinforced. However, **it is also clear that the collaborative research instruments currently used in Pillar 2 are not appropriate to support scaling and commercialisation**. In areas where uptake is hindered by market failures, a new instrument is needed which is tailored to drive industrial innovation to higher TRLs and to unlock the untapped potential of industry-led eco-system collaboration, including between large industries, midcaps, SMEs and start-ups/scale-ups. At the core is the idea that industrial companies know their markets and the supply networks and are better suited to drive innovation and commercialisation than R&I consortia.

A broadened toolbox, **explicitly including established industry,** will be crucial for better connecting activities across Pillar 2, Pillar 3, and the ECF. We support the EU tech frontrunners initiative under Article 17 of the ECF Regulation. However, we believe that under Horizon Europe innovation boosters are also needed in order to accelerate the development of research-intensive industrial technologies and to quickly bring them to innovation and scaling.

To maximise scaling potential, **innovation boosters should be built around real industrial applications, needs, and challenges.** Innovation thrives when industry, academia, and start-ups collaborate. Industry can contribute with expertise, global networks, infrastructure, and act as an anchor customer for deployment. A stronger ecosystem approach in the next Framework Programme will help Europe close the innovation gap faster and more effectively.

Key features of the industrial innovation booster include shorter programming cycles, bottom-up project proposals led by industry, flexible project execution, and continuous monitoring. The goal is to increase private investment to at least 50% of the project funding.

Strengthen Public-Private Partnerships with a greater focus on industry needs

Public-Private Partnerships (PPPs) bring together the Commission, industry, research organisations and other stakeholders to tackle challenges in research and innovation through collaborative projects. PPPs under previous and current Framework Programmes (e.g. Made in Europe, ADRA, Process4Planet) have proved to be highly valuable and inclusive instruments and have successfully delivered innovative technologies and deployable solutions for the digital transformation and green transition. PPPs under the new Horizon Europe should be strengthened in two ways:

- The number of PPPs should be reduced to avoid fragmentation of the programmes. **Criteria for selection should avoid a sectoral approach,** not losing sight of the essential role played by enabling technologies such as advanced manufacturing, robotics and automation, photonics, etc. in Europe's long-term competitiveness. Horizon Europe should have a portfolio approach in its selection strategy, supporting a long-term vision for innovation shared by policymakers, industry, universities and research and technology organisations.
- Partnerships should be better focused on industry needs to create value and contribute to Europe's competitiveness. To this end, **companies should take a more significant role and be leaders when defining the partnerships agenda and choosing the cooperation partners**, with the clear goal of bringing research to market.

Partnerships co-funding rules must refrain from imposing financial in-cash contributions from partners. Especially for the manufacturing sector, where innovation requires high capital investment and where companies are subjected to volatile market conditions, compulsory cash contributions risk reducing industry participation by increasing financial barriers at the very stage when technologies are most uncertain. It must be understood that, in particular, the in-kind contribution in terms of human resources is a much more valuable commitment. For companies, experienced individuals are more valuable than money – especially given the shortage of skilled technical talent in Europe – and the industrial researchers bring know-how to the projects. Maintaining flexible co-funding rules instead encourages broader industrial engagement, maximises leverage of private investment, and ensures that public–private partnerships remain inclusive, innovation-driven, and aligned with Europe's strategic autonomy goals.

Balance EU preference and collaborative research

The Commission's ECF proposal sets out rules and safeguards to make sure funding benefits industries and technologies within the EU. As Horizon Europe Pillar 2 activities are designed based on the ECF's priorities, **there is a need to clarify whether EU preference for deployment and manufacturing phases under ECF will also apply to R&I project calls** and how the mechanism will be implemented.

We would like to highlight that the **European technology sector has strong long-term R&I partners outside of the EU, such as Norway, the UK and Switzerland**. The stability of these partnerships must be maintained to ensure research projects lead to fruitful results.
Research excellence is the result of cooperation between the best brains across borders – and the EU alone will not be able to fully meet the technological challenges which lie ahead. Therefore, Horizon Europe must encourage the participation of partner countries and like-minded countries. In general, admission should follow an interest-based approach, allowing cooperation where it is needed and imposing EU-preference where EU-interests are at risk. This does not only apply to project participation but also to access to data and the dissemination of results.

Simplify & accelerate application processes

To attract more companies to EU R&I initiatives, Horizon Europe programmes should be transparent, with flexible call topics, clear deadlines, and streamlined application processes for all types of companies. Greater flexibility in choosing partners and efficient sharing of research results to benefit all businesses are also needed.

The Commission proposal rightly strives to simplify calls application process and projects implementation.

- Open calls by default: we welcome this approach, which enables flexibility for future needs and bottom-up innovation, having better, flexible absorption capacity for technological evolution.
- Shortening the time-to-grant period to a maximum of seven months (Article 26) is a positive development for accelerating the start of funded projects and enabling quicker deployment of R&I activities. Overall, this improvement enhances the responsiveness and agility of the Horizon Europe programme, allowing it to better address emerging scientific and technological opportunities as well as societal needs.

However, we want to **express caution on the lump sum per default approach**. Lump sums reduce flexibility in managing complex or capital-intensive R&D, require highly detailed work-package planning upfront, and potentially result in a withholding of payment if a work package is only partially completed. This may deter companies from coordinating or joining ambitious projects, especially in demonstrators where costs and technical pathways evolve. To keep industrial players fully engaged in Europe's R&I agenda, the new framework should preserve flexibility for cost-based funding where lump sums are unsuitable and ensure clear, practical completion criteria that avoid disproportionate risks for coordinators.

Regarding funding rates, we strongly advise against setting a general limit of 70%. In particular, in low TRL research action projects higher funding rate might be needed to facilitate active industry participation with appropriate public financial back-up for high-risk initiatives. We are in favour of the current scheme (Research & Innovation Actions 100% for all, Innovation actions 70% for private for profit), as it provides both room for sufficient funding for high technological risks and the option for private co-investment in innovation.

Increase the nominal budget to €200bn

Orgalim requests the increase of the **nominal budget for the next Framework Programme to €200 billion**, and a better reflection of the **importance of applied research under Pillar 2 to secure industry's participation.** Orgalim has also noted the steep decrease in the share of Pillar 2 in the total budget. We strongly advocate for **dedicating 60% of the Horizon Europe budget to applied research** that represents both the important cost for testing and prototyping and correlated investment risks for companies The role of Horizon Europe is to stimulate industrial R&D in Europe, by providing predictable, long-term, and adequate funding to ensure that Europe retains and grows its research-intensive companies and maintains a leading position in global innovation. Over time, the R&I Framework Programme has attracted fewer participants, which this edition should seek to reverse in order to strengthen Europe's competitiveness.

Stable and sufficient funding is essential to give businesses the confidence to invest in European R&D and to strengthen Europe's competitiveness in a fiercely challenging global market.

Dual use in Horizon Europe

European technology manufacturers welcome the new flexible approach to dual use in Horizon Europe, as this can facilitate innovation with both civilian and security-relevant applications, create spillovers and support Europe's strategic autonomy. However, industry also cautions that this shift must not inadvertently distort the programme's core mission of advancing civilian technologies but rather create synergies and spillovers. Orgalim therefore calls for careful implementation to ensure that dual use openness enables, rather than crowds out, civilian technological development and for dedicated safeguards to keep Horizon Europe primarily focused on Europe's long-term industrial competitiveness.

Annex: The innovation investment toolbox

Public funding plays a critical role throughout the research and innovation continuum, with decreasing intensity when TRLs advance. It is important to create appropriate instruments which vary based on the technology readiness level. For instance, grants may be more suitable for early stages of research, whereas European Investment Bank (EIB) guarantees may be preferable for innovation deployment. Consequently, Horizon Europe as a R&I funding tool should focus on grant-based instruments and TRLs up to maximum seven. This should not, however, be taken as a strict rule as public support might be needed in a more significant fashion for pilots and demonstration cases where the technology step requires an investment greater than individual industries are able to provide in a timely and cost-effective manner (e.g. when decarbonising energy-intensive technologies and processes).

EU funding tool	Investment journey stages	Funding and investment needs
Horizon Europe	**Research and discovery** **Technologies emerge from fundamental research conducted by universities, research institutes, start-ups, and industrial laboratories.**	Funding is predominantly public or grant-based because the technology is unproven and commercial applications may still be unclear. Stable research funding, talent mobility, and strong R&D infrastructure are critical at this stage.
Horizon Europe	**Proof of concept and early validation** **Inventors develop first prototypes and demonstrate feasibility**	Private capital is scarce because risks remain high and the business model may not yet be defined. Public instruments such as Horizon Europe, EIC Pathfinder, and national innovation agencies often act as the first movers. This is the 'valley of death' stage when public–private co-investment, early-stage grants, and innovation-friendly regulation are critical to bridge the gap.
Horizon Europe + ECF	**Development and pilot demonstration** **Companies refine the technology, test reliability, and conduct pilot projects with early partners.**	Venture capital and corporate investment begin to flow, but financing gaps remain for capital-intensive technologies (e.g. energy, deep tech). Public support for technology infrastructures, standardisation, regulatory sandboxes, and access to scale-up financing mechanisms such as the EIB. IPCEIs schemes are also used to provide public financing in this stage.

ECF		**Deployment** **The product reaches the market. The focus shifts to manufacturing, supply chains, and customer acquisition.**	Capital needs grow significantly, and technologies must compete globally. We need innovation and investment-friendly framework conditions (harmonised EU market rules, better regulation, infrastructure) to facilitate private investments. In some cases of market failure or unfair competition from third countries, the ECF should offer tools that accelerate market uptake – procurement, targeted incentives, infrastructure deployment, and risk-sharing models with the private sector. The fund should provide effective models for risk-sharing between public and private actors and target projects where the technological and commercial risk is too high for individual companies to carry alone, but where the investment is of significant strategic importance and contributes to broader societal transition – for example, strengthened technological leadership in key technologies or enhanced defence and transition capabilities of the Union.
ECF		**Scaling and widespread adoption** **Mature technologies expand into new sectors and regions.**	**Where markets work, no public intervention is needed – scaling is the terrain of companies.** The risks are now commercial rather than technical and must be shouldered by industry, institutional investors and private equity supply capital. Competitive capital markets, strategic autonomy in key technologies, and continued alignment with climate and digital transition goals are essential to attract investors**. In exceptional cases of high strategic relevance, public intervention (e.g. by the ECF) could be justified.**

More information

Orgalim key recommendations on Research, Development & Innovation – December 2024

Orgalim represents Europe's technology industries, comprised of 770,000 innovative companies spanning the mechanical engineering, electrical engineering, electronics, ICT and metal technology branches. Together they represent the EU's largest manufacturing sector, generating annual turnover of over €2,750 billion, manufacturing one-third of all European exports and providing over 11 million direct jobs. Orgalim is registered under the European Union Transparency Register – ID number: 20210641335-88.

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