

## CONTRIBUTIONS FROM AENEAS, EPOSS AND INSIDE TO THE INITIAL DEBATE ON FP10

### KEY MESSAGES

In view of the preparations for the 10<sup>th</sup> EU Framework Programme (FP10) for Research and Innovation (R&I), which will succeed Horizon Europe as of 2028, the industry associations AENEAS, EPoSS and INSIDE, constituting the private members of the Chips Joint Undertaking, would like to put forward some considerations and recommendations, primarily from an industrial perspective. Our main inputs can be summarised as follows:

#### **I. Strengthen industry involvement**

The innovation gap between the EU and global leaders appears to be mainly due to lagging R&D investments by the EU business sector. Therefore, in particular industries with high R&D intensities, such as Electronic Components and Systems (ECS), should be supported to grow. General framework conditions should be enhanced to encourage higher private R&D investments and attract more high-tech industry. FP10 and the Union's industrial policy must be mutually reinforcing, both contributing to the new European Competitiveness Deal. According to our analysis, large enterprises performed half of all R&D in the EU but received only 7.5% of all Horizon Europe funding in 2021-2023; this discrepancy should be addressed in FP10. More generally, FP10 should better reflect the important role of industry in transforming science into innovations with impact on the economy and society.

#### **II. Join forces**

For our fragmented continent, joining forces is the only viable approach. Within FP10, collaborative R&I projects should remain the main modality. Researcher exchanges between science and industry should enhance knowledge transfer and address skill shortages. Within the Union, national R&I efforts should be aligned better with the common European interests pursued by FP10. International cooperation with like-minded countries outside the Union should be intensified to ensure economic security. Public-private partnerships should be continued, with industry contributing mainly in-kind rather than cash to safeguard effective collaboration. The Chips Joint Undertaking should be prolonged and reinforced in view of its strategic importance for European competitiveness and economic security.

#### **III. Make FP10 ambitious, attractive, balanced, effective and efficient**

Increasing the budget for FP10 to €200 billion is necessary to fund high-quality proposals and bridge the R&D gap with Europe's international partners and main competitors. FP10 should maintain its current three-pillar structure, balancing fundamental research, applied research and innovation, while reducing red tape to attract more industry participation. As Widening Member States relatively receive almost twice as much funding from Horizon Europe as the other Member States, FP10 should primarily promote quality and impact, not cohesion.

## TABLE OF CONTENTS

<b>Key messages</b>	1
<b>Table of contents</b>	2
<b>1. Introduction</b>	3
<b>2. Strengthen industry involvement</b>	3
2.1. Support high-tech R&D-intensive industries such as Electronic Components and Systems	3
2.2. Improve the general framework conditions for private investments in R&I	3
2.3. Align FP10 with the Union's future Industrial policy	4
2.4. Value the role in research and innovation played by industry, in particular large enterprises	4
2.5. Boost the FP participation of industry, in particular large enterprises	6
<b>3. Join forces</b>	7
3.1. Focus on collaborative public-private R&D involving industry	7
3.2. Foster researcher exchanges between science and industry	7
3.3. Intensify international cooperation with like-minded countries	8
3.4. Align national R&I efforts within the Single Market	8
3.5. Continue public-private partnerships, with industry mainly contributing in-kind	8
3.6. Prolong and reinforce the Chips Joint Undertaking	9
<b>4. Make FP10 ambitious, attractive, balanced, effective and efficient</b>	9
4.1. Increase FP budget to € 200 billion	9
4.2. Keep current structure with its pillars and instruments	10
4.3. Maintain balance between fundamental research, applied research and innovation	10
4.4. Cut red tape and don't overburden FP10 with additional policy objectives	10
4.5. Continue allowing exceptions to the obligation of providing open access to research data	10
4.6. Be cautious with roll-out of lump sum funding	10
4.7. Keep focusing on quality and impact instead of cohesion	11
<b>About AENEAS, EPoSS and INSIDE</b>	12

## 1. INTRODUCTION

[AENEAS](#), [EPoSS](#) and [INSIDE](#) are the industry associations constituting the private members of the [Chips Joint Undertaking](#) (JU). Its budget of about 11 billion euro (public + private) makes the Chips JU the largest of the European Partnerships under Horizon Europe. With over 900+ members (large enterprises, SMEs, RTOs and universities) in the domain of Electronic Components and Systems (ECS), including all key European players along the semiconductor value chain, we are major stakeholders in Horizon Europe (HE). Therefore, we are eager to contribute to the initial debate on its successor as the 10<sup>th</sup> EU Framework Programme (FP10) for Research and Innovation (R&I). As (industrial) competitiveness will be at the top of the political agenda for the coming years<sup>1,2,3,4</sup>, we provide some revealing insights and concrete recommendations from an industrial perspective.

To set the scene, the challenges that the EU will be facing in the domain of research and innovation are manifold. FP10 will have to adapt to new global dynamics, characterized by accelerating innovation, an increasingly intense race for emerging technologies on a global scale, a higher speed of adoption of new technologies, and shorter throughput times of their applications. New digital technologies are drastically changing our ways of living, working, and even performing research and innovation. China has emerged as a new powerhouse in science and technology, resulting in major technological advancements and massive patenting, intensifying global competition. Additionally, the war in Ukraine has disrupted scientific cooperation and innovation ecosystems in the region, highlighting the vulnerability of global research networks to geopolitical conflicts. At the same time, important societal challenges remain to be addressed, including climate change, energy security, ageing population and public health crises, to mention just a few. The EU must also address internal issues such as fragmented research efforts and the need for increased investment to close the innovation gap with its international partners and main competitors.

## 2. STRENGTHEN INDUSTRY INVOLVEMENT

### 2.1. Support high-tech R&D-intensive industries such as Electronic Components and Systems

Recently, the European Policy Analysis Group has released a report<sup>5</sup> with recommendations for reforming the European Innovation Council (EIC) within Horizon Europe. It argues that the innovation gap between the EU and the US is mainly due to lagging R&D investments by the EU business sector, which is concentrated in mid-tech sectors requiring lower R&D intensities than the high-tech sectors dominating the US business sector. In this respect, we would like to emphasise that our Electronic Components and Systems (ECS) industries are part of the high-tech sectors and feature high R&D intensities<sup>6</sup>. With investments in R&D typically ranging between 10% and 20% of revenue, public support for the growth of our industry sector will have a high yield in reaching the EU objective of spending 3% of GDP on R&D.

### 2.2. Improve the general framework conditions for private investments in R&I

The aforementioned report decomposes the difference in R&D intensity between the US and EU and finds that in 2022, 60% of it was due to differences in industry composition – the R&D-intensive high-

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<sup>1</sup> [Mario Draghi's speech](#) at the High-level Conference on the European Pillar of Social Rights, Brussels, April 16, 2024.

<sup>2</sup> [European Council conclusions](#), 17 and 18 April 2024.

<sup>3</sup> ["Much More than a Market"](#), report by Enrico Letta for the European Council, April 2024.

<sup>4</sup> [Conclusions of the Competitiveness Council](#) of May 24, 2024, on the future of industrial policy.

<sup>5</sup> ["EU Innovation Policy - How to Escape the Middle Technology Trap"](#), by econpol@cesifo, Institute for European Policymaking@Bocconi University and Toulouse School of Economics.

<sup>6</sup> See p. 10-11 of the report.

tech industry is larger in the US – and the remaining 40% to a generally higher R&D intensity in the US across all industries. However, we would like to point out that firms invest to the extent they can expect a return on their investments that exceeds their cost of capital. Therefore, R&D intensity is a yardstick for general framework conditions for investing in R&D. Apparently, these are less favourable in the EU than in the US. In other words, the lower R&D intensity of the EU business sector is therefore not the cause, but the consequence of the lagging investment climate in Europe. To attract more high-tech industry to Europe and increase R&D intensity, general framework conditions need to be improved.

The report [“Economic rationale of public R&I funding and its impact”](#), prepared for the Commission in 2017 by an expert group consisting of prominent economists in preparation of Horizon Europe, confirms that a number of market failures are linked to investment decisions in R&I. High risks, sunk costs, market uncertainty, lack of full appropriability of results, or unavailability of funding, all induce underinvestment in R&I below what is socially desirable. Therefore, to maximize the spillovers that the creation and diffusion of knowledge generate, public R&I funding, for both public and private investment, is needed according to this report.

### 2.3. Align FP10 with the Union’s future Industrial policy

Public R&I funding is only one of the considerations that companies take into account when deciding on investments in R&I. Therefore, we very much welcome the [Conclusions of the Competitiveness Council](#) on May 24, 2024, on the future of industrial policy, highlighting “the importance of a favourable environment in which businesses, in particular SMEs, can thrive, prosper and scale up, which is conducive to entrepreneurship, attracts investment, fosters innovation and contributes to the competitiveness of the Union”. In our opinion, an effective and proactive industrial policy should have a holistic approach, based on integrated value chains and addressing also the general business environment, demand-side aspects, better regulation and a global level playing field to attract investments and prevent relocations. Evidently, FP10 and the Union’s future industrial policy must be mutually reinforcing and both contributing to the new European Competitiveness Deal as called for in the [Conclusions of the European Council](#) of April 17-18, 2024.

As a major industry sector itself and a key enabler for digitising other industry sectors, ECS should feature prominently in such industrial policy. To ensure Europe’s economic security<sup>7,8</sup>, the need for resilient supply of electronic components and systems, as promoted by the [Chips Act](#), will only increase further, witness the June 14 [G7 Leaders’ Communiqué](#) acknowledging the crucial role of resilient and reliable global semiconductor supply chains and welcoming the establishment of a Semiconductors G7 Point of Contact Group.

### 2.4. Value the role in research and innovation played by industry, in particular large enterprises

The 2017 [“LAB – FAB – APP”](#) report of the high-level group led by Pascal Lamy on maximising the impact of EU research and innovation programmes recognises the critical role that industry is playing in the transformation of new knowledge into innovation<sup>9</sup> and sees academia and industry not as rivals in this, but as allies. The title of the report reflects that research labs alone are not enough; to have an impact on economy and society, also fabrication and application are needed. Bridging the gap from lab to fab requires major risky investments from industry.

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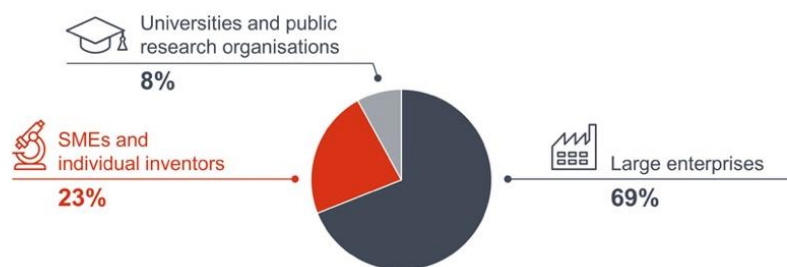
<sup>7</sup> [“Demystifying Economic Security: a Framework for the EU”](#), issue paper, Institut Montaigne, April 2024.

<sup>8</sup> [“The EU’s Critical Tech Gap - Rethinking Economic Security to put Europe back on the map”](#), DIGITALEUROPE, June 2024.

<sup>9</sup> According to the 2018 [Oslo Manual of the OECD](#), “an innovation is a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)”.

In innovation ecosystems, R&I partnerships and global value chains, large enterprises often hold a pivotal position, with many SMEs flourishing in their slipstream. Large enterprises are essential for exploiting the results from FP projects, as they have the critical mass and market access channels needed to ensure exploitation, standardisation and market uptake.

In fostering innovation, which in turn drives economic growth, patenting plays a crucial role, as well-documented in economic literature. By providing legal protection and economic incentives for inventors, patents encourage the development and dissemination of new technologies, ultimately contributing to broader economic development. According to the European Patent Office, a [breakdown of patent applications](#) originating from European countries shows that in 2023 69% of them were filed by large enterprises, 23% by SMEs and individual inventors, and 8% by universities and public research organisations. Accounting for 92% of applications, the private sector is by far the main actor in patenting.



Patent applications filed with EPO in 2023 from applicants in EPO Member States (source: EPO).

From a new [working paper from NBER](#) (the US National Bureau of Economic Research), [The Economist](#) concludes that despite the rapid expansion of higher education and increased government spending in recent decades, university-led research has not translated into significant productivity growth, contrasting with the more impactful corporate-led research model of the past. The decline of corporate labs and the focus of universities on academic rather than practical outcomes have contributed to this issue, suggesting a need for better integration between public science and corporate R&D to enhance innovation and economic growth.

In the same vein, the [American think-tank ITIF](#) assigns a key role to large enterprises in achieving technological innovation, productivity gains and international competitiveness, while claiming that “it’s time for the EU to make a fundamental turn in the Horizon programme, taking it back more to its roots of winning global technological competition, and away from a university-dominated, mission-oriented social policy programme”.

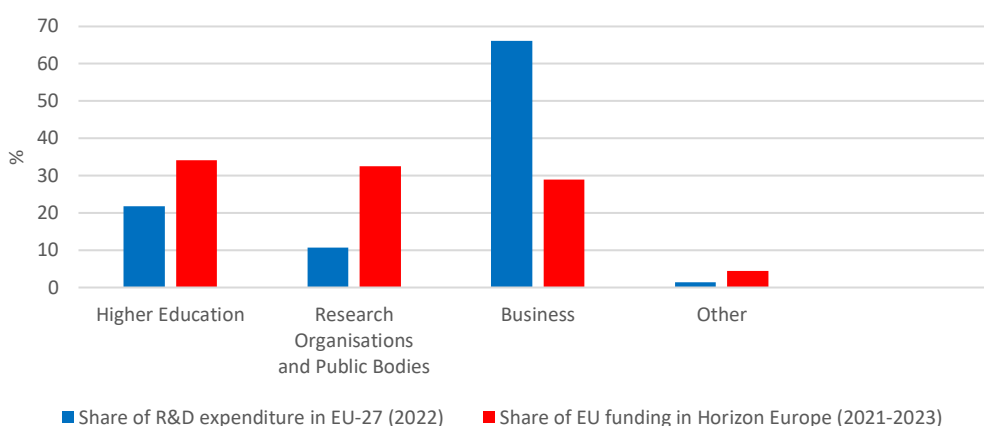
A case in point is generative Artificial Intelligence. Its recent rise does not stem from basic academic research but from Big Tech companies such as Google, Microsoft, Amazon, Meta (Facebook), and Apple. These large enterprises play a key role in driving R&D and innovation in AI by investing heavily in cutting-edge research, developing advanced algorithms, and providing vast amounts of computational resources and data. Their influence extends to setting industry standards, fostering AI talent through educational initiatives, and facilitating the deployment of AI technologies across various sectors, thereby accelerating the pace of innovation globally.

Another example of the crucial importance of large enterprises in R&I is [ASML](#), the world’s leading provider of the lithography equipment that is essential for mass producing semiconductor chips. This rapidly expanding company has become one of the cornerstones of the [Brainport Eindhoven](#) region, driving innovation and technological advancement. ASML collaborates closely with numerous SMEs,

leveraging their expertise as suppliers and co-developers to enhance capabilities in tandem. This symbiotic relationship fosters a robust, dynamic network of innovation, enabling the continuous growth and competitiveness of the regional ecosystem.

## 2.5. Boost the FP participation of industry, in particular large enterprises

Despite its key role in research and innovation, industry is not well represented in Horizon Europe. Whereas in the first FPs, most of the EU funding went to industry, in later FPs the funding share of the business sector has fallen gradually to only 28.9% in Horizon Europe<sup>10</sup>. This is very much out of proportion with respect to the 66.2% share<sup>11</sup> of the business sector in the total R&D expenditure in the EU, as can be seen from the figure below.



Therefore, FP10 should attract more participants from industry, not only in its partnerships (see section 3.5. below), but also in its regular part.

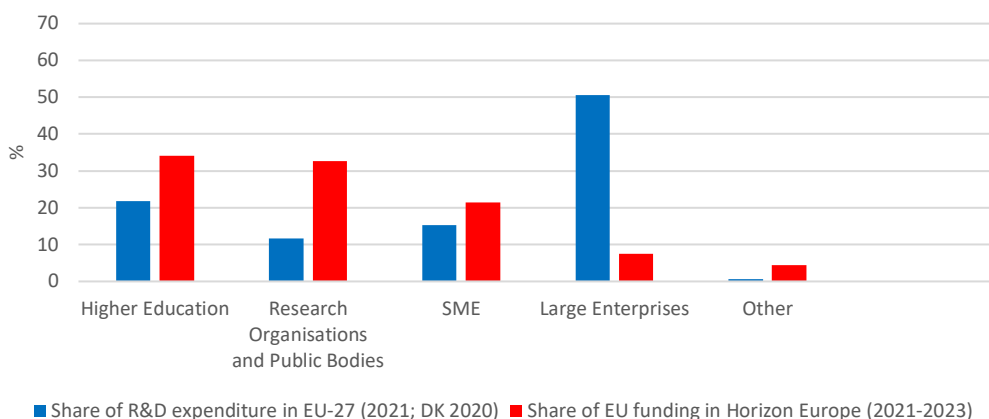
Dividing the business sector into SMEs and large enterprises, it turns out that SMEs received €6.6 billion or 21.4% of the total Horizon Europe funding of €30.8 billion in the 2021-2023 period, which is well above their 15.3% share in Europe's R&D efforts<sup>12</sup>. That is in stark contrast to the meagre €2.3 billion or 7.5% of all Horizon Europe funding in 2021-2023 that went to large enterprises, whereas these account for half (50.6%) of all R&D expenditure in the EU. This discrepancy – very clearly visible in the next figure – has become even worse than in Horizon 2020, when large enterprises received 11.5% and SMEs 16.7% of the total EU funding<sup>13</sup>.

<sup>10</sup> Horizon Europe implementation [Key Figures 2021-2023](#).

<sup>11</sup> Calculated from [Eurostat data on GERD by sector of performance](#), taking 2022 as the reference year, i.e. in the middle of the 2021-2023 implementation period of Horizon Europe; GERD: gross domestic expenditure on R&D.

<sup>12</sup> Calculated from [Eurostat data on BERD by size class and source of funds](#) for the year 2021, except DK (2020).

<sup>13</sup> P. 21-23 of the [Staff Working Document H2020 Evaluation](#).



Given that large companies account for half of total R&D expenditure in the EU, FP10 cannot simply ignore them. Indeed, the fact that under-investment by industry is the main reason why the EU fails to meet its target of spending 3 per cent of GDP on R&D, underlines the need for FP10 to incentivise also large companies to increase their research budgets.

### 3. JOIN FORCES

#### 3.1. Focus on collaborative public-private R&D involving industry

In 40 years of successive FPs, hundreds of thousands of transnational projects have laid a solid foundation for the European Research Area (ERA). Any researcher can safely call any public-sector or private-sector colleague in Europe to set up collaboration: as the FP rules of the game are clear, these researchers can talk science and technology right away, without having to worry too much about the conditions and modalities of collaboration. In addition, matchmaking mechanisms are in place to facilitate partnering. The resulting collaboration fabric is a unique asset for Europe. Such collaboration projects, large and small, therefore must be continued, in view of their obvious European added value. Therefore, we very much concur with [FP veteran policy maker Dan Andrée](#) to keep the focus on collaborative, public-private, precompetitive R&D involving large enterprises, SMEs, universities and RTOs.

The collaborative approach represents a strength for EU to address R&I, the only possible approach for our continent. A strong, collaborative R&I environment fosters the development of sustainable solutions, which are ultimately crucial for long-term competitiveness. Conversely, a competitive European industry can drive investment in sustainable technologies, creating a virtuous cycle that reinforces both objectives.

#### 3.2. Foster researcher exchanges between science and industry

We highly value the intersectoral mobility of researchers between universities, RTOs, large enterprises and SMEs facilitated by the Doctoral Networks, Industrial Doctorates, Staff Exchanges and Postdoctoral Fellowships under the Marie Skłodowska-Curie Actions (MSCA). Not only are such staff exchanges a very effective form of public-private R&I collaboration, but they also help addressing the huge [skills shortages](#) that the ECS industry is facing. Indeed, according to the [Letta report on the Single Market](#), "the expansion of established programs like Marie Skłodowska-Curie Actions is needed to increase the mobility of researchers and innovators. This enriches Europe's research landscape, promotes knowledge exchange, and is key to achieving a truly integrated European Research Area. Retaining



talents is critical for Europe's economic resilience, innovation capacity, strategic independence, and societal welfare and should be one of the most urgent priorities”.

### 3.3. Align national R&I efforts within the Single Market

FP10 will have to cater to the common European interest, which is not the same as the sum of national interests. To reduce the current fragmentation of R&I efforts and achieve the critical mass needed to address the challenges that Europe is facing, better alignment of European and national R&I efforts will be needed. A good example is the Chips Joint Undertaking (see section 3.6 below). Thanks to its pan-European Strategic Research and Innovation Agenda ([ECS SRIA](#)) and its co-funding mechanism combining public funding from the Union and national authorities with private resources it has created a genuine European Research Area (ERA) in the ECS domain.

### 3.4. Intensify international cooperation with like-minded countries

Many societal challenges, supply chains and important markets are global, and many large EU-based companies operate and/or sell worldwide. Furthermore, ensuring supply chain resilience and tackling major technological challenges will require international cooperation with like-minded countries as part of the Union's de-risking approach, e.g. by means of joint R&D projects and/or staff exchanges under FP10. While acknowledging the crucial role of resilient and reliable global semiconductor supply chains and welcoming the establishment of a Semiconductors G7 Point of Contact Group, [G7 Leaders](#) are committed to safeguarding the global research ecosystem and preserving open research collaboration. Therefore, while taking reciprocity and economic security duly into account, the FP10 approach to international cooperation should be “as open as possible, as closed as necessary”.

### 3.5. Continue public-private partnerships, with industry mainly contributing in-kind

As effective platforms for fostering collaboration between public and private actors in research and innovation, the partnerships should be continued under FP10.

In the current partnerships under HE, industry's contributions to the R&I activities are made largely in-kind in the form of the unfunded part of the R&I costs. In addition, in the joint undertakings, industry makes financial contributions to the administrative costs of the JU. We are very concerned about suggestions to replace these in-kind contributions to the R&I activities of partnerships under FP10 by cash contributions, because the industry associations acting as the private partners in the partnerships would be unable to make commitments for such major financial contributions and because most companies would be unlikely to join any JU projects if they must contribute cash instead of receiving it.

Furthermore, in view of the limited budgets that companies can afford to invest in R&D, mandatory financial contributions to partnerships would come at the expense of their own in-house R&D efforts. Moreover, through in-kind participation, an actual connection is made between industry and academia in consortia, which is crucial for the take-up of research results by industry and thereby creating impact for Europe. In-kind contributions from industry in the form of having its R&D staff working together in joint projects with their peers from universities and institutes leads to much closer collaboration than merely providing cash. Therefore, the current system of industry contributing primarily in-kind should be continued in the partnerships under FP10.



### 3.6. Prolong and reinforce the Chips Joint Undertaking

The [Chips JU](#) was launched on November 30, 2023, as a key element of the [European Chips Act](#). In view of its crucial importance for ensuring Europe's economic security, supply chain resilience and technological leadership in semiconductor technologies and applications, the Chips JU must continue under FP10 as a tri-partite public-private partnership of the EC (representing the EU), participating states (including the EU Member States) and industry. Its EU budget should be increased to reflect its strategic value for European competitiveness, economic security and technological sovereignty, and it should be matched by commensurate budgets of the participating states, as far as possible with a multi-annual structural perspective.

Without adequate public funding, Europe's ECS industry won't be able to catch up with its competitors elsewhere, and its R&I activities might move to other parts of the world, where conditions are more attractive, for example<sup>14</sup>:

- The US Chips Act provides for an allocation of USD 52 billion to manufacturing and R&D until 2026.
- China is accelerating efforts to close its technological gap and by 2025 it is estimated that it will have invested around USD 150 billion over the past decade in line with a series of plans and initiatives such as the "Made in China 2025".
- Japan has announced USD 8 billion in public funding for domestic semiconductor investment, which is set to be complemented with additional funding.
- South Korea will bolster its semiconductor industry by supporting, through tax incentives, its domestic companies' private investments in R&D and manufacturing, which are estimated at USD 450 billion until 2030.

To make Europe's ECS industry more competitive at the global level, also the governance, administrative processes, co-funding mechanism and funding rates of the Chips JU must be improved. In addition, its scope in terms of research and innovation activities funded from the FP vs. capacity building activities funded from the Digital Europe programme must be reviewed.

Furthermore, while the EU's focus on semiconductor strategic autonomy is commendable, the current strategy overlooks the critical software dimension. Highlighting the software international dependencies and hidden vulnerabilities across the technology stack is crucial. A holistic EU strategy encompassing both hardware and software, ensuring true strategic autonomy, security and safeguarding the full technological stack is crucial in the rapidly evolving geopolitical and economic landscapes<sup>15</sup>.

In a later stage of the debate on FP10, we will put forward more specific comments on the continuation of the Chips JU after 2027.

## 4. MAKE FP10 AMBITIOUS, ATTRACTIVE, BALANCED, EFFECTIVE, EFFICIENT AND STRATEGIC

### 4.1. Increase FP budget to € 200 billion

We support the [campaign of MEPs Christian Ehler and Maria da Graça Carvalho](#), as well as the [open letter from EUA, EARTO and Science Europe](#), all advocating an ambitious FP10 with a budget of €200

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<sup>14</sup> ["A Chips Act for Europe"](#), Communication from the Commission, COM(2022) 45 final.

<sup>15</sup> ["Europe's semiconductor strategy: a software blind spot?"](#), INSIDE Industry Association Magazine, Issue 7, June 2024.

billion (up from €95.5 billion for HE, excluding the recently announced cut of €2.1 billion). Such increase is badly needed, not only to help close Europe's gap vis-a-vis other regions in the world in terms of R&D investments, but also because according to the [ex-post evaluation of Horizon 2020](#), with a budget of €75.6 billion, an additional €159 billion would have been needed to fund all high-quality proposals. According to the recent [Key Figures 2021-2023 on the Horizon Europe implementation](#), only 33% of the high-quality proposals could be funded. Extrapolated to the entire Horizon Europe period, a budget of even €290 billion (instead of the available budget of €95.5 billion) would be needed to fund them all. At the same time, national budgets for research and innovation must be stepped up, not only to close the gap with other regions, but also to avoid that FP10 becomes the last resort for too many applicants.

#### 4.2. Keep current structure with its pillars and instruments

We recommend keeping the three-pillar structure largely as it is in Horizon Europe, paying ample attention to enabling and industrial technologies and their applications in the second pillar. The various parts and instruments each have their purposes. We support the [plea made by MEP Maria da Graça Carvalho](#) to maintain the variety of HE instruments in FP10 and are against breaking up the FP in separate programmes or merging it with other EU funding programmes.

#### 4.3. Maintain balance between fundamental research, applied research and innovation

Each type of R&I is needed for ensuring Europe's competitiveness and addressing societal challenges, short-term as well as long-term.

#### 4.4. Cut red tape and don't overburden FP10 with additional conditionalities

We know of a lot of companies who didn't participate in Horizon 2020 and Horizon Europe because it was/is perceived to be too cumbersome. Therefore, red tape in FP10 processes must be reduced. Furthermore, over the years, more and more additional policy objectives have been imposed on FP projects, e.g. regarding open science, data management, gender equality, "do no significant harm"<sup>16</sup>, etc. Whereas we fully support these principles, we are concerned that such conditionalities make participation increasingly burdensome and less efficient.

#### 4.5. Continue allowing exceptions to the obligation of providing open access to research data

While valuing the merits of open science, it is also important to protect European competitiveness and economic security, as well as business interests. Therefore, also under FP10, it is crucial to ensure that access to research data strictly follows the principle "as open as possible, as closed as necessary". The existing possibility of exceptions should be continued, "taking into consideration the legitimate interests of the beneficiaries including commercial exploitation and any other constraints, such as data protection rules, privacy, confidentiality, trade secrets, Union competitive interests, security rules or intellectual property rights"<sup>17</sup>.

#### 4.6. Be cautious with roll-out of lump sum funding

As lump sum funding makes project participants more dependent on one another for getting paid, it may lead to a risk-averse approach in choosing partners and engaging in genuine collaboration. In this

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<sup>16</sup> See Science|Business article "[MEPs decry inclusion of 'do no significant harm' principle in Horizon Europe](#)".

<sup>17</sup> See paragraph 3 of article 39 of the [Horizon Europe Regulation](#) and section 7 of Annex 5 on p. 377 of the [Annotated Grant Agreement applicable to EU grants](#).

respect, we share the concerns expressed by a.o. [EARTO](#) and [EUA](#), as well as the [verdict of 68 research managers](#).

#### 4.7. Keep focusing on quality and impact instead of cohesion

According to the [Key Figures 2021-2023 on the Horizon Europe implementation](#) recently made available, the 15 Widening Member States received only 15% of the grants allocated to EU beneficiaries. At first sight, this might seem evidence that Horizon Europe is deepening the innovation divide. However, according to [Eurostat data](#), the Widening MS accounted for only 9% of total R&D expenditure in the EU in 2022 (i.e. in the middle of the first three years of Horizon Europe). Therefore, the Widening MS fared far better in Horizon Europe than the other MS: the Widening MS received 51,134 euro from Horizon Europe per million euro spent on R&D domestically (GERD<sup>18</sup>), almost twice as much as the 28,044 euro Horizon Europe funding per million euro GERD that went to the 12 other MS<sup>19</sup>. Consequently, the innovation divide should be addressed primarily by additional national investments in R&I capacity with the help of EU cohesion policy, not by FP10.

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<sup>18</sup> Gross domestic Expenditure on R&D.

<sup>19</sup> [Key Figures 2021-2023 on the Horizon Europe implementation](#).



## ABOUT AENEAS, EPOSS and INSIDE

[AENEAS](#) standing for Association for European NanoElectronics ActivitieS, is an industrial Association, established in 2006, providing unparalleled networking opportunities, policy influence & supported access to funding to all types RD&I participants in the field of micro and nanoelectronics enabled components and systems.

The object of the Association is to promote Research, Development and Innovation in order to strengthen the competitiveness of European industry across the electronics components and systems (ECS) value chain.

AENEAS is open to all European key players in the value chain, such as large industry, Small and Medium Enterprises, research institutes, academia, and associations.

[EPoSS](#) is the European Association leading the development and integration of intelligent and green Smart Systems technologies and solutions for a sustainable society.

The European Technology Platform on Smart Systems Integration is an industry-driven policy initiative, defining R&D and innovation needs as well as policy requirements related to Smart Systems Integration and integrated Micro- and Nanosystems.

A group of major industrial companies and research organisations from more than 20 European Member States intend to co-ordinate their activities in the field of Smart Systems Integration. A main objective is to develop a vision and to set up a Strategic Research Agenda.

EPoSS brings together European private and public stakeholders in order to create an enduring basis for structuring initiatives, for co-ordinating and bundling efforts, for setting up sustainable structures of a European Research Area on Smart Systems Integration. EPoSS embraces all key players, public and private, in the value chain.

[INSIDE](#) is the Industry Association that strives for a leading position of Europe in Intelligent Digital Systems and their applications. The Association is a membership organisation for the European R&I actors with more than 265 members from 28 European and associated countries, spanning the entire Electronic Components, Software and Systems value chain, from semiconductors to applications.

Our commitment lies in supporting both industry and academia to secure funding that drives the creation of innovative, competitive, reliable, and sustainable solutions for European industry and key application sectors.

Aligned with the goals of the Chips Act, INSIDE plays a pivotal role in strengthening Europe's hardware and software supply chain, fostering technological innovation, and enhancing Europe's strategic autonomy in critical technologies. Our multidisciplinary membership base creates a robust network for exchanging technological ideas, collaboratively building strategic R&I agendas, facilitating cross-domain fertilization, and spearheading large-scale innovation initiatives.

Through our concerted efforts, INSIDE significantly contributes to maintaining and enhancing Europe's competitive edge in the global market. We have a proven track record of success, exemplified by numerous high-impact projects and initiatives that have emerged from our collaborative environment.

Joining the Association, members actively participate in our mission to drive Europe's technological advancement and secure its leadership in the intelligent digital systems landscape. Together, we can achieve groundbreaking innovations and bolster Europe's position on the global stage.