

Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

Collaboration at Scale: Unlocking Europe’s Innovation Potential

European collaborative research and innovation (R&I) is one of the EU’s greatest strengths. It enables industry, research organizations, and universities to work together at a scale and level of excellence that no program by a single member state could achieve. In a multipolar global environment, EU-level collaboration is indispensable. This collaborative core has always been the hallmark of the Framework Programs (FPs) and must remain the common thread of FP10.

The EU faces a unique structural challenge: the Single Market is not yet fully realized, the Capital Markets Union is incomplete, and national interests across 27 member states often constrain further European integration. Precisely because of these limitations, EU-level R&I initiatives are essential, creating the critical mass needed to compete globally and tackle challenges no individual country could address alone.

FP10 holds great promise, but ambition alone will not guarantee impact. Aligning FP10 with the European Competitiveness Fund (ECF) is commendable, yet its role must remain realistic. Building on decades of experience, Fraunhofer recommends prioritizing collaborative research, simplifying funding, reforming governance, establishing adaptable R&I strategies, and safeguarding budgets to unlock Europe’s full innovation potential. Europe’s global competitiveness and sovereignty ultimately hinge on sustained and reliable R&I investment.

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Invest Where Europe Gains Most: Protect the FP10 Budget and Prioritize Collaborative R&I

The proposed increase in the EU R&I budget is welcome. Yet, once adjusted for inflation, the €175 billion planned for FP10 represent only modest real-term growth. The Draghi report proposed a budget of €200 billion to address the innovation deficit of the EU. Without a substantially higher budget for R&I, Europe will not be able to accomplish the goal of being globally competitive, nor fully realize its growth agenda for prosperity and resilience. Without a strong and stable EU commitment, Europe will remain behind its global competitors.^{1,2} It is therefore essential to safeguard the proposed FP10 budget – both in the negotiation phase and throughout implementation. The R&I community has long emphasized stability and predictability in investment as prerequisites for long-term R&I planning and investment. Policymakers must recognize that only robust grants can effectively support R&I. The ECF relies predominantly on loans, equity, and quasi-equity instruments, which are valuable for later-stage market activities but inaccessible for research-performing organizations (RPOs) such as universities and RTOs. Without sufficient grants, essential parts of the European R&I ecosystem risk being excluded.

This concern is amplified by the distribution of resources across FP10 pillars. The current proposal foresees a smaller share for Pillar II (Global Challenges and European Industrial Competitiveness) compared to earlier FPs and too little investment in Pillar III (Innovative Europe). These pillars represent the true added value of EU R&I policy, as they mobilize cross-border collaboration and industry–research partnerships that no single member state could achieve alone. By contrast, Pillar I (Excellent Science), while important for supporting frontier research, primarily funds single-beneficiary projects. Such funding could in principle be provided at national level. This reinforces the need to protect and prioritize those parts of FP10 that provide unique European added value: collaborative, challenge-driven, and innovation-oriented R&I. Only by safeguarding both the budget and the collaborative core of FP10 can Europe strengthen its competitiveness, resilience, and innovation capacity in the decade ahead. To ensure FP10 delivers maximum impact, it is essential to:

- Safeguard €175 billion R&I budget against reallocations and short-term political pressures.
- Protect and prioritize collaborative R&I in Pillars II and III.

Governance That Delivers: Streamline Governance and Involve Stakeholders

The ECF and FP10 proposals foresee various advisory bodies, but it remains unclear how these will operate in practice. The shift from “examination procedure” to “advisory procedure” allows work programs to be adopted without member state consent. However, member states bring critical knowledge of their national R&I ecosystems. Integrating them into decision-making

¹ The Draghi Report: A competitiveness strategy for Europe, 2024

² https://www.fraunhofer.de/content/dam/zv/en/institutes/international/brussels/finalpapers/2025-03_Securing%20Europes-Future_%20by-Investing-in-Tomorrows-Solutions-Fraunhofer.pdf

ensures that EU priorities are aligned with national strategies and that FP10 complements, rather than duplicates, national initiatives (e.g., the high-tech agenda in Germany³). Governance processes must be designed with and for stakeholders. Early and meaningful involvement of the R&I community — universities, RTOs, innovative industry, including SMEs — is essential to ensure programs address real-world needs and deliver measurable impact. In a similar vein, the proposals provide little to no detail on the Observatory on Emerging Technologies. The issue is further exacerbated by the inconsistent use of the terms critical, emerging, and dual-use technologies throughout the proposals. Key actions to achieve effective governance include:

- Define clear roles and responsibilities at the interface between FP10 and the ECF.
- Include technical experts from relevant DGs and other EU bodies program committees.
- Ensure transparent and timely participation opportunities for the R&I community from the outset.
- Harmonize priorities and procedures for member state engagement to leverage their unique insights.
- Ensure a clearly defined remit, governance and outreach of the proposed Observatory on Emerging Technologies.

Ensure Fair and Transparent Evaluation: Keep Scientific Excellence at the Core of FP10

Scientific excellence is the cornerstone of Europe’s global leadership in R&I, reinforcing its position as a leading R&I destination. New evaluation instruments should be tested, but any weakening of the excellence principle risks undermining credibility. To safeguard quality, overarching principles must remain clear: excellence as the primary benchmark alongside solid financial and legal requirements for eligibility. Within this framework, the evaluation system can and should evolve. Since rigid ex-ante assessments cannot fully anticipate the potential or long-term impact of emerging technologies, evaluations should allow flexibility for applicants to choose technological pathways.

Removing the distinction between Research and Innovation Actions (RIAs) and Innovation Actions (IAs) could streamline processes, but it is unclear how award and ranking criteria would be applied, raising concerns about consistency, fairness, and transparency. Adding criteria and ranking options in work programs, as opposed to the legislation, risks complicating evaluation for applicants, funders, and evaluators. Introducing criteria without clear, demonstrable value increases the administrative burden, reduces predictability, and erodes trust in the system.

The award process needs to:

- Maintain scientific excellence as the central evaluation criterion across all FP10 calls.
- Clarify how ranking criteria will be applied following the removal of the RIA/ IA distinction.
- Introduce additional criteria only when they provide clear, demonstrable value.

³ [High-Tech Agenda - BMFT](#)

- Preserve independent expert evaluation and peer review as the backbone of the assessment process.
- Continue to experiment with novel approaches to evaluation.

Operationalize FP10 and ECF Funding: Simple, Efficient, and Stakeholder-Centered

Maximizing the impact of FP10 and ECF requires not only safeguarding resources, but also ensuring that funding is accessible, practical, and efficiently deployed. Current structural and administrative barriers slow project implementation, increase risks, and limit participation, particularly for RPOs, SMEs, and complex collaborative consortia.

Leverage Synergies Across Funding Instruments

Combining FP10, the ECF, and other EU and national programs is both desirable and necessary to close funding gaps caused by high overhead costs in the participating organizations. This challenge becomes even more acute when large research infrastructures, already burdened with significant overhead lump sums, are excluded from the program-specific overhead rate. However, past implementation practices have been cumbersome: uncoordinated call rounds, differing funding conditions, incompatible accounting systems, and complex cumulative funding rules significantly increase administrative burdens. Co-funding (including within partnerships) diverts time and resources from research, reducing efficiency and limiting the intended added value of multi-source funding.

To this end, the proposed “Competitiveness Seal” lacks significant added value. Experience with the STEP Seal has yet to demonstrate any uptake through private investors, while its link to national funding schemes remains underutilized, and multi-beneficiary projects face the challenge of securing funding from multiple member states. Most seals are awarded to countries with lower cohesion funding due to a structural mismatch that is difficult to overcome.⁴ Without a clear purpose and likelihood of uptake, such instruments risk becoming symbolic rather than impactful. Key measures to operationalize synergies effectively:

- Clarify cumulative funding mechanisms to avoid legal uncertainty.
- Reduce bureaucracy and better coordination of national co-financing and EU funding.
- Develop instruments (possibly in combination with a small starting grant, e.g. the Horizon Booster) to make underfunded proposals more attractive to private investors.

Ensure Fair Funding Rates for Broad Participation

While FP10 funding rates are generally favorable, significant gaps remain, particularly for technology- and infrastructure-intensive research (e.g., in cleanrooms). Maintaining funding rates of 100% direct costs plus 25% overhead lump sums in collaborative and partnership projects is critical to ensure broad and inclusive participation. Experience from previous programs

⁴ European Commission, Report from the Commission to the European Parliament and the Council: Investing in the competitiveness and technological leadership of the EU, COM(2025) 421 final, Brussels, 16 July 2025, https://strategic-technologies.europa.eu/document/download/76cfe54b-4046-477f-8193-0b9945203844_en

has shown that, even with this level of support, technology-driven and infrastructure-heavy projects often struggle to cover all indirect costs. Any departure from this established funding practice risks undermining participation, discouraging SMEs and other resource-constrained actors, limiting the diversity and competitiveness of proposals.

- Fund excellent science with fair funding rates for non-profit organizations of 100% of direct costs plus 25% overhead.
- Apply this funding rate to R&I in all ECF policy windows.

Design a practical “Single Rulebook”

The idea of a “single rulebook” is appealing: it promises transparency, consistent standards, and reduced administrative overhead. However, stricter provisions on eligibility risk imposing restrictions that are ill-suited to the specific needs of R&I projects, potentially complicating access to materials, and the exploitation of results. The modular construction of the rulebook could create new layers of complexity, and it is not yet clear who will ultimately decide on the additional rules for R&I, raising questions about governance, accountability, and trust. To implement R&I projects successfully, it is vital to:

- Harmonize rules across programs.
- Ensure rules do not impose undue restrictions to R&I.
- Avoid unnecessary complexity in the modularity of the rule book.
- Clarify rule-setting, decision-making, and accountability.
- Provide consistent guidance and training for applicants, funding agencies, and evaluators for smooth implementation.

Improve Efficiency Without Overburdening Stakeholders

Simplification has long been a stated priority; the Commission must now effectively implement it to make EU funding more accessible and efficient for participants. However, simplification must not come at the expense of the beneficiaries or project quality. Shorter legislative texts are not inherently simpler; they can create uncertainty that must later be clarified through secondary legislation, guidance, or ad hoc interpretations. This leaves participants (and funding agencies) with additional complexity and the risk of inequality through different interpretations instead of a reduced workload. In addition, Europe’s challenges cannot be tackled by any discipline alone or through narrowly defined calls. Interdisciplinary, bottom-up calls that allow flexibility in scientific and technological approaches are essential for fostering innovation and yet unexpected synergies. Projects should remain adaptable, capable of integrating the latest technological advances even when these diverge from the original work program priorities.

At the same time, these calls should align with strategic EU priorities, ensuring that R&I projects contribute directly to key goals, from competitiveness and sustainability to technological sovereignty. By combining thematic openness with strategic focus, the EU can maximize both scientific excellence and societal impact. To sustain this, policy windows must remain flexible and adaptable, ensuring that Europe continues to generate fresh opportunities and does not meet 2034 with an empty innovation pipeline. Key considerations to mobilize stakeholders around European priorities:

- Clarify objectives and criteria in open topics.
- Balance funding formats, e.g., open topics with flexibility and targeted calls.
- Experiment with new funding formats (e.g., based on EIC Open Challenges) in Pillar II⁵.

Streamline and Reduce Bureaucracy

While participants adapted well to new processes in the FPs, their early involvement is crucial to ensure that proposed changes are realistic, practical, and aligned with their operational realities. For example, the proposed reduction of the time to grant to seven months is a welcome step forward. However, compressing the grant agreement phase to two months, while maintaining a five-month evaluation period on the Commission's side puts undue pressure on applicants, particularly in complex projects with large consortia or newcomers with limited administrative capacity. This reflects a broader pattern in which simplification costs are externalized to participants. To achieve genuine efficiency gains in the time to grant, improvements must also focus on internal Commission procedures:

- Transfer proposal data automatically into the Grant Agreement and F&T Portal.
- Elimination of redundant forms and requests for information already submitted.
- Harmonize guidance across all funding instruments to minimize interpretation errors and repeated verification.

Make Funding Practical and Fair

Effective simplification cannot happen without listening to those running the projects since effects on their internal processes are often not obvious from an outside perspective. Simplified funding models, such as lump-sum approaches, can reduce the administrative burden, but only if implemented flexibly and with attention to context. While a one-size-fits-all approach may work for smaller consortia of less than ten partners, larger and more complex projects face significant challenges. The current "all or nothing" disbursement rule in single work packages creates disproportionate risk: a single underperforming partner can jeopardize payments for the entire consortium, which increases the administrative burden on coordinators and work package leaders and shifts risk management from the funding body to individual participants. This undermines fairness and discourages participation in larger, ambitious, high-risk projects.

Persistent uncertainty around audits and activity verification further compounds these issues. Today, many participants are forced to maintain in parallel hourly reporting alongside lump-sum accounting due to unclear or lack of guidance. EU funding rarely covers full project costs, necessitating additional funding sources that adhere to standard accounting practices.

As a result, the intended simplification of procedures remains unrealized, placing unnecessary strain on those responsible for implementing the projects. To optimize lump-sum funding:

- Allow partial payments to avoid penalizing the consortium due to one partner's shortcomings.
- Provide clear, harmonized guidance on activity verification.

⁵ European Commission: Directorate-General for Research and Innovation, *Align, act, accelerate – Research, technology and innovation to boost European competitiveness*, Publications Office of the European Union, 2024, <https://data.europa.eu/doi/10.2777/9106236>

- Continue to calculate personnel costs based on actual hours worked.
- Use transparent, validated, and auditable accounting systems.
- Align accounting systems with national regulations and institutional processes.

Make Partnerships in FP10 More Strategic and Impact-Driven

Partnerships are a central instrument in European R&I funding, with the potential to mobilize private investment, strengthen industrial leadership, and accelerate innovation across Europe. Close integration with the ECF can enhance the strategic focus of partnerships by connecting them to specific policy windows and mobilizing additional private investment. However, the future of the European Partnership landscape remains unclear due to inconsistencies between the proposed Regulation and Specific Program. The Regulation speaks of public-private, public-public, and public-public-private partnerships. In contrast, the Specific Program establishes strict selection criteria, which also require further clarification, e.g., on the arbitrary minimum involvement of five member states. It is unclear whether this will lead to fewer partnerships, stricter eligibility requirements, or both, nor how existing partnerships will continue.

Phasing out co-funded partnerships is a reasonable step, provided that their relevant topics are effectively integrated into the remaining partnership types. In this context, institutionalized and co-programmed partnerships need long-term continuity as they facilitate well-established and smoothly running cooperation between RPOs and industry. Partnerships must remain outcome-focused, aligned with industrial and societal priorities. Their continued relevance should be assessed using previously agreed common indicators, consistently reported and applied to decisions regarding the continuation or phasing out of partnerships. Cooperation across partnerships should be formalized and incentivized to ensure practical synergies, rather than existing only on paper.

Experience under Horizon Europe demonstrates a persistent gap between regulatory ambition and practical implementation. Although the Council Regulation establishing the Joint Undertakings sought to unify approaches, in practice multiple partnership models have emerged, creating unnecessary complexity. It is essential to design realistic and transparent financing mechanisms, which must be co-developed with both industry and the research community. RPOs generally cannot provide cash contributions, and the financial implications for industry must be carefully assessed in advance to ensure feasibility and proportionality. National co-financing should be actively encouraged but must be carefully executed to avoid creating additional burdens for applicants (see above).

Tripartite collaborations by default could, in principle, provide a feasible governance model. However, they remain a highly complex funding structure. To date, neither member states have demonstrated a clear understanding of how such models should function, nor has the Commission offered sufficient guidance on their practical implementation. A transparent definition of roles and responsibilities is urgently needed: the Commission and member states must confine themselves to strategic guidance and predictable funding mechanisms, avoiding micromanagement that unnecessarily increases burdens for participants.

The administrative and financial implications of coordinating partnerships are substantial. Proposals must be processed at the EU level from submission to Grant Agreement, while at the same time managed separately at national levels through distinct applications and funding decisions and additionally coordinated with industry via co-financing contracts. Participants face the challenge of calculating funding rates and required co-financing across multiple sources, while also navigating different contracts, conditions, and reporting obligations⁶. Non-profit organizations face additional administrative burdens in co-funded partnership projects, such as verifying that no profit has been made. Combining different funding models, like lump-sum and actual cost-based funding, adds further uncertainty. Without clear rules on how funding adjustments are applied, participants face financial risks and inequities, making project participation more complex and burdensome. These overlapping requirements not only slow down project initiation but also increase the risk of errors and discourage participation. Instead of simplifying participation, the model risks deterring stakeholders. In close consultation with stakeholders to ensure practicality and efficiency, legislators should explore measures such as:

- Harmonize rules and contracts in standardized contract template.
- Develop common definitions, reporting formats, and timelines.
- Implement all funding processes from proposal submission to calculation of funding rates, co-financing shares, eligibility, execution, and reporting in single entry point (e.g. F&T Portal).
- Designate one funding authority as the single point of contact to streamline communication and compliance.

Unlock Europe's Innovation Potential Through a Revamped EIC

To make Europe a true innovation leader, research excellence must be better connected to entrepreneurial skills and commercialization pathways. The EU must incentivize the creation, growth, and retention of start-ups, spin-offs, and scale-ups to ensure that Europe captures the benefits of its own innovative technologies and business models. As Draghi has recently underlined, centres of excellence and high-risk, high-reward projects must be reinforced by strong industry linkages to academic institutions to turn research into real applications.⁷ However, funding for collaboration in the EIC remains limited and coordination between key actors is weak: formal links exist mainly on paper. Although a list of eligible Pillar II projects has been established, real alignment and interaction are still limited. Without genuine coordination,

⁶ Case Example: JU Chips Projects (excluding the CHIPS Pilot Line)

Under the current framework, EU funding covers 35% of eligible costs (including a 25% overhead rate). German national co-funding is provided on a 1:1 basis with the EU contribution. For non-profit institutions, this combined funding level is demonstrably inadequate, as it leaves a substantial share of costs uncovered. A more sustainable model could draw on the practice established under the European Defence Fund (EDF), where participants submit an *Indirect Cost Methodology Declaration* in advance, allowing full reimbursement of overhead costs. Alternatively, the overhead funding rate for non-profit institutions could be increased to 50%. While this would not achieve full cost coverage, it would represent a significant improvement in financial viability and ensure that public research organizations can participate on a fair and equitable basis.

⁷ https://commission.europa.eu/document/download/0951a4ff-cd1a-4ea3-bc1d-f603decc1ed9_en

synergies across programs cannot be realized, resulting in inefficiencies and missed opportunities. The EIC can be the beacon of this transformation – given the following prerequisites:

- Strengthen synergies with Pillar II and partnerships to translate collaborative, challenge-driven R&I into market-ready solutions.
- Increase support for EIC Pathfinder (TRL 1–3/4) and Transition (TRL 4–6) to bridge frontier research with marketable applications.
- Rebalance the portfolio with a stronger emphasis on research and transfer (Pathfinder, Transition).
- Open the EIC Accelerator for multiple transfer pathways (licensing, partnerships, collaborations).
- Deliver genuine simplification of procedures in the Plug-in scheme in collaboration with member states and their implementing bodies.
- Shift EIT activities to the EIC.

European Technology Infrastructures as Drivers of Industrial Transformation

Fraunhofer and other European RTOs operate high-end technology infrastructures (TI) where researchers and companies work side by side, conducting research with industry, for industry. TIs are embedded in specific industrial ecosystems and function as real-world laboratories where questions central to industrial transformation can be explored, tested, validated, and translated into market-ready innovations. These infrastructures require substantial capital (CAPEX) and operational (OPEX) investments. As they must remain state-of-the-art infrastructures to develop tomorrow's solutions, continuous maintenance and regular upgrading are essential. A dedicated, grant-funded European instrument for TIs is therefore needed, one that builds and sustains facilities with cross-border and European added value. Such an instrument should enable the creation of pilot lines, testbeds and demonstrators that no single member state could afford alone. Transparent, inclusive, and straightforward governance is crucial. All relevant stakeholders, including member states, should be involved to ensure fair access, accountability, and strategic alignment. Future TI needs should be defined in close cooperation with industry and closely linked to existing European partnerships, ensuring that investments reflect real technological and market demands.

Finally, the diversity in TIs across Europe needs to be acknowledged. National and regional investments have created a rich and varied TI landscape, with business models tailored to specific ecosystems. Harmonization of access conditions at EU level or the imposition of uniform requirements that disregard national specificities risk undermining the effectiveness of existing infrastructures. Instead, FP10 should respect national specificities while fostering interoperability and collaboration where genuine European added value can be achieved.

Legal Certainty: Safeguard Intellectual Property in FP10 and ECF

IP rules are a cornerstone of R&I collaboration. However, the proposed provisions on intellectual property rights (IPR) appear less detailed than in previous FPs, creating uncertainty about implementation, while at the same time establishing greater commitments for beneficiaries. One key concern relates to background knowledge. Retaining the “needed” principle ensures that only knowledge essential for project execution or exploitation is subject to access rights. Removing this principle would have significant consequences: it could subject all pre-existing knowledge to access rights, increase the administrative burden of IP management for participants, and undermine trust, thereby complicating cooperation, particularly with industry.

Another concern is the alignment with the ECF. The ECF IP rules are different from those under FP10, through provisions for EU ownership or control of rights rather than supporting independent exploitation by beneficiaries. This divergence risks creating legal and operational friction between programs and funding instruments, reducing clarity for participants and exposing them to undue legal and other risks. Recommendations to safeguard IP and ensure coherence:

- Maintain the “needed” principle for background knowledge.
- Set reasonable limits on access rights and keep IP management effort as low as possible.
- Align FP10 and ECF IP rules to avoid contradictions and ensure consistency.
- Focus on empowering beneficiaries: funding should strengthen their innovation capacity and enable autonomous exploitation of results.
- Provide legal clarity and guidance on IP management, particularly in mixed-finance or partnership projects, to reduce administrative burdens and legal risks.

Turn Dual-Use Potential into a European Advantage

The ambition to strengthen synergies between civil and defense domains, including in R&I, is commendable. However, without clear guidance, RPOs, SMEs, start-ups and scale-ups may have to take sole responsibility for navigating this field resulting in fragmented implementation and underutilized opportunities for meaningful impact. Support for technologies with dual-use potential requires coordinated, well-calibrated action: clear guidance, alignment across DGs, and close cooperation with member states. Otherwise, an entirely open approach could fail to accelerate market uptake and reinforce “the valley of death” in sensitive areas such as security, defense, and space.

- Explore a flagging mechanism to identify projects with dual-use potential while keeping the administrative burden to a minimum.
- Provide targeted support instruments to foster dual-use technologies through R&I and connect civil and defense R&I communities.
- Implement spin-in and spin-out calls to encourage knowledge transfer for civil and defense applications.
- Utilize procurement approaches to create pathways for market uptake of dual-use innovations.