Seizing Europe's innovation moment: Empowering science and technology through the Innovation Act

To remain competitive in an increasingly complex and fast-evolving world, Europe must act decisively to lead in science, technology, and innovation. The forthcoming European Innovation Act presents a once-in-a-decade opportunity to build a robust, integrated innovation ecosystem that links frontier research with start-ups, scale-ups, mature industries, and broader society. Universities of science and technology are a central component of such ecosystems, delivering the scientific knowledge, talent, and technologies that fuel Europe's competitiveness, strategic autonomy, prosperity, and societal resilience.

As outlined in the European Commission's Competitiveness Compass and CESAER's position on Competitiveness, reindustrialisation and strategic autonomy, critical gaps persist. Europe suffers from insufficient stable investment in frontier research and talent development and a lack of systemic support for scaling scientific discoveries into impact. Without urgent action, Europe risks falling irreversibly behind in the global race for technological leadership.

To meet these challenges, the European Innovation Act must adopt a bold, systemic approach across the full knowledge value chain. This requires unlocking the full potential of the continent by realising the 'fifth freedom' proposed in the Letta report, ensuring synergies with the European Research Area (ERA) and the forthcoming ERA Act, and substantially reinforcing the European framework programme for research and innovation. At the same time, the Innovation Act must address persistent bottlenecks in regulation, funding, skills, and infrastructure.

In this position, the over 50 leading universities of science and technology united in CESAER present seven key recommendations to unlock the full potential of Europe's innovation ecosystems through the Innovation Act:

1. Innovative approaches and tools – support mechanisms bridging development through the full innovation continuum, from frontier research to technological impact.
2. Mobilising more private capital – unlock patient, risk-tolerant investment in deep tech and university spinouts.
3. Skills and talent development – create modern, attractive careers and open mobility pathways.
4. Coordination of research and innovation policies – ensure coherence across EU instruments and governance levels.
5. Radical simplification – reduce bureaucratic burden and complex regulations and empower researchers and innovators.
6. Strategic autonomy and societal goals – align innovation with sustainability, resilience, and prosperity.

7. Strengthening global collaboration – preserve openness and global leadership through partnerships.

With these recommendations, we aim to help shape an ambitious Innovation Act that enables Europe's innovators, reinforces its scientific foundation, and delivers on the continent's economic, environmental, and societal aspirations.

1. Innovative approaches and tools – closing the gaps

Leadership in frontier scientific knowledge and key technologies—including deep tech, cleantech, and biotech—requires a holistic approach that engages and bridges the full knowledge value chain, from early-stage frontier research to technological innovation and real-world impact. A fragmented or unbalanced approach risks undermining the entire research and innovation system.

We call on the EU institutions to:

➢ Support the full innovation continuum: Address the long time-to-market typical for deep tech by ensuring legal and regulatory frameworks support early-stage development, proof-of-concept, verification, piloting and scale-up. Austria's FFG spinout model is one mechanism worth replicating.

➢ Link sandboxes with market access: Include mechanisms that tie sandbox participation to public procurement fast-tracks, certification support, or scale-up funding to accelerate real-world usage.

➢ Ensure supportive European legal frameworks: Develop enabling legal conditions across Europe that facilitate and support the commercialisation of research, technology transfer, and entrepreneurship. This includes promoting frameworks that encourage researchers, founders, and tech talent to bring their ideas to innovation and support seamless cross-border collaboration and scaling—while fully respecting national IP ownership models and university autonomy.

➢ Avoid one-size-fits-all models: Rather than imposing harmonisation, support the development of flexible model clauses and guiding principles for cross-border IP collaboration, in line with best practices and the autonomy of universities.

This balanced, systemic vision must be anchored in a substantially expanded and dedicated European framework programme for research and innovation, engaging the entire knowledge value chain.

2. Mobilising more private capital

Europe's innovation-driven enterprises—especially university spinouts and deep tech ventures—are held back by chronic underinvestment and risk-averse capital markets. With only 5% of global VC raised in the EU, urgent measures are needed. Without better access to long-term, patient capital—the kind that allows time for breakthrough innovations to mature—Europe's most promising innovations will scale elsewhere.

We call on the EU institutions to:

➢ Strengthen the EIC as the EU's investment engine: Scale up the EIC Fund, particularly the EIC transition & accelerator funding, simplify access, and enhance its role as a cornerstone of future funds aimed at boosting competitiveness.

- ➢ Unlock long-term, patient capital for deep tech: Develop blended finance and equity models tailored to long development cycles and complex technologies, connected to the Startup & Scale-up Strategy.
- ➢ Incentivise early-stage investment: Introduce legal measures and fiscal incentives to stimulate private capital in seed and pre-seed stages.
- ➢ Foster go-to-market readiness: Include legal recognition and support mechanisms for early-stage ventures focused on customer validation, sales-readiness, and internationalisation.

Universities of science and technology are crucial enablers and accelerators of these efforts—if provided access to adequate innovation financing.

3. Skills and talent development

Europe must act now to build and retain the talent needed for scientific and technological leadership. Failure to do so will weaken Europe's long-term scientific and innovation capacity.

We call on the EU institutions to:

- ➢ Scale up researcher and interdisciplinary training and mobility: Strengthen MSCA while ensuring it remains exclusively bottom-up, enhance Erasmus+ and refocus EIT on training and education of talent and on innovation ecosystems.
- ➢ Elevate research careers as a European priority: Promote attractive, stable, and mobile research and innovation careers.
- ➢ Strengthen connections between PhDs and industry: Recognise and harmonise frameworks supporting engagements of doctorates with industrial partners, ensuring cross-border employability and fiscal neutrality across member states.
- ➢ Support embedded innovation roles: Create mechanisms to support Entrepreneurs in Residence and innovation scouts within universities, also outside the framework of European funding mechanisms.
- ➢ Simplify talent access: Introduce fast-track visas and recognition of qualifications for international researchers and entrepreneurs through the "Choose Europe" programme.

4. Coordination of research and innovation policies

Fragmentation of policy and funding limits the EU's ability to compete globally. Better coordination is essential.

We call on the EU institutions to:

- ➢ Ensure regulatory coherence: Design the Innovation Act to complement the ERA Act, EIC mandates, Startup & Scale-up Strategy and national regulations avoiding duplication and contradiction, with a strong focus on providing enabling conditions and empowering researchers and innovators.
- ➢ Support a full-spectrum approach: Provide balanced support across the entire research and innovation pipeline—from fundamental and frontier science to acceleration of technological development and real-world impact.

- ➢ Strengthen infrastructures: Enhance the European approach to research and innovation infrastructures as vital enablers of science-based and technology-driven innovation.
- ➢ Promote cross-programme synergies: Support enabling factors—researcher-led consortia, access to infrastructures, interoperability—that drive excellence and European added value.

A truly integrated approach will allow Europe to unlock its collective innovation capacity and lead globally in strategic sectors.

5. Radical simplification

Bureaucratic barriers deter participation in EU funding programmes and reduces speed and efficiency. Simplification must be a core pillar—not a postscript.

We call on the EU institutions to:

- ➢ Simplify funding instruments: Ensure user-centered simplification and clarity in framework conditions focused on supporting what works through approaches with proven track record.
- ➢ Align audit and accounting methods: Accept usual accounting practices and promote cross-reliance on audits.
- ➢ Enable agile, risk-tolerant funding: Support high-risk, breakthrough innovation through faster, more responsive instruments.
- ➢ Instil a 'need for speed' mindset and accelerate administrative processes.
- ➢ Launch a digital innovation navigator: Provide a centralised tool—such as a chatbot or one-stop-shop—to help innovators navigate EU rules and funding.

Cutting red tape is among the most effective ways to unlock innovation potential.

6. Enabling Europe's strategic autonomy and societal goals

Innovation policy must align with Europe's broader goals—prosperity, sustainability, resilience, and inclusiveness.

We call on the EU institutions to:

- ➢ Embed sustainability in innovation: Align efforts with the European Green Deal and decarbonisation goals.
- ➢ Promote strategic autonomy: Invest in research and innovation across key value chains, and for nurturing related talent, to reduce dependencies.
- ➢ Facilitate innovation-friendly IP use: Support legal environments that enable flexible and effective use, licensing, and co-ownership of publicly funded IP—without enforcing uniform ownership regimes. Encourage facilitation and support mechanisms by universities to assist researchers in valorising their work, in line with our previous call on EIC IP provisions.

Europe's innovation leadership must serve sustainability and long-term societal well-being.

7. Strengthening global collaboration

Global challenges, such as addressing the United Nations' Sustainable Development Goals, require international cooperation. Europe must stay open and lead in forging partnerships.

We call on the EU institutions to:

➢ Ensure open and frictionless collaboration: Maintain strong ties with long-standing and like-minded partners in science and technology including by streamlining procedures for association to the next European framework programme for research and innovation.

➢ Foster open innovation ecosystems: Promote collaboration frameworks between academia, industry, and policymakers across Europe.

➢ Establish Centres of Excellence for research-based innovation: Create EU-supported hubs that bridges fundamental research with industry needs and promote knowledge transfer, mobility (e.g., industrial PhDs), and joint innovation.

Conclusion and offer to contribute

The Innovation Act can become a cornerstone of Europe's competitiveness. To succeed, it must support the full knowledge value chain—from frontier research through accelerated technological innovation to real-world impact—mobilise private capital, develop skills, and radically simplify rules. It must also boldly align innovation policy with Europe's strategic autonomy, sustainability, prosperity and societal resilience goals.

Europe's ability to lead in the age of rapid technological development and innovation depends on what we do now. The Innovation Act must be bold—and it must be built on cutting-edge science.

CESAER and its Members stand ready to contribute to this vision, drawing on the deep expertise and leadership of universities of science and technology operating at the forefront of research, education, and innovation across Europe.

For more information and enquiries, please contact our Senior Advisor for Innovation & Sustainability Louise Drogoul.

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