



Position Paper by QuIC on The European Innovation Act

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EXECUTIVE SUMMARY

Europe excels in scientific research but continues to lag in turning that knowledge into globally competitive companies. The forthcoming **European Innovation Act (EIA)** is a once-in-a-generation opportunity to address this gap, building a true single market for innovation and enabling Europe to compete with the US and China.

This position paper, prepared by the **European Quantum Industry Consortium (QuIC) Funding & SME Working Group**, draws on consultations across startups, corporates, investors, universities, RTOs, and policymakers. It highlights persistent barriers – fragmented regulation, underdeveloped capital markets, limited scale-up pathways, weak IP valorisation, and talent shortages – and sets out practical recommendations to overcome them.

At its core, we believe the EIA must

- **Simplify and harmonize regulation** by cutting red tape, expanding regulatory sandboxes, and creating a predictable EU-wide framework for startups and deep-techs.
- **Close the scale-up funding gap** by expanding the EIC and establishing a Scale-Up Europe Fund, while crowding in private and institutional capital with de-risking mechanisms.
- **Strengthen infrastructure and supply chains** with pan-European R&I networks, shared deep-tech foundries, and strategic procurement to reduce dependencies.
- **Accelerate commercialization** through mission-driven demonstration projects, public procurement of innovation, and stronger IP exploitation mechanisms.
- **Empower talent and mobility** with better research careers, industry-academia pathways, and an EU-wide innovation visa to attract and retain global innovators.
- **Enhance international collaboration with safeguards** – fostering openness and standards leadership while protecting Europe’s strategic technologies.
- **Institutionalize stakeholder engagement** so industry, investors, and academia have structured input into governance and implementation.

QuIC emphasizes that quantum technologies exemplify both Europe’s research strength and commercialization weaknesses – and that targeted action in this domain can serve as a test case for the broader innovation ecosystem.

The message is clear: Europe has the knowledge, talent, and industrial base, but needs bold policy action to unlock its full innovation potential. The EIA must be ambitious, mission-driven, and execution-focused – ensuring that Europe does not remain a laboratory for others’ success but builds its own global champions.

1. Context

The European Innovation Act (EIA) is a forthcoming EU initiative aimed at creating an innovation-friendly environment to help innovative companies grow and compete globally. It is a central pillar of the EU's new Startup and Scale-up Strategy, intended to close the innovation gap with the US and China by accelerating the path from research to market (1). Key objectives include simplifying complex regulations, improving access to finance, and fostering cross-border cooperation for innovation. The urgency is clear: Europe has world-class research but lags in commercialization – as highlighted by recent high-level reports, no new European company with >€100 billion market cap has emerged in decades, while the US produced multiple trillion-dollar tech firms in the same period.

This position paper, developed by the European Quantum Industry Consortium (QuIC) Funding and SME Working Group, examines the EIA from the perspective of Europe's quantum technologies sector – a quintessential deep-tech domain – and offers actionable recommendations to EU policymakers. It outlines how QuIC, as the collective voice of Europe's quantum industry, envisions the EIA can support a robust innovation ecosystem across stakeholders. QuIC's role as a pan-European industry association uniting **SMEs / start-ups & scale-ups, large corporations, investors, research organisations and academia** in the quantum industry positions it uniquely to provide insights on barriers and opportunities across the full innovation value chain.

IMPORTANT NOTES

(1) ScienceBusiness.net - <https://sciencebusiness.net/news/research-and-innovation-gap/zaharieva-sets-out-plans-european-innovation-act>

2. Scope and Methodology

This paper consolidates input gathered through QuIC's Funding & SME Working Group consultations, stakeholder workshops, and analysis of public reports. It reflects perspectives from a broad range of stakeholders in the quantum innovation ecosystem – from startups and universities to investors and policymakers – to identify common challenges and proposals. These insights were complemented by evidence from recent EU studies and position papers (e.g. CESAER's recommendations, the Letta and Draghi reports, and other industry analyses) to ensure recommendations are **evidence-based** and aligned with broader European innovation trends.

The scope is focused on EIA-relevant themes such as regulatory simplification, funding mechanisms, scale-up support, intellectual property (IP) management, talent development, and collaboration frameworks. For each stakeholder group identified, we review the EIA's implications from that angle, highlight specific barriers and opportunities, and formulate concrete policy recommendations. This structured approach ensures the paper speaks directly to the needs of each group while driving home cohesive messages for Europe's innovation policy.

3. Analysis and Discussion of Stakeholder Feedback

3.1 Introduction and Context

The stakeholder consultation carried out for this position paper revealed both a strong alignment on Europe's systemic innovation challenges and nuanced priorities specific to different actors across the innovation ecosystem. While deep-tech start-ups and SMEs emphasise their need for patient capital and simplified regulation, large enterprises focus on scaling opportunities and talent pipelines. Investors underline the shortcomings of Europe's financial architecture, whereas universities and RTOs stress the need for stronger pathways from research to market. EU institutions, industry bodies, and global partners highlight governance, policy coherence, and strategic positioning.

Despite these differences, the consultation confirms a broad consensus: the European Innovation Act (EIA) must be bold, coherent, and implementation-driven if Europe is to translate scientific excellence into sustainable economic leadership. As Mario Draghi warned in his report on European competitiveness, Europe has been "trapped in a static industrial structure," despite world-class knowledge and talent. Enrico Letta similarly called for a "fifth freedom" of knowledge and innovation, urging Europe to treat knowledge mobility as a fundamental principle of integration. Stakeholders echoed these calls, framing the EIA as a once-in-a-generation opportunity to close structural gaps and ensure Europe does not remain merely a laboratory for others' success.

3.2 Barriers and Opportunities

Across stakeholder groups, several **recurring barriers** emerged:

- **Regulatory fragmentation and bureaucracy:** Divergent national frameworks, overlapping EU rules, and heavy administrative processes delay innovation and increase costs. This affects all actors, from start-ups navigating certification to universities administering grants.

- **Funding gaps and risk aversion:** Europe attracts only a small share of global venture capital (around 5% compared to ~50% in the US) and lacks sufficient late-stage, patient investment for deep tech. Investors are constrained by fragmented capital markets, and start-ups often face relocation pressures due to underfunding.
- **Weak commercialisation and scale-up pathways:** Knowledge valorisation, technology transfer, and procurement mechanisms remain underdeveloped. As CESAER has noted, Europe risks falling irreversibly behind if it cannot scale frontier research into impact.
- **Talent shortages and career instability:** Researchers face precarity and limited mobility between academia and industry. Visa processes are slow, and entrepreneurial careers lack cultural and financial support.
- **Strategic dependencies and fragile supply chains:** Reliance on non-EU suppliers for critical inputs (e.g. semiconductors, cryogenics, specialised materials) creates vulnerabilities, particularly in areas like quantum technologies.

At the same time, stakeholders identified **shared opportunities** under the EIA:

- **Simplification and harmonisation** through a "28th regime," regulatory sandboxes, and outcome-based regulation.
- **Expansion of deep-tech finance**, including a Scale-Up Europe Fund, stronger EIC capacity, tax incentives for investors, and mechanisms to mobilise institutional capital.
- **Strengthening of infrastructure and supply chains** by investing in pilot lines, foundries, and pan-European R&I networks.
- **Acceleration of market uptake** via mission-driven demonstration projects, pre-commercial procurement, and EU-led standardisation.

- **Empowerment of talent** with improved career models, enhanced academia–industry mobility, and a European Innovation Visa.
- **Enhanced international collaboration with safeguards**, balancing openness with strategic autonomy and reciprocity.
- **Structured stakeholder engagement** in governance, ensuring policies remain inclusive, representative, and adaptive.

3.3 Policy Recommendations

Drawing from this feedback and aligning with broader European strategic analyses, QuIC identifies several imperatives for the European Innovation Act:

1. Simplify and Harmonise Regulation

- Implement a pan-European startup regime with unified rules for company formation, taxation, and compliance.
- Expand regulatory sandboxes across sectors, enabling real-world testing of emerging technologies.
- Adopt outcome-based, tech-neutral frameworks that encourage experimentation and reduce fragmentation.

2. Mobilise and Diversify Finance

- Increase the budget and scope of the EIC, including ring-fenced support for quantum and other deep-tech domains.
- Launch the Scale-Up Europe Fund to co-invest with private venture capital in large late-stage rounds.
- Adjust prudential rules and tax frameworks to incentivise institutional and private investment, in line with Draghi’s call to unlock Europe’s “sleeping capital.”

3. Strengthen Infrastructure and Supply Chains

- Develop interconnected networks of testbeds, foundries, and pilot lines to provide SMEs and RTOs with affordable access to advanced facilities.
- Map critical supply chains and incentivise local production of strategic components, reducing reliance on non-EU suppliers, in line with the EU’s industrial alliances.

4. Accelerate Commercialisation and Market Uptake

- Expand public procurement of innovation and require prime contractors to integrate SMEs and RTOs into supply chains.
- Enhance technology transfer offices and IP valorisation mechanisms to ensure that publicly funded research generates European economic value.
- Drive European leadership in standardisation and certification, echoing CESAER’s call to link frontier research with global market impact.

5. Empower Talent and Mobility

- Improve research careers with longer-term positions, tenure-track options, and stronger academic recognition of entrepreneurial activity.
- Facilitate academia–industry mobility through dual appointments, sabbaticals, and industrial PhDs.
- Introduce an EU-wide Innovation Visa, supported by targeted scholarships and return schemes for European talent abroad.

6. Embed International Collaboration with Safeguards

- Broaden association to Horizon Europe and launch joint missions with like-minded partners.
- Promote interoperability and mutual recognition of standards globally while protecting Europe's strategic technologies, building on Letta's and Draghi's recommendations for balanced openness.

7. Institutionalise Stakeholder Engagement

- Create permanent EIA advisory councils that bring together industry associations, start-ups, universities, and investors to inform implementation.
- Ensure transparent monitoring and evaluation of the Act through regular scorecards and industry-led data collection, as already suggested by several industry bodies.

3.4 Stakeholder-Specific Angles

While these recommendations reflect strong convergence, the consultation also revealed priorities unique to specific groups:

- **Deep-Tech Start-Ups and Scale-Ups:** Demand simplified regulatory regimes, SME-friendly procurement, access to foundries, and long-horizon capital tailored to hardware development.
- **Large Enterprises:** Seek harmonised regulation, incentives for corporate venture capital, and mechanisms to partner with SMEs and RTOs, alongside a focus on skills and industrial autonomy.
- **Early- and Late-Stage Investors:** Emphasise completion of the Capital Markets Union, harmonised tax treatment, stronger exit channels, and guarantee schemes to attract institutional investors.

- **Innovation Hubs and Universities:** Call for proof-of-concept funding, stronger technology transfer offices, and incentives rewarding entrepreneurial activity within academia.
- **Research and Technology Organisations (RTOs):** Highlight the need for EU-wide demonstration programs, coordinated infrastructure roadmaps, robust IP valorisation, and a stronger role in standards-setting.
- **EU Institutions and Member States:** Stress coherence between EU and national policies, subsidiarity, and mechanisms such as an Innovation Pact to align reforms.
- **Industry Bodies and Associations:** Advocate for structured advisory roles, resources for consortium-building, and responsibilities in disseminating and monitoring EIA measures.
- **Global Partners and Cooperation:** Support mutual recognition of standards, international talent schemes, and joint missions, while cautioning against strategic leakage.
- **Talent and Researchers:** Demand better career stability, cultural change around risk-taking, improved academia-industry pathways, and more inclusive policies to harness diversity.
- **Suppliers and Buyers:** Stress the urgency of mapping dependencies, creating lead markets through procurement, and fast-tracking interoperability standards to de-risk adoption.

In sum, the stakeholder feedback underscores that the European Innovation Act is widely seen as an opportunity to break Europe's cycle of scientific strength but commercial weakness. Stakeholders agree on the need for simplification, patient finance, stronger value chains, and empowered talent. Where perspectives diverge, they do so in ways that are complementary rather than contradictory, offering policymakers a clear mandate: to design an Act that is systemic, bold, and capable of aligning Europe's diverse innovation actors behind a shared vision of competitiveness and technological sovereignty.

4. Conclusions and Overarching Policy Recommendations

In conclusion, the European Innovation Act represents a once-in-a-generation opportunity to reshape Europe's innovation landscape and ensure that scientific excellence translates into societal and economic leadership. Across the diverse stakeholder perspectives explored – from agile startups to large enterprises, from academia to investors, and from public sector to global partners – a common theme emerges: Europe must act boldly, cohesively, and with urgency. The analysis in this paper reveals both shared and unique challenges faced by stakeholders, but also a strong alignment on the solutions needed. Simplifying processes, unifying the market, investing in people and ideas, and forging partnerships are recurring imperatives.

Overarching Recommendations: The European Innovation Act must be bold in addressing Europe's chronic innovation gap. Based on QuIC's analysis across stakeholders, we recommend the following overarching priorities:

- 1 **Simplify and Harmonize Regulation:** Establish a unified startup framework and expand regulatory sandboxes to reduce fragmentation, cut red tape, and create a predictable single market for innovators.
- 2 **Close the Scale-Up Funding Gap:** Expand and diversify deep-tech funding instruments (EIC, Scale-Up Europe Fund, co-investment schemes), mobilize institutional capital, and incentivize private investment to provide patient, risk-tolerant capital.
- 3 **Strengthen Infrastructure and Supply Chains:** Invest in interconnected European R&I infrastructure networks, deep-tech foundries, and critical supply chains, ensuring SMEs and RTOs have affordable access to advanced facilities.

4 Accelerate Commercialisation and Market

Uptake: Use public procurement, IP valorisation, and standards leadership to bridge lab-to-market gaps, create lead markets in strategic sectors, and de-risk adoption for buyers.

5 Empower Talent and Mobility:

Improve research career paths, expand skills programs aligned with industry, introduce an EU-wide innovation visa, and support academia-industry mobility to attract and retain top talent.

6 Enhance International Collaboration with

Safeguards: Promote openness through global partnerships and standard-setting, while ensuring reciprocity and protecting Europe's strategic technologies.

7 Institutionalize Stakeholder Engagement and

Governance: Embed industry bodies, investors, and innovation hubs in structured advisory roles, align EU and Member State policies, and ensure continuous monitoring and evaluation of the EIA's impact.

By implementing these overarching recommendations, EU policymakers can ensure that the European Innovation Act not only addresses the immediate needs of today's innovators but also builds a foundation for sustainable, long-term innovation excellence. As Mario Draghi cautioned, Europe has the talent and knowledge but has been **"trapped in a static industrial structure"** – the EIA is our chance to break free of that trap. Likewise, Enrico Letta's vision of a reinvigorated Single Market with a fifth freedom of knowledge reminds us that deep integration and bold thinking are required. QuIC and its partners stand ready to work with EU institutions to make this vision a reality, ensuring Europe's quantum and broader deep-tech industries thrive in the years ahead.

5. About QuIC and Contributors

The European Quantum Industry Consortium (QuIC) is a non-profit pan-European association founded in 2021 that represents the quantum technology industry. QuIC's mission is to **boost Europe's competitiveness in quantum technologies** by uniting stakeholders across the ecosystem – including startups and SMEs, large tech companies, investors, academic institutions, and RTOs. Acting as “the voice” of the European quantum industry, QuIC collaborates closely with EU institutions and national initiatives to shape strategic directions, address common challenges (such as standardization, IP, and workforce development), and accelerate the commercialization of quantum research. QuIC is part of the EU's Quantum Flagship program, ensuring industry input feeds into Europe's quantum R&D efforts.

This position paper is a product of QuIC's **Funding and SME Working Group**, which focuses on improving the landscape for quantum startups and scale-ups in Europe. The working group comprises representatives from quantum startups, established companies, venture capital, and innovation support organizations within QuIC's membership. Under the guidance of the QuIC Executive Team and Governing Board, the group gathered insights through internal surveys, member workshops, and dialogue with external experts.

This outline was prepared by the QuIC Funding & SME Working Group as a preparatory document. It draws on publicly available sources and stakeholder consultations to ensure accuracy and representativeness. References to external analyses (e.g., CESAER's recommendations, Science|Business reports, Draghi and Letta high-level reports, QuIC Strategic Industry Roadmap and QuIC's own white papers) are included to support the points made and provide context for the recommendations.

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