

EARTO Reaction to the new EC Expert Group Report on Horizon Europe's Interim Evaluation

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EARTO, the umbrella organisation of Europe's leading Research and Technology Organisations (RTOs) for applied research, hereby welcomes the European Commission (EC) Expert Group Report on the Interim Evaluation of Horizon Europe, which provides timely recommendations on strengthening Europe's competitiveness through Research, Technology and Innovation. EARTO Members have been very active participants in EU Research, Development & Innovation (RD&I) Framework Programmes for the last decades (see our analysis here). Today, 1 out of 5 Horizon Europe projects include EARTO members, representing almost 50% of the EU Horizon Europe funding. Their extensive involvement demonstrates the critical role that RTOs play in turning scientific research into concrete, market-ready innovations that enhance Europe's competitiveness on the global stage.

The Expert Group Report aligns with the current key EU strategic political discussions including the <u>Draghi Report</u> and European Commission's President Ursula von der Leyen's political quidelines, which both call for placing RD&I at the core of Europe's competitiveness and economic transformation. RD&I activities are pivotal in enhancing the EU's capabilities, resilience, security, and crisis management. Strengthening our strategic competitiveness by reducing industrial dependencies in critical sectors and securing vital components within European strategic value chains will require concerted efforts to strengthen our EU RD&I ecosystem.

In this context, EARTO supports the report's call for reinforcing Europe's competitiveness by promoting and advancing European RD&I as outlined in its recommendations, which:

- Reaffirm the pivotal role of RD&I in driving European competitiveness: Strengthening Europe's RD&I framework and bolstering the Research and Innovation Union is essential to boost Europe's competitiveness globally.
- Understand that enhancing Europe's Industrial Competitiveness will require stimulating industrial RD&I investments,
- Call for an increase of the budget of the next European Research & Innovation Framework Programme (FP10) to €220 billion. The recommendation to increase the budget to €220 billion of FP10 is a crucial step towards ensuring that Europe can achieve global RD&I leadership and retain its technological edge. RD&I must be at the heart of Europe's economy to enhance industrial competitiveness and build a sustainable, digital, and clean future.
- Call for the development of a pan-EU strategy for Technology Infrastructures: As highlighted in the Expert Group report, the European RD&I landscape requires significant investment in applied Technology Infrastructures to drive technological breakthroughs and promote industrial competitiveness.

Horizon Europe's Pillar II: Key to EU RD&I Success in technology maturation

As key participants in Horizon Europe (FP9), EARTO Members would like to hereby again highlight the critical importance of Pillar II of the current Horizon Europe in fostering a collaborative, cross-border RD&I ecosystem that drives technological advancements and solutions for Europe's major challenges. Today in Horizon Europe, investments in technology development and maturation take place within Pillar II. Pillar II directly supports Europe's capacity to compete globally, offering tangible and impactful innovation that contributes to industrial leadership and societal benefit. As such, Pillar II of Horizon Europe must continue to receive substantial funding in the next FP10 and remain the key Pillar of FP10, which should provide crucial support to RD&I across the full spectrum—from fundamental research to market-driven innovations.

The implementation of collaborative research within Pillar II allows for sharing risks and optimising efforts and resources. The FP offers a collaboration arena that no single country, entity or a single RD&I actor can provide to companies and their suppliers. It should drive pan-European collaboration, especially through Technology Infrastructures, which are essential for scaling innovations from research labs to industrial applications.

EARTO looks forward to jointly creating an impactful and fit-for-purpose FP10 with the EU Institutions.

In addition, EARTO calls on the EU Institutions to support the key actions defined by the EC's Expert Group in this Report by taking together the following supportive arguments:

No.	Expert Group's Recommendations:	EARTO Reaction:
1. & 2.	Create momentum through a whole-of- government approach & Make Europe globally competitive, secure, sustainable and resilient	 EARTO strongly supports the call for stronger EU RD&I policy linked to EU strategic goals, particularly through a whole-of-government approach. Industrial competitiveness is essential for navigating societal transitions and political challenges, and it hinges on technological leadership. However, recent European initiatives often overlook the interconnectedness of these dimensions, with the notable exception of the EU Chips Act. A more coherent and systematic approach is essential to better align EU industrial policy, the Green Deal, and its digital compass with our RD&I policy. These priorities are interdependent and must be addressed as a cohesive whole. To enable European industry to thrive, it must be supported by excellent RD&I. By strengthening its industrial base, the EU will create an environment conducive to increased private RD&I investment, complementing public funding and fostering a virtuous cycle of innovation.
		See EARTO Recommendations.
3.	Deliver European-added value through a portfolio of four interrelated and interdependent "spheres" of action	 Achieving this vision requires increased public investment in RD&I, which is crucial for developing innovative solutions, securing access to materials within global strategic value chains, and establishing a more efficient regulatory framework for critical technology development and deployment. Europe's industrial policy must prioritise supporting its key industries by enhancing RD&I capabilities. The EG recommendation to increase the budget to €220 billion is a crucial step towards ensuring that Europe can maintain its technology frontier. Major global economies, notably the United States and China, are engaged in a race for technological leadership, significantly increasing their RD&I investments. Europe, therefore, faces a significant risk of falling behind. EARTO support the EG call for stronger commitments by the Member States targets in terms of public RD&I investments to be supported by the various EU programmes such as Horizon Europe, Digital Europe Programme, and European Defence Fund. The EU 3% target of GDP investment in R&D should not be questioned and should rather be increased. In any case, the next Multiannual Financial Framework (MFF) should aim at making it a reality. A concrete roadmap to fulfil such commitment should also be the focus of the upcoming revision of the European Research Area's Policy Agenda by the Council. Higher RD&I spending is not an end in itself but the prerequisite to provide innovative solutions to Europe's most pressing industrial and societal challenges, thereby securing the EU's productivity, competitiveness, and sovereignty for the future. To maximise the benefits of R&D investment at EU level and to increase investments, Europe must promote a comprehensive range of interconnected instruments that facilitate the seamless progression from idea to deployment and provide new insights for future basic research. See EARTO paper on FP10.
6.	Stimulate industrial RD&I investment in Europe	 Today, the industry calls for regulations that are more effective and less burdensome. In this context, to attract extra private investments in Europe, public investments must be seen as high-quality and targeted at precise industrial needs. As an example, forgoing steps further in this direction: in Finland, the Act on Research and Development Funding entered into force on 1 January 2023¹, leading to a significant increase in government R&D funding between 2024 and 2030. The Finnish Parliament has committed that the combined level of private and public R&D spending will reach 4% of GDP by 2030. However, this requires private sector R&D spending to account for at least two-thirds of total R&D spending. Encouraging and involving the private sector is at the heart of the implementation of the Act to reach the target of one-euro public R&D funding encouraging two euros private R&D investment. EARTO welcomes the creation of an Industrial Competitiveness and Technology Council to foster public-private collaborations in strategic sectors such as digital technologies, energy, etc. As done for the ERC President and the EIC President functions, Pillar 2 needs an 'advocate' and a communicator of successes who could be the Chair of such a Council. The EU produces 20% of the world's scientific output, despite having only 6% of the world's population indicating that the European science system is working well. However, the uptake of RD&I results in the EU remains a challenge. We should continue to prioritise improving the EU's ability to translate scientific discoveries into market and non-commercial solutions, as there is a significant gap between scientific research, innovation, and the market. Compared to other

 $^{^{\}rm 1}$ The national plan to raise R&D funding, State Treasury Republic of Finland, 2022

		 major economies, the EU lags behind in exports and job creation in knowledge-intensive services. A critical barrier in this process is the "valley of death", which represents the gap between the development of new solutions and their market adoption. Public-private partnerships, fostering collaborative RD&I, are critical to operationalising strategic links and overcoming this valley. It is critical to strengthen collaborative applied research actions for long-term competitiveness and to establish trusted networks. Continuity and complementary expertise are of particular importance in long-term network operations. Innovations emerge when applied research works with industry to translate new knowledge into practice. Collaborative applied research funding is vital to support medium to long-term research and development that would be a risky investment for businesses. Accordingly, FP10 should focus on excellent cross-border collaborative RD&I, with a strong industrial participation. To do so, the focus on competitiveness must be reinforced in Pillar II, and should similarly be a key driver for activities in Pillar I and Pillar III. See Joint Statement with more than 110 co-signatories for an Ambitious FP10.
8.	Foster an attractive and inclusive RD&I ecosystem in the EU	 EARTO fully endorses the recommendation to implement a strategy for long-term investments in world-class research and technology infrastructures. To further strengthen Europe's RD&I ecosystem, EARTO urges increased funding of €10 billion for Technology Infrastructures through dedicated budget lines within the Framework Programme. This would help attract private co-investment and accelerate the deployment of disruptive technologies. See recent EC Study on Technology Infrastructures.
9.	Drive radical simplification, user orientation and efficiency	EARTO supports efforts to simplify RD&I funding mechanisms, reduce administrative burdens, and create a more agile funding environment. See EARTO paper on FP10 and lump-sums.
12.	Embrace the fact that dual use occurs naturally given the ubiquitous nature of modern technology	 EARTO recognises the growing importance of dual-use technologies. EU security and resilience require a whole-of-society approach and can not only depend on military capabilities. If Europe wants to be more secure and resilient, more investment in dual-use technologies is needed, as the separation between purely civil and military technologies is hardly possible. See EARTO paper on dual-use.

As key players in the European RD&I ecosystem and strategic value chains, RTOs are therefore instrumental in accelerating innovation, reducing costs and risks, enhancing productivity, and supporting sustainable growth. EARTO and its members reaffirm their commitment to supporting the European institutions and Member States in shaping policies that will further boost Europe's competitiveness. Accordingly, EARTO is eager to collaborate with the EU Institutions when shaping and further developing the next EU RD&I policy.

RTOs - Research and Technology Organisations: From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity. RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services' development. RTOs are non-profit organisations whose core mission is to produce, combine and bridge various types of knowledge, skills and infrastructures to deliver a range of research and development activities in collaboration with public and industrial partners of all sizes. These activities aim to result in technological and social innovations and system solutions that contribute to and mutually reinforce their economic, societal and policy impacts.

EARTO - European Association of Research and Technology Organisations: Founded in 1999, EARTO promotes RTOs and represents their interest in Europe. EARTO network counts over 350 RTOs in more than 31 countries. EARTO members represent 150,000 highly skilled researchers and engineers managing a wide range of technology infrastructures.