



POSITION PAPER

BY THE AUSTRIAN FEDERAL ECONOMIC CHAMBER

ON THE 10TH FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

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EXECUTIVE SUMMARY

I. USE LEARNINGS FROM HORIZON 2020 AND HORIZON EUROPE TO IMPROVE INNOVATION POLICY

TACKLE THE LONG-LASTING ISSUE OF BUREAUCRACY AND COMPLEXITY

- Horizon Europe is too complex. FP10 needs a **transparent programme structure** based on a revamped programme portfolio that can be readjusted when necessary.
- To **make funding mechanisms easier** to navigate for applicants, an in-depth review of the different requirements related to horizontal policy criteria should be conducted.
- To reduce the administrative burden, efforts to simplify cost calculations and reporting should continue

EFFECTIVELY ADDRESS THE INNOVATION DIVIDE

- The “**innovation divide**” is a major weakness of Europe’s innovation ecosystem but the current **widening measures** do not offer an appropriate response to this issue.
- A more appropriate way to rebalance the participation in FP10 could be to build up R&I **capacities and administrative support** in countries with weaker R&I systems through **cohesion policy**.
- While maintaining **widening measures** could further support **knowledge circulation** and best practice diffusion, it cannot replace a knowledge-based cohesion policy.

ENSURE COMPLEMENTARITY WITH EU PROGRAMMES AND NATIONAL R&I INVESTMENTS

- Better synergies between EU and national policies ensuring their complementarity would make support for research and innovation in Europe more efficient.
- The promotion of structured exchanges between **managing authorities** and coordinating relevant **regulations** would be a way to improve synergies between programmes.
- The **Seal of Excellence** promotes substitution rather than complementarity between EU and national funding schemes. WKÖ suggests reconsidering its future.

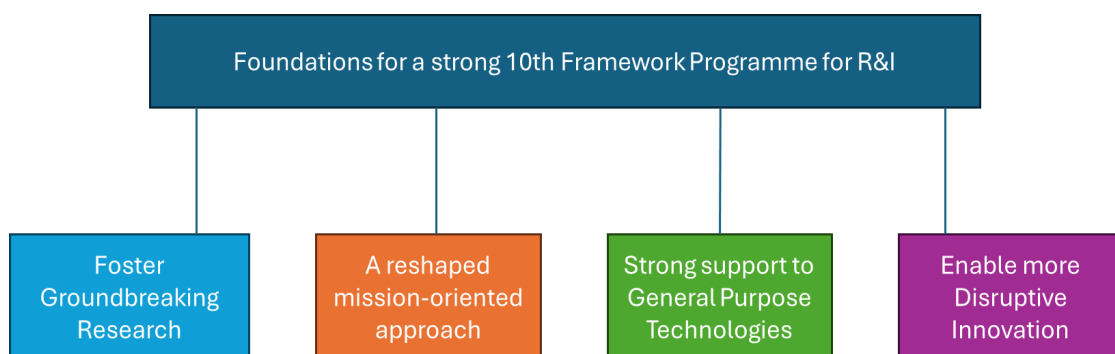
EVALUATE CROSS-FERTILISATION BETWEEN CIVIL AND MILITARY RESEARCH

- Improved synergies between civil and military research in FP10 has gained political momentum.
- Allowing for **dual use research** should not lead to unnecessary restrictions and administrative burden.

GUARANTEE BEST CONDITIONS FOR THE FUTURE OF INTERNATIONAL COOPERATION

- International cooperation is an important enabler for innovation and **needs to remain a priority** under FP 10.
- Preserving an **open and dynamic economy** should remain a guiding principle of international cooperation, while safeguarding national security and protecting economic interests. FP10 should remain “as open as possible and as closed as necessary”.

II. LEVERS TO ENSURE INNOVATION, COMPETITIVENESS AND LONG-TERM SUSTAINABLE GROWTH



FOSTER GROUNDBREAKING RESEARCH IN EUROPE

- Despite increased global competition, the EU has to remain a **scientific powerhouse**.
- FP10 should aim at **enabling scientific breakthroughs** by building up on Horizon Europe’s programmes that have proven successful in this regard (especially Pillar 1).
- Provided that FP10 gets more budget, additional funding should support **fundamental science**.

ADDRESS SOCIETAL CHALLENGES WITH A MISSION-ORIENTED APPROACH

- The support of ambitious **collaborative intersectoral and multidisciplinary R&I** projects to tackle societal challenges must remain a key building block of FP10.
- The current design of the EU Missions in Horizon Europe has failed to engage the private sector and to effectively encourage innovation, meanwhile setting up a cumbersome governance.
- FP10 needs a **rethought mission-oriented approach** for addressing societal challenges. Promising options are the adoption of MOIP at the level of thematic clusters or managing authorities.

SUPPORT THE DEVELOPMENT AND USE OF GENERAL-PURPOSE TECHNOLOGIES (GPT)

- Since general-purpose technologies such as quantum computing, robotics, advanced semiconductors, or synthetic biology are important engines of growth, FP10 should comprise specific actions to **speed up their development**.
- R&I programmes dedicated to GPT could take the form of **European Partnerships** where relevant.

ENABLE DISRUPTIVE INNOVATION AND PROMOTE RISK-TAKING

- FP10 needs to **foster the emergence of disruptive innovation**, enabling more creative destruction (as defined by Schumpeter) in Europe.
- Europe's future innovation policy should **build on Open funding schemes** such as the EIC Pathfinder Open and the EIC Transition Open programmes, which are likely to support the emergence of radical innovations. This will require the allocation of additional funding to this kind of programmes.
- FP10's support for innovation should take more risk by targeting more effectively the critical stage of the "valley of death". In its current form, the EIC Accelerator does not provide patient capital to **deep tech start-ups and spin-offs** during the riskiest phases of the innovation process.
- Despite some success in providing education programmes, the overall structure of the **EIT** has proven to be inefficient in supporting innovation. This is why it seems appropriate to challenge the added value of the EIT as part of the EU's future Innovation policy.
- FP 10 needs to further **restructure partnerships** to avoid overlaps and ensure clarity, transparency, and simplicity.

PRIORITISE R&I BUDGET OF AT LEAST €200 BILLION FOR FP10

- Europe must give itself the means to become a more competitive economy by investing **at least €200 billion** in the next FP. FP10 needs a stable budget, safe from arbitrary cuts and resource diversions linked to emerging priorities.

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INTRODUCTION

Europe needs to **step up the ambitions** of its Research and Innovation (R&I) policy and the 10th Framework Programme (FP10) of the European Union (EU) should steer this effort at European level. As highlighted by benchmarking exercises against global competitors¹, the EU did not reach its declared aim to “become the most competitive and dynamic knowledge-based economy in the world”². Recent research on innovation-led growth emphasised the fact that the United States of America (USA) are providing a more favourable environment for bolstering innovation, while one of Europe’s strengths are its well-developed social security systems³. An optimal approach combines these two elements in a complementary fashion. **Innovation is the main driver for long term growth**⁴, but leads to major transformations for which social security systems provide useful support⁵.

It would be a strategic move to **dedicate additional efforts to developing a more effective R&I policy** in Europe at both European and Member State (MS) level. The question is: To what extent can the next Framework Programme (FP⁶) for R&I of the EU provide the appropriate tools for this purpose? This will strongly depend on the available resources and on the ability to learn from past experiences and effective policies. Indeed, it can either be a main driver for innovation in Europe by fostering Schumpeterian growth⁷ or fall deeper in unwanted patterns such as an increasing bureaucracy, complexity, and budgetary instability. Furthermore, Europe is facing major societal challenges, declining competitiveness and geopolitical shifts requiring R&I based solutions.

Building on our previous contribution for the public consultation linked to the evaluation of Horizon Europe, this paper aims at nourishing the reflexion about the 10th Framework Programme of the EU by identifying key aspects and learnings from the perspective of the Austrian Federal Economic Chamber and provide some **policy options** to consider for the future.

I. USE LEARNINGS FROM HORIZON 2020 AND HORIZON EUROPE TO IMPROVE INNOVATION POLICY

The **FP for R&I provides a significant contribution to support R&I** in Europe. As highlighted in the ex-post evaluation of Horizon 2020, EU funded projects have enabled groundbreaking research leading to different R&I outputs including publications among the top 1% most highly cited, a substantial number of intellectual property rights (IPR) applications, human capital extension in form of research skills and

¹ See for instance the European Innovation Scoreboard 2024

² European Union, Lisbon Strategy, 2000

³ The European Policy Analysis Group dedicated a report to this question insisting on the transatlantic gap (C. Fuest, D. Gros, P.-L. Mengel, G. Presidente and J. Tirole; EU Innovation Policy: How to escape the middle technology trap, 2024). Some European weaknesses compared to the USA are also discussed by Philippe Aghion, Céline Antonin and Simon Bunel in: The Power of Creative Destruction - Economic Upheaval and the Wealth of Nations, Harvard University Press, 2021

⁴ Evidence for the relation between innovation, productivity and growth has been provided by different economic analysis and models, in particular R. Solow and T. Swan (1957), P. Romer (1990), P. Aghion; and P. Howitt (1998).

⁵ Aghion P., Akcigit U., Deaton A. Roulet A., “Creative destruction and subjective well-being”, American Economic Review, 2016, 106(12), pp. 3869-3897

⁶ To avoid any confusion, the abbreviation FP refers to the concept of a Framework Programme for R&I as laid down in Article 182 of the Treaty on the Functioning of the European Union, while the abbreviation FP10 refers explicitly to the 10th Framework Programme.

⁷ The Schumpeterian growth theory provides an explanation for the unprecedented economic development that has taken place since the first industrial revolution (1760-1840). It attributes growth to three main factors, cumulative innovation based on scientific discoveries, incentives to innovate based on clear propriety rights and a dynamic process of innovation known as “creative destruction” allowing new innovations to replace old ones.

knowledge development, as well as concrete solutions to societal challenges such as climate change and global health⁸.

Most of the activities supported by the FP would not have been possible without EU funding, and Horizon 2020 provided a **significant added value** in terms of multidisciplinary and European cooperation in R&I. According to the most recent Programme Performance Statement⁹, Horizon Europe is already showing some first similar results. Nevertheless, some policy objectives are addressed in a more effective way than others, some instruments have proven more successful than others, and overall, the next FP for R&I could certainly enable more disruptive innovation¹⁰.

The first part of this paper provides an analysis of innovation related issues and FP specific learnings to consider for FP10.

TACKLE THE LONG-LASTING ISSUE OF BUREAUCRACY AND COMPLEXITY

The complexity of Horizon Europe remains one of its most important weaknesses. According to the feedback received from companies, Horizon Europe - particularly the second Pillar - has become very **difficult to navigate**, making the identification of funding opportunities very challenging. In addition, the high number of requirements related to secondary goals has led to an important need for expertise. Hence, preparing a competitive proposal without the support of external consultants or internal experts is very challenging and reporting exercises require dedicated human and financial resources.

The overall **structure** of Horizon Europe encompasses a high number of different programmes following specific aims, having their own governance mechanisms, and performing unevenly. This complex programme portfolio is the result of cumulative developments in the R&I policy of the EU. While we agree that an ambitious R&I policy should rely on sophisticated programmes tailored to effectively encourage different types of R&I activities, we also think that it is important to dynamically readjust the programme portfolio when necessary. As with any type of public policy, the R&I policy of the EU is subject to inertia effects, with the result that existing programmes tend to remain in place even if they do not deliver the expected outcomes. Since creating a specific programme is necessarily a form of attempt, unexpected outcomes and overlaps cannot systematically be avoided. Therefore, the conception of FP10 is a good opportunity to draw appropriate conclusions and **readjust the programme portfolio** with the underlying aim to improve its consistency and readability. Fundamentally, FP10 should concentrate on supporting R&I activities. The second part of this paper will explore some options to readjust the programme portfolio accordingly.

At **project level**, the multiplication of requirements related to R&I policy goals and the development of the European Research Area (ERA) raised the workload for participants. The need for projects to address a variety of **horizontal policy goals** such as open science, citizen engagement, data management, gender equality, communication, dissemination and exploitation of project results, or interdisciplinarity especially

⁸ European Commission, Ex-post evaluation of Horizon 2020, the EU Framework Programme for Research and Innovation, 2024 (SWD (2024) 29 final)

⁹ European Commission, Horizon Europe Programme Performance Statement published in 2024

¹⁰ Disruptive innovation refers to a process leading new entrants to target the low-end of an existing market or a totally new market. By doing so they initially address non-consumers. This type of innovation is considered as the main source of growth. The concept has been described in: Christensen C.M., The innovator's dilemma: when new technologies cause great firms to fail, Boston, Harvard Business Review Press, 1997, 288p

with social science and humanities¹¹ increases the workload for preparing a proposal. While implementing evidence-based measures aiming at improving the quality of R&I activities in Europe is fully justified, imposing new requirements on participants might not always be the most effective way to obtain the desired outcomes. Therefore, we would encourage an **in-dept review of the requirements at proposal and reporting stage** with the objective of measuring their impact and exploring alternative implementation options. Indeed, effective measures could take different forms including incentives through requirements at programme level, but also contractual liabilities or policy initiatives targeting institutions. This exercise should concentrate on identifying measures for which conditionality on funding is really the most effective incentive to achieve the related R&I policy goals. Since developing new ideas relies on creativity but also on the possibility to develop the most fruitful collaborations, FP10 should provide enough flexibility to do so. Over-formatting the FP could prevent the emergence of very innovative proposals indeed.

Furthermore, the efforts engaged to **simplify cost calculations and reporting** (Lump sum funding and alternative cost declaration methods) could help to further reduce the administrative burden at project level.

EFFECTIVELY ADDRESS THE INNOVATION DIVIDE

The so called “**innovation divide**” is a major weaknesses of Europe’s innovation ecosystem. The concept of Innovation divide refers to the existence of a considerable performance gap between countries and regions in Europe, with the best performing countries concentrated in the north-west of the continent. According to the European Innovation Scoreboard 2024, emerging innovators¹² are not catching up and the gap is even widening. Since R&I is a major driver of economic growth, the innovation divide is a mid- to long-term issue for a more economically cohesive Europe. Though the single market allows new technologies to circulate, the know-how and added value emerging in innovation hot spots remains concentrated in the north-west of Europe. This leads to differences in salary levels and brain drain from weaker regions, which may increase the gap in the long run.

Participation in Horizon Europe is strongly correlated with the overall performance in R&I. As a matter of fact, more legal entities from countries with higher R&I expenditures are participating in funded projects¹³. Since the FP is based on competitive calls aiming at selecting the most innovative projects, this is not surprising. However, the difference in performance has become a politically sensitive issue because well performing countries are perceived as benefiting more from European R&I funding. This has led to the introduction of specific measure known as “**widening measures**”¹⁴ to increase the participation of countries with a lower overall participation. In our opinion, this is looking at the problem from the wrong angle. The performance of widening countries is not weaker because of discrimination, but because innovative projects build on specific R&I competences which are less available in countries with weaker R&I systems. This means that the best way to rebalance participation in the FP would be to **build up R&I capacities and administrative support** in these countries. A dedicated report of the European Court of Auditors is pointing in the same

¹¹ Horizontal policy goals are mentioned in the different documents related to Horizon Europe, especially the Regulation establishing Horizon Europe (R(EU) 2021/695), the Annotated Model of Grant Agreement (AMGA), the template for preparing a project proposal and the documentation related to periodic reporting.

¹² The European Innovation Scoreboard classifies countries in four categories: Innovation leaders, strong innovators, moderate innovators, and emerging innovators. The countries classified as emerging innovators are those with the lowest aggregate performance.

¹³ To draw this conclusion, we used the data on R&D expenditures published by the OECD (Gross domestic spending on R&D - consulted on 6.06.2024) and the data available on the Horizon Dashboard of the European Commission, which indicates country participation in Horizon Europe (consulted on 8.06.2024)

¹⁴ Widening measures aim at closing the gap between high and weak performing countries. They encompass dedicated programmes for fostering knowledge exchange (Teaming for Excellence, Twinning, ERA Chairs and ERA Fellowships) but also more direct interventions such as the recently introduced Hop-on facility allowing research institutions from widening countries to join ongoing R&I projects under Horizon Europe Pillar 2 and EIC Pathfinder.

direction by concluding that “the widening measures were well-designed to address the limited participation of widening countries in R&I framework programmes, but sustainable change requires efforts at national level”¹⁵.

Now, should capacity building in widening countries be a priority of the next FP? Probably not, because there might be better ways to support it, particularly the **cohesion policy** of the European Union. The aim of the cohesion policy of the EU is explicitly to enable an economical catch up¹⁶, meanwhile Horizon Europe focuses on developing frontier knowledge by supporting groundbreaking R&I projects. Therefore, these policies are clearly complementary, and we think that supporting more actively the **development of R&I capacity through the cohesion policy instead of multiplying “widening measures”** is the best way forward to reduce the innovation divide and the participation gap.

This does not mean that the current **widening measures allowing for knowledge circulation** are not useful, but increasing this effort in FP10 would certainly not enable to significantly rebalance participation. Weaker regions need above all better R&I systems. We strongly believe that **a more balanced innovation performance** in Europe would benefit the entire EU including the countries currently performing well in Horizon Europe. Ultimately reducing the innovation divide would lead to the reduction of the need for transfers in the form of a cohesion policy and make more money available for an even more ambitious R&I budget targeting frontier research at European Level. Support capacity building in weaker regions would be the most appropriate way to enable this shift.

ENSURE COMPLEMENTARITY WITH EU PROGRAMMES AND NATIONAL R&I INVESTMENTS

By mentioning the complementarity between Horizon Europe and the cohesion policy of the EU, we have already approached the subject of synergies between the FP and other policies and instruments supporting R&I in Europe. One of the main conclusions of the ex-post evaluation of Horizon 2020 is that the EU should aim at enhancing **synergies with other initiatives at EU, national and regional level**. In a dedicated special report, the European Court of Auditors recommended to work specifically on synergies between the Framework Programme and the European Fund of Regional Development (ERDF)¹⁷. According to this report¹⁸, there is room for improvement in particular for downstream synergies¹⁹.

The lack of synergies is an obstacle to efficiency. By increasing the consistency between the different policies supporting R&I in Europe, the innovation output could be significantly higher without consuming more resources. This implies enhancing the coordination between the different programmes following different policy goals related to R&I. However, looking for more synergies should not lead to an increase in the complexity of individual programmes. Hence, we believe that the most appropriate way to develop synergies is certainly to **focus on complementarities**, while avoiding blurring the objectives of individual programmes. In other words, neither the FP nor other programmes should try to solve all the issues simultaneously but rather concentrate on their core goals in a complementary fashion. Indeed, the right way forward is certainly

¹⁵ European Court of Auditors, Special report 15/2022, Measures to widen participation in Horizon 2020 were well designed but sustainable change will mostly depend on efforts by national authorities

¹⁶ See article 174 of the Treaty on the Functioning of the European Union (TFEU)

¹⁷ The ERDF is one of the five financial instruments of the structural and investment funds, which is the main investment pipeline for implementing the cohesion policy of the EU.

¹⁸ European Court of Auditors, Special report 23/2022: Synergies between Horizon 2020 and European Structural and Investment Funds - Not yet used to full potential

¹⁹ In this context downstream synergies refer mainly to the exploitation of results of Horizon 2020 projects.

not to force synergies with complex governance structures but to develop complementarities and coordination by ensuring exchanges between the managing authorities and, when relevant, align or coordinate regulations. The Czech Presidency of the Council of the EU has developed recommendations to strengthen the synergies for R&I funding in Europe²⁰, which clearly promote these principles.

Several EU programmes implemented through the Multiannual Financial Framework of the EU (MFF) support either directly or indirectly Europe's R&I policy. Among these, we can mention the Innovation Fund, the European Defense Fund (EDF), the European Structural and Investment Funds (including the ERDF, Cohesion Fund, European Social Fund (ESF) and Connecting Europe's facilities), the European Space Programmes, Digital Europe and Erasmus+. For these programmes, it would be important to consider synergies while preparing the legislative framework of the next MFF in order to avoid obstacles to potential synergies and promote **coordination and cooperation between managing authorities**.

R&I policies in Europe are defined and implemented through a multilevel governance. Since the birth of the FP 40 years ago, the EU has become a significant funding provider alongside Member States and regions. Therefore, ensuring synergies between the different levels of interventions has become challenging. This has led some of the instruments of Horizon Europe, especially the **EU-Missions and Co-funded Partnerships**²¹ to be designed for mobilising European, national, regional or even local funding. Indeed, these instruments aim at fostering alignment along common priorities. As highlighted by the reports on partnerships²² and Missions²³ in Horizon Europe, this approach has proven useful for leveraging funding and incentivising commitment, but at the expense of complex administrative structures. Hence, prioritising alternative forms of intervention for enabling synergies, such as supporting cooperation between managing authorities, could help to reduce the overall complexity of the FP.

The **Seal of Excellence**²⁴ is often considered as a good way to incentivise synergies by encouraging Member States to fund R&I projects that would be supported by the EU, provided that more funding would be available at European level. Since Horizon Europe aims primarily at supporting R&I projects with a European dimension, the projects are often not compatible with existing national or regional funding schemes. As we have already highlighted, synergies should aim at building complementarities and not encourage the substitution of funding at the different levels of the European R&I system. The fact that the EU is mainly funding projects that would not have been implemented without EU funding is clearly a good thing, because it means that the multilevel funding structure has a real added value. However, a consequence of this degree of complementarity is that projects with a Seal of Excellence usually need to be readapted and reevaluated at national level to get some funding. This clearly limits the benefit of the instrument, while giving false hopes to applicants. Indeed, even though some Member States have implemented dedicated funding schemes to support projects receiving a Seal of Excellence, most projects with the label are not

²⁰ Czech Presidency of the council of the European Union, Prague-Declaration on Synergies in the Research and Innovation Funding in Europe, 2022

²¹ Three different types of European Partnerships are implemented in Horizon Europe. Co-programmed Partnerships are based on a contractual agreement organising the implementation of a specific programme. Institutionalised Partnerships based on Article 185 or 187 of the TFEU are implemented by creating a dedicated autonomous structure responsible for managing a specific programme. Finally, co-funded Partnerships are implemented at Member States level and rely on national managing authorities.

²² European Commission, Performance of European Partnerships: Biennial Monitoring Report 2022 on partnerships in Horizon Europe

²³ European Commission, EU Missions two years on: assessment of progress and way forward, COM(2023) 457 final

²⁴ The Seal of Excellence is a quality label awarded by the European Commission to proposals that could not receive funding due to a lack of available budget. The label aims at providing a quality signal to encourage other funding providers at EU, national or regional level to support the project. A similar label, the "Sovereignty Seal", has been created with the recently admissioend Regulation establishing the Strategic Technologies for Europe Platform 'STEP' (R2024/795)

directly supported at national level²⁵. Since the added value of the instrument seems to be quite limited, we think that it would be important to engage a reflection about its future.

EVALUATE CROSS-FERTILISATION BETWEEN CIVIL AND MILITARY RESEARCH

The war in Ukraine has highlighted the importance of efficiently developing defense research capabilities in Europe. Notably, it has sparked a debate about optimising **synergies between civil and military research**. Currently military research is supported through the European Defense Fund (EDF), while Horizon Europe focuses on civil applications. To enable a better cross-fertilisation, the European Commission has published a White Paper²⁶ presenting options for supporting the development of technologies with **dual use potential** in FP10²⁷. The document suggests three options, among which two would require to remove the exclusive focus on civil applications in the next FP. The first option suggests introducing additional measures for strengthening the coordination between FP10 and the European Defense Fund (EDF), while maintaining a clear focus on civil applications for FP10. The two other options suggest allowing for dual use research in selected parts of FP10 or, alternatively, conceive a dedicated instrument to support the development of dual use technologies. While seeking synergies is a laudable objective, the three options bear advantages and disadvantages. They also leave certain questions unanswered. The implementation of the 1st option would maintain the clear separation between civil and military research but would limit the room for maneuver regarding dual use technologies, meanwhile options 2 and 3 prompt questions about their compatibility with civil research priorities such as open science, international cooperation, and research valorisation. Without ruling out the possibility of dual use research in the next FP, we think that unnecessary restrictions and administrative burden must be avoided. To that extent, in the case of a removal of the exclusive focus on civil applications, FP10 should only allow for - thus not actively encourage - the development of technologies targeting military applications and keep general rules for participation tailored for R&I activities targeting civil applications. Allowing for dual use research should not lead to more restrictive rules for civil research carried out in impacted programmes. More concretely, this means that potential restrictions related to military applications would be defined on a case-by-case basis and only apply to consortium partners, which deliberately would like to engage in R&I activities with potential military applications. This could be done by introducing specific optional contractual clauses or a separate agreement between relevant partners. If options 2 and 3 would suppose a more restrictive approach, then option 1 clearly remains the best choice for encouraging cross-fertilisation.

GUARANTEE BEST CONDITIONS FOR THE FUTURE OF INTERNATIONAL COOPERATION

International cooperation is an **important enabler for innovation** as it offers knowledge otherwise unavailable to circulate. Thus, any restriction on international cooperation might be an obstacle to R&I. The same applies to trade, for which empirical studies in economics have provided evidence of a correlation with innovation explained by a market size effect. Indeed, trade perspectives provide an important incentive for profit seeking companies to innovate, because they get access to a wider market on which they can sell their innovation²⁸. On the other hand, trade restrictions can be very detrimental to economic growth and welfare,

²⁵ European Court of Auditors, Special report 23/2022: Synergies between Horizon 2020 and European Structural and Investment Funds - Not yet used to full potential

²⁶ European Commission, White Paper On options for enhancing support for research and development involving technologies with dual-use potential, COM(2024) 27 final.

²⁷ Technologies with dual use potential are those that could lead to both military and civil applications.

²⁸ Gene M. Grossman and Elhanan Helpman, Innovation and Growth in the Global Economy, MIT Press, 1991, 376p

because it limits technology diffusion and adoption. For an economic area, importing a new technology is comparable to developing it with local capabilities²⁹. In this regard, economists have estimated that about 80% of income differences between countries can be attributed to the diffusion of technologies³⁰.

Yet, major geopolitical shifts are making international cooperation more challenging and might lead to additional trade barriers. The growing race for technological dominance between the USA and China, which is known under the term of “decoupling”³¹, a stronger awareness about the problems related to technological dependences over single countries following the disruption of supply chains during the Covid-19 pandemic, and the war in Ukraine have contributed to a paradigm shift. Growing tensions already affected the preparation of Horizon Europe, with the introduction of article 22(5) in the Horizon Europe regulation³². In this context the EU has also been forced to further react and recently adopted an economic security package³³, including the White Paper to Dual Use already mentioned above. Since military R&I is usually more restricted and dual use products subject to specific export control regimes, options 2 and 3 of the White Paper also introduce concerns regarding international cooperation in the next FP. While the international context provides ground for security related measures, it will be important not to overreact and continue **promoting international cooperation in R&I as a default**. Therefore, we fully support the approach proposed by the Letta report³⁴ regarding international cooperation and trade. The report insists on the imperative to preserve an open and dynamic economy, while safeguarding national security and protecting economic interests against aggressive international actors, underling the importance of “de-risking” instead of “decoupling”.

For the next FP, this means that international cooperation should **remain a priority** and that the programme should remain “**as open as possible and as close as necessary**”³⁵. Exploratory dialogues aiming at associating relevant like-minded countries such as Japan and South Korea should be pursued. It will also be essential to ensure a smooth transition towards FP10 with, if possible, no interruption of participation for associated countries. This will require appropriate transitional rules as well as anticipation for preparing association agreements. We would also like to recall that the failure to rapidly associate the United Kingdom and Switzerland has been detrimental to R&I in Europe and in both countries. Thus, it would be more favorable not to repeat this kind of scenario for FP10.

II. LEVERS TO ENSURE INNOVATION, COMPETITIVENESS AND LONG-TERM SUSTAINABLE GROWTH

Until now we have mainly discussed specific issues related to an effective implementation of the next FP, but we have not touched on the most fundamental aspect that should define it: **How to enable more creative destruction and Schumpeterian growth?** Some directions to consider will be the subject of this second part. From the perspective of the Austrian Federal Economic Chamber, FP10 should aim at

²⁹ Paul Romer, "New Goods, Old Theory, and the Welfare Costs of Trade Restrictions," *Journal of Development Economics*, 43, 1994, pp. 5-38.

³⁰ Comin D. and Mestieri M., "If Technology Has Arrived Everywhere, Why Has Income Diverged?", *American Economic Journal: Macroeconomics* (10/3), 2013, pp. 78-137

³¹ Nigel Inkster, *The Great Decoupling: China, America and the Struggle for Technological Supremacy*, 2021, 304p.

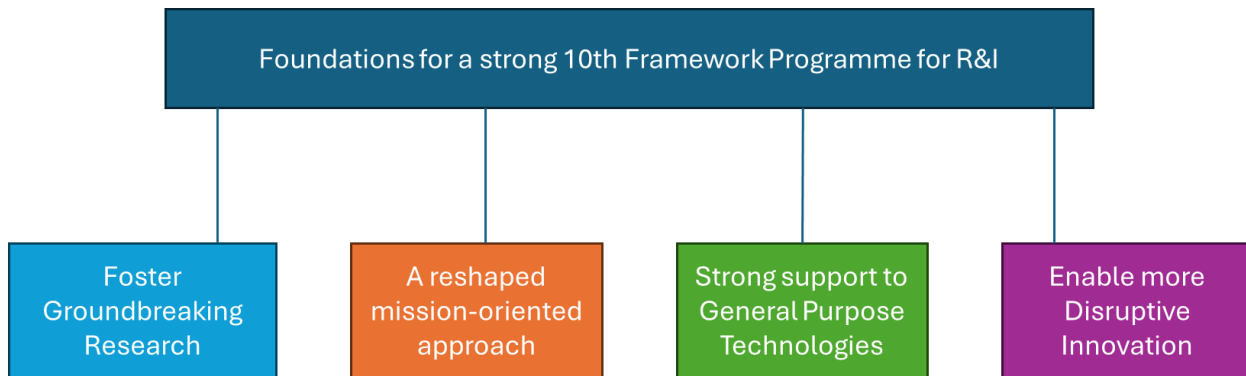
³² Article 22 of the regulation is allowing to limit the participation of entities established in associated or third countries as well as enterprises controlled by non-associated third countries to some Horizon Europe calls in order to protect the EU's interests.

³³ European Commission, *Advancing European economic security: an introduction to five new initiatives*, COM(2024) 22 final

³⁴ Enrico Letta, *Much More than a Market, Speed, Security, Solidarity, Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens*, 2024

³⁵ European Commission, *Open Innovation, Open Science, Open to the World - a Vision for Europe*, Publication Office of the European Union, 2016

strengthening Europe’s scientific base, improving Europe’s competitiveness while strengthening its technological sovereignty, enabling more creative destruction and driving innovation toward major societal challenges. Providing opportunities for collaborative research between sectors, disciplines and countries is one of Horizon Europe’s added values and we expect FP10 to maintain this principle at its core. To deliver on these objectives we believe that FP10 should be built around four main components that will be detailed thereafter.



FOSTER GROUNDBREAKING RESEARCH IN EUROPE

FP10 should support the development of high-quality basic research in Europe. Despite the rapid rise of China’s scientific production during the last 20 years, the EU managed to generate a significant share of the world’s scientific output. According to the 2024 edition of the SRIP report, “In 2022, the EU ranked second globally and contributed to 18.1%³⁶ of all scientific publications, amounting to approximately 650 000 publications”³⁷. By funding **groundbreaking fundamental science**, the FP of the EU have contributed to the EU’s overall performance over the years. Key findings of the ex-post evaluation of Horizon 2020 are providing evidence about the FPs role in supporting scientific breakthroughs. For instance, “at the time of evaluation, beneficiaries had reported over 276 000 peer-reviewed publications” and “Horizon 2020 publications are twice as cited as the global average”. Horizon 2020 also supported 33 Nobel Prize winners, either before or after they received the price. If this doesn’t say much about the real impact of the EU’s funding for developing the research that has led to the award, it shows that world-class scientific research leading to a Nobel Prize can be conducted in Europe. Especially the programmes of the first pillar of Horizon Europe have proven successful in enabling scientific breakthroughs, but other programmes such as the **EIC Pathfinder** are also significantly contributing. Since FP7, the **European Research Council (ERC)** and **Marie Skłodowska Curie Actions (MSCA)** have established as very valuable and well working programmes. Similarly, supporting the development and connexion of R&I infrastructure helps to provide favourable working conditions in Europe. Therefore, we would advise to keep these programmes as part of FP10 programme portfolio and, provided that FP10 gets a more ambitious overall budget, **allocate more resources** to these initiatives.

³⁶ While China’s world share of scientific publications rose from about 5% to 27% between 2000 and 2022 and the USA’s share declined from around 30% to 13,1%, the EU’s world share of scientific publications only dropped from 25% to 18,1% during the same period. A similar trend can be seen for the world share of top 10% and 1% highly cited publications.

³⁷ European Commission, Science, Research and Innovation Performance of the EU (SRIP) report 2024; Chapter 3: Scientific Performance

Fundamental science is an important fuel for innovation³⁸. Until now Europe was able to remain a key scientific player, but global competition is rising. If Europe expects to play a significant role in developing future scientific breakthroughs and host future Nobel laureates, an increased commitment will be necessary. This leads us to think that **scientific excellence should remain a core goal for FP10**. The design of the next FP should enable to fund even more projects contributing to advance the frontier of scientific knowledge, while also encouraging its uptake for applied research and innovation.

ADDRESS SOCIETAL CHALLENGES WITH A MISSION-ORIENTED APPROACH

Societal challenges representing major threats for European societies such as climate change, aging populations and rising inequalities should be key drivers for encouraging innovation in FP10. Supporting ambitious collaborative intersectoral and multidisciplinary R&I projects targeting societal challenges is a major strength of Horizon Europe, in particular because this kind of projects could not be supported by individual Member States and lead to unique collaborations involving for instance social science and humanities or creative industries. The second Pillar of Horizon Europe is supporting collaborative research with a strong focus on tackling societal challenges by mobilising different approaches (Clusters, Partnerships and Missions). Since innovation activities tend to follow “path dependencies” related to past activities and existing comparative advantages, directing R&I toward specific societal priorities can emulate creative destruction³⁹.

However, the **complexity of the instrument portfolio** of Horizon Europe is an issue. Different programmes from Pillar 2 and Pillar 3⁴⁰ are built around societal challenges, resulting in a laborious readability and sometimes even overlaps that the strategic planning exercise⁴¹ of Horizon Europe has not been able to avoid. Therefore, we would recommend maintaining the objective of tackling societal challenges in FP10 to foster innovation in line with important societal needs, but with some adjustments to the programme portfolio.

The **EU-Missions** added to the programme portfolio with Horizon Europe is one of the instruments that will **require a revision** in FP10. While building on a very promising approach to encourage innovation, EU Missions have failed to mobilise substantial resources and commitment beyond Horizon Europe. Despite some promising results, private sector engagement remains low and citizen engagement limited. In addition, the overall governance is particularly cumbersome⁴² and probably inadequate for driving innovation as expected. These important shortcomings could be related to the design of EU-Missions, which has moved away from the original concept. Broadly speaking, “mission-oriented policies can be defined as systemic public policies that draw on frontier knowledge to attain specific goals, or big science deployed to meet big problems”⁴³. According to Mariana Mazzucato, this approach can be suited to encourage innovation related to major societal challenges, provided that it follows a specific approach (shaping new markets instead of fixing

³⁸ Akcigit U., Handley D., Serrano-Velarde N., “Back to basics: Basic research spillovers, innovation policy and growth”, *Review of Economic Studies*, 2021, 88(1), pp. 1-43

³⁹ Aghion P., Dechezleprêtre A, Hémous D., Martin R., Van Reenen J., “Carbon taxes, path dependency, and directed technical change: Evidence from the auto industry”, *Journal of Political Economy*, 2016, 124(1), pp. 1-51.

⁴⁰ Societal challenges are also drivers for some thematic priorities of the EIC (Pathfinder and Transition Challenge Calls) and for Knowledge and Innovation Communities of the European Institute of Innovation and Technology (EIT)

⁴¹ Horizon Europe is the first FP with strategic plans orienting and coordinating the funding priorities for 3 to 4 years.

⁴² This is in line with the conclusions of the first assessment of the progresses made by the EU-Mission (COM(2023) 457 final)

⁴³ Ergas H., “Does Technology Policy Matter?” In: Guile B. and Brooks H., Eds., *Technology and Global Industry: Companies and Nations in the World Economy*, National Academy Press, Washington DC, 1987, pp. 191-280.

markets, providing patient capital for financing radical and incremental innovations, picking the willing instead of winners, encouraging risks and accepting failures)⁴⁴. The design of the EU-Missions and their actual governance do not fully match these principles though. The EU Missions are more effective at deploying existing technologies than at supporting radical innovation, struggle at shaping new markets attractive for the private sector and don't provide substantial amounts of patient capital for supporting the development of risky innovations.

Should we consider the EU-Mission as a failure then? Not necessarily. MOIP are also about welcoming experimentation and learning from past processes⁴⁵. More importantly, Mariana Mazzucato's research on innovation provided substantial evidence about the key role played by governments in the development of radical innovations such as new drugs, the internet or the smartphone. These have been the result of government led initiatives providing long-term public funding for fundamental and applied research aiming at achieving specific goals⁴⁶. Indeed, important innovations have emerged when governments were led to take risks for facing major challenges such as the Apollo Mission, succeeding at sending a man on the moon. Therefore, MOIP have been the driver for major transformations in the past. Acknowledging the added value of MOIP but also the shortcomings of the EU-Missions, we think that the best way forward would be to draw pertinent lessons from this experience and reshape the Mission approach in FP10 accordingly.

We see at least **two possibilities** for building on MOIP in the next FP:

A first possibility would be to **use a challenge-based or mission-oriented approach to define priorities for thematic collaborative research programmes**. This would mean that thematic clusters could promote a transformative approach by targeting specific goals and encourage the development of different solutions using conditionality principles. Implementing MOIP in this way would require to be open for a bottom-up approach building on problems rather than supporting the development of specific solutions. According to Mazzucato, governments can perform especially well at identifying problems but are more limited in terms of selecting the best solutions. This leads us to consider this approach as worth exploring. Of course, this kind of MOIP would allow for supporting the most promising solutions in a targeted way, but it would also suppose encouraging alternative solutions by setting-up more open calls in parallel. After all, MOIP are all about flexibility, experimentation and combining different approaches to achieve an objective.

A second option is to **adopt a MOIP approach at the level of managing authorities**. Since in the USA, MOIP are mainly implemented by specific agencies such as NIH, NASA, ARPA-E, BARDA or DARPA, there is certainly a case for this approach. Nevertheless, adopting this configuration would require a structural change in the implementation of FP10 compared to Horizon Europe. To further support the credibility of this option, we can mention that some of the partnerships of Horizon Europe, for instance Clean Aviation or Europe's Rail, already have characteristics that bring them - at least to some extent - close to this approach.

SUPPORT THE DEVELOPMENT AND USE OF GENERAL PURPOSE TECHNOLOGIES (GPT)

Based on a historical perspective, a few General Purpose Technologies (GPT) such as the steam engine, electricity and semi-conductors have been major drivers of technological progress and growth⁴⁷. Secondary innovations following the emergence of GPTs led to significant growth waves. Schumpeter described this

⁴⁴ Mazzucato M., "Mission-oriented innovation policies: challenges and opportunities Industrial and Corporate Change", *Industrial and Corporate Change*, 27(5), 2018, pp. 803-815.

⁴⁵ Ibid.

⁴⁶ Mazzucato M., *The Entrepreneurial State: debunking public vs. private sector myths*. Anthem Press, London, 2013

⁴⁷ Bresnahan T. F. and Trajtenberg, M., "General purpose technologies 'Engines of growth'", *Journal of Econometrics*, 65(1), 1995, pp. 83-108.

process of diffusion and adoption of a GPT as a “wave of output growth”⁴⁸. GPTs have a wide range of potential applications, but usually require continuous developments and societal rearrangements to spill over. For instance, the second industrial revolution only took off and led to productivity growth after important rearrangements of the organisation of factories, which led to a more efficient use of electricity in production processes⁴⁹. This resulted in a noticeable delay between the emergence and the broader diffusion of this GPT.

Since **GPT are potential engines of growth**, it is strategically important to **support their development** toward application and, despite the huge transformational potential of these technologies, MOIP are not perfectly suited for this purpose. This is mostly due to the fact that possible applications are not immediately clear. While societal challenges and Missions can provide some priority application areas for GPTs, past experiences show that their potential can be better nurtured by developing technological capabilities independent from selected application areas. Therefore, we encourage to consider **specific programmes in FP10** supporting the development of promising GPT such as quantum computing, robotics, advanced semi-conductors or synthetic biology.

Developing strong technological capabilities for promising GPTs would not only provide important foundations that could complement a mission framework, but also support Europe’s technological sovereignty. As mentioned in the chapter on international cooperation, growing tensions over technological leadership might increase the risks related to technological dependencies in the future. This would support the implementation of initiatives such as the Strategic Technologies for Europe Platform (‘STEP’)⁵⁰, which aims at creating additional means for reinforcing Europe’s technological base in selected strategic areas. To encourage the emergence of secondary innovations, building up **technological capabilities in GPT should be a central goal for FP10**. Additional expertise and leadership over GPTs could also provide an important leverage in future international relations. Some Partnerships of Horizon Europe such as the Chips Joint Undertaking or the European Partnership for Hydrogen Technologies, as well as the EIC already contribute to build up this type of capabilities, but FP10 could be even more ambitious in the regard.

ENABLE DISRUPTIVE INNOVATION AND PROMOTE RISK-TAKING

To foster creative destruction FP10 should enable disruptive innovation to emerge. As suggested in the introduction, Europe was not the epicentre of innovation leading to Schumpeterian growth during the last decades. The wave of innovation related to the computer revolution also known as the “digital revolution”⁵¹ mainly took place in the USA. According to Philippe Aghion, this is mainly due to more favourable financial conditions for R&I on the other side of the Atlantic as well as to a better ability of the US market to select companies⁵².

With the creation of the **European Innovation Council (EIC)**, the EU has set up a dedicated instrument to support the emergence of disruptive innovation and stimulating creative destruction by mainly targeting the scale up of deep tech start-ups⁵³. An important novelty of the funding scheme is the creation of the EIC

⁴⁸ Schumpeter J., *Capitalism, Socialism and Democracy*, 1942, 431p

⁴⁹ Frey C.B., *The Technology Trap: Capital, Labor, and Power in the Age of Automation*, Princeton University Press, 2020

⁵⁰ Regulation establishing the Strategic Technologies for Europe Platform ‘STEP’ (R2023/0199)

⁵¹ Castells M., *The information age: economy, society and culture*. Oxford: Blackwell, 1996

⁵² Aghion P., Antonin C. and Bunel S., *The Power of Creative Destruction*, 2021, Op. cit.

⁵³ The EIC encompasses three main programmes, the EIC pathfinder supporting early-stage research to proof of concept, the EIC transition supporting mainly technology transfer and the EIC accelerator supporting the scale up of start-ups and SMEs. About 70% of the € 10 billion budget of the EIC is dedicated to supporting deep tech start-up through the EIC accelerator.

fund, which is providing public equity funding to selected companies⁵⁴. This endeavour shows that Europe tries to bolster its innovation policy to compensate its relative weakness. Since the initiative is still quite new and the EIC accelerator programme has suffered from a chaotic implementation⁵⁵, the EIC's ability to support creative destruction remains to be seen. Nevertheless, the conception of FP10 provides the possibility to deepen and rationalise some elements of Europe's innovation policy. In this regard, a central question for FP10 is the future role of the EIC. In our opinion, its potential lies mainly in the ability to enable the emergence of disruptive innovation and market entry for innovative firms, which are core elements of Schumpeterian growth.

We have already emphasised the fact that the EIC is supporting R&I projects going from exploratory research to market scall-up but with a heavy focus on the latter. To succeed, the commercialisation phase of the innovation process requires financial resources, which can be difficult to obtain especially for start-ups with limited tangible assets. In this regard, the USA has an important comparative advantage related to its particularly developed capital market. Indeed, more Venture Capital (VC) is available in the USA and the role played by VC to finance innovation has been well documented in the literature⁵⁶. In addition, the existence of a more developed capital market in the USA enables public support to concentrate on supporting fundamental and applied research. This financial structure has proved particularly efficient to support creative destruction in the USA. Since it generates more uncertain outcomes and externalities that might benefit competitors, companies tend especially to underinvest in exploratory research indeed⁵⁷. In contrast, the limited amount of VC in Europe probably explains the increasing focus on supporting scall-ups through the EIC. As a matter of fact, following the adoption of the STEP regulation, the EIC fund is now entitled to make equity investment over € 15 Mio. In principle, the EIC fund doesn't endorse the role of lead investor in selected companies but acts as co-investor. In doing so, it helps filling the gap of less developed capital markets, but **it is not targeting the riskiest stages of innovation activities**. Feedback from the start-up community is supporting this observation by commenting that the EIC Accelerator is **"not taking enough risks"**. This is not very surprising because Mariana Mazzucato provided evidence that VC is not as risk loving as most people believe, describing this belief as a myth⁵⁸. She argues that VC is mainly intervening in the last stages of the innovation process when commercialisation is within reach and the most important risks have already been taken by the "entrepreneurial state". Evidence highlights that VC does support the most promising innovative companies to scall up though, especially if they have promising intangible assets⁵⁹. Concretely, VC is good at selecting and supporting companies with the potential for scaling up, but not at providing patient capital enabling innovative companies to go through the so called "valley of death"⁶⁰. Therefore, **we would encourage exploring possibilities to make the EIC accelerator more risk friendly**.

⁵⁴ The EIC Accelerator programme supports deep tech start-ups, spin offs or SMEs through a combination of grants and equity in a flexible way. The company can apply for blended financing but also for grant only, grant first or equity only support.

⁵⁵ Among other issues, the EIC Fund didn't finalise equity investment during the first two years of Horizon Europe, leading the European Commission to transfer the management of the EIC fund to the European Investment Bank. Some major technical issues also led the European Innovation Council and SMEs Executive Agency (EISMEA) to abandon the artificial intelligence tool used for the application phase, bringing the selection process to a halt.

⁵⁶ See for instance Korstum S., Lerner J. "Assessing the contribution of venture capital to innovation", The RAND Journal of Economics, 2000, 31(4), pp. 674-692 or Grompers P., Lerner J., "The venture capital revolution", Journal of Economic Perspectives, 2001, 15(2), pp. 145-168

⁵⁷ Aghion P., Antonin C. and Bunel S., The Power of Creative Destruction, 2021, Op. cit.

⁵⁸ Mazzucato M., The Entrepreneurial State, 2015, Op.cit.

⁵⁹ Akcigit U. Dinlersoz E., Greenwood J., Penciakova V., "Synergizing ventures", NBER Working Papers, 2019, n°26196

⁶⁰ This concept usually refers to a funding gap between basic research and commercialisation requiring patient capital to support innovation.

With the EIC Pathfinder and EIC Transition programmes, as well as other funding schemes, Horizon Europe is also funding projects at an earlier stage. This is an important strength of the FP, because funding this kind of exploratory and applied research is particularly inclined to foster the emergence of disruptive innovation, market entry and creative destruction. However, programmes targeting more early-stage R&I in the EIC face major budgetary constraints and would need more resources to make a difference in FP10. In addition, while initially conceived for supporting bottom-up research projects through mainly open calls, the EIC adopted a more thematic approach with the multiplication of challenge-based calls. As highlighted above, directionality of funding helps to avoid technological path dependencies, but with an appropriate design open calls are also a good way to encourage exploratory research. In this regard, Horizon Europe provides only limited possibilities for open collaborative research allowing to think out of the box. **With more funding for supporting collaborative explorative research as done by the EIC Pathfinder and the EIC Transition, more radical innovation could emerge.**

The complementarity between the EIC and the funding instruments of the European Investment Bank (EIB), which are also supporting scale-up, is an additional topic for synergies. Indeed, state investment banks have developed different types of financial instruments to support innovative companies and therefore play an important role in supporting innovation⁶¹. Furthermore, in 2015 the EU launched the creation of a Capital Markets Union (CMU), which aims at facilitating VC investments in European Innovative companies. Progressing on this endeavor could enhance Europe's private financing capabilities for innovation and thus additional means to better target public support.

Horizon Europe's innovation policy also includes the **European Institute of Innovation and Technology (EIT)**, which mainly support the creation of thematic European networks known as Knowledge and Innovation Communities (KICs) aiming at developing activities fostering the integration of the knowledge triangle⁶². For several reasons, the EIT has been increasingly criticized and seen as an institution diverting resources that could be more effectively mobilised to support innovation. The main critics are gathered in a position paper published by Fraunhofer-Gesellschaft⁶³. Although recognising a contribution to network formation and educational programmes, critics of the EIT highlight important issues related to the model of the KICs. According to this feedback, the administrative and financial burdens clearly outweigh the benefits of an active participation, the governance structure and regulatory framework make it challenging to reach financial sustainability and KICs are often created in areas where R&I ecosystems are already established, making them redundant. From the perspective of companies KICs are complex, costly and non-transparent. Therefore, it seems appropriate to **challenge the added value of the EIT** as part of the EU's future Innovation policy.

Since Horizon Europe is founding applied research through **European Partnerships**, disruptive innovation can also emerge from these programmes. A reform and rationalisation exercise took place for Horizon Europe, leading the number of European Partnerships to decrease from about 120 in Horizon 2020 to 58 (including the 9 new partnerships identified for the second strategic plan 2025-2027⁶⁴). Because they involve stakeholders in the programming process, European Partnerships prove to be a good way for identifying important technological bottlenecks. Nevertheless, feedback from participating companies tend to emphasise that some European Partnerships are more transparent and ambitious than others. While European partnerships are driving forward a competitive and innovative Europe, it would be important to

⁶¹ Mazzucato M. and Penna C.C.R., Beyond market failures: the market creating and shaping roles of state investment banks, 2014

⁶² This means basically connecting research, education and knowledge valorisation

⁶³ Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.: Towards a bigger bang for the buck: Bid farewell to the EIT, 2024

⁶⁴ European Commission, Horizon Europe Strategic Plan 2025-2027

work on a coherent portfolio for FP10 avoiding overlaps and ensuring clarity, transparency and simplicity. In addition, the different waves of identification have also generated an important work at European and national levels and some difficulties related to the co-funding mechanisms. In the case of Co-funded partnerships, the implementation is somehow cumbersome and leads to uncomfortable situations, especially when not enough national funding is available. This has forced some participants to withdraw from projects and suffer reputational loss. For this reason, it might be more effective to **avoid co-funding and to give priority to centrally managed funding at European level.**

One thing is for sure, to bolster disruptive and radical innovation FP10 will require an effective programme portfolio and financial resources. Different contributions, including the Letta report, have echoed the call for a more ambitious innovation policy. Now it's a question of turning ambition into action.

PRIORITISE R&I BUDGET OF AT LEAST €200 BILLION FOR FP10

At least 200 billion Euros for FP10! This is the number put forward by the European Parliament and the R&I community to meet the challenges faced by R&I at European level⁶⁵. Since doubling the budget for FP10 would be a strategic decision for the future of the continent we fully support this demand. FP10 could be the first step towards a more ambitious European R&I policy that strengthens Europe's economy, while also supporting its necessary green and digital transformation.

Economic models show that R&I is crucial for economic development. Although they account for only a small portion of Europe's total R&I spending, the economic impact of the EU's previous R&I programmes is significant. According to the ex-post evaluation of Horizon 2020, the programme's expenses will have a multiplier effect of approximately five times the amount invested. More concretely, "in the long term, the programme is estimated to contribute an average annual increase of €15.9 billion to EU GDP, totalling €429 billion over the period 2014-2040"⁶⁶. In this regard, the FP is not only providing solutions for societal challenges and enabling growth, but it is also a profitable investment for the European economy.

However, agreeing on a more ambitious budget for R&I Programmes in the next MFF is not enough. It will also be essential to consider its stability over time. Horizon Europe has not been exemplary in this regard, and it is to be expected that the overall impact of the FP will be affected in the long run. Following the Covid-19 pandemic and the war in Ukraine, inflation has been significantly higher than the target of the European Central Bank⁶⁷, even reaching a peak of 9,22% in 2022⁶⁸. Inflation reduces the purchasing power of money, thus decreasing the net present value of Horizon Europe's budget based on constant price of 2021. In addition, the mid-term revision of the MFF has resulted in a €2 billion cut for the period 2025-2027. Provided that Member States are systematically seeking to cut the annual budget of Horizon Europe and that resources from the FP have been diverted towards emerging priorities such as the European Chips Act⁶⁹, ensuring that R&I remains a priority over time is just as important as securing at least € 200 billion for FP10.

⁶⁵ Members of the European Parliament (in particular Christian Ehler and Maria da Graça Carvalho) as well as R&I organisation such as Science Europe, the Guild of European Research-Intensive Universities and the League of European Research Universities have publicly mentioned this figure.

⁶⁶ European Commission, Ex-post evaluation of Horizon 2020.

⁶⁷ The primary objective of the ECB's monetary policy is to maintain price stability, which is considered to be achieved by aiming for a 2% inflation rate over the medium term.

⁶⁸ Average inflation rate for the EU 27 based on Eurostat data (consulted the 19.06.2024)

⁶⁹ The final compromise on the financing aspects of the framework of measures for strengthening Europe's semiconductor ecosystem "Chips Act" (R2023/1781) has resulted in a reallocating €75 million of Horizon Europe's budget to support the initiative.

Europe must provide itself with the means to become a more competitive economy. This will require more innovation, which again is not possible without investing in R&I activities.

CONCLUSION

If the European Union is serious about bolstering the competitiveness of its economy, strengthening its technological sovereignty and tackling societal challenges, there is no way around prioritising R&I in the next MFF. This should start with an ambitious FP10 endowed with at least €200 billion.

Horizon Europe is not perfect, but it supports collaborative R&I projects that EU Member States would struggle to fund without a centrally managed programme. Building on this approach, the EU should aim for a sophisticated but unbureaucratic programme portfolio supporting groundbreaking research and innovation in Europe. This paper has highlighted several avenues that the Austrian Federal Economic Chamber deems important exploring to enable FP10 to lead to a more innovative Europe. Our analysis leads us to encourage the conception of a FP that provides a strong support to fundamental science, supports the development of GPTs, adopts a revised approach to MOIP and enables disruptive innovation. FP10 also needs to remain open for international cooperation and should be completed by an appropriate cohesion policy that effectively addresses the innovation divide.

Innovation is the main force behind the development of human societies. With the conception of FP10, the EU has the chance to make bold choices that lead to a more innovative Europe. We must not miss this chance.