Science Europe response to the Call for Evidence on a European Innovation Act

Introduction

The landmark reports by Enrico Letta, Mario Draghi, and the Expert Group on the Interim Evaluation of Horizon Europe led by Manuel Heitor identified that while the EU possesses a strong research base, the Union falls behind its competitors in translating these results into marketable innovation. To bridge this gap, the European Commission published the Competitiveness Compass for the EU, which envisions an Innovation Act. This legislative proposal intends to strengthen the EU's global position, restore industrial competitiveness and unleash growth, by supporting innovative companies and organisations, and facilitating access to European research and technology infrastructures and intellectual assets generated by publicly funded R&I.

Research and Innovation are strongly interlinked. The Innovation Act should enable the effective valorisation of research into innovation, with excellence as a key criterion for research assessment. Therefore, the key objectives of this Act – "the deployment and diffusion of innovation and creating an innovation-friendly level playing field for innovative companies" – should build on the foundation of supporting excellent research activities and sound ethical values. For this reason, it is crucial that the Innovation Act links closely and effectively with the upcoming ERA Act. Science Europe has also contributed to the Call for Evidence relating to this Act in 'Unlocking the Fifth Freedom: Science Europe Response to the Call for Evidence on the ERA Act'.

The European Commission has outlined several intervention areas for the Innovation Act, ranging from coordination, simplification and access to finance to improving talent attraction, commercialisation and market deployment.

Considering the above, the recommendations below aim to contribute to the Call for Evidence from the perspective of public, national European Research Performing Organisations and Research Funding Organisations, based on their many years of experience.

Recommendations for the Innovation Act from an R&I Perspective

a. Simplifying and making the existing regulatory framework more innovation-friendly

With regards to reducing complexity, the principles of applicant-focused simplification and faster implementation are welcome. However, the provisions for simplification should be scrutinised, and applied only if they do not compromise key European or academic values, nor high ethical,

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sustainability, and inclusivity standards. Simplification of existing regulatory frameworks should be carried out in coordination with associated countries.

The importance of coordination of the regulatory framework, and other policy instruments, focusing on commercialisation is acknowledged. However, it is important that coordination measures remain balanced. Science Europe recommends that when a project's primary focus is R&I, its governance should remain under the remit of Horizon Europe, with policies tailored for R&I, rather than a 'one size fits all' single rulebook. Especially with regards to Horizon Europe, it is critical that the close coordination and overlaps with the European Competitiveness Fund are not detrimental to R&I.

b. Facilitating access to finance including EU and national funds.

It is vital that the funds allocated for R&I – in addition to being ambitious – are protected and ring-fenced to provide stability. Meanwhile, funding opportunities should not limit the innovation potential because of over-prescriptiveness by political objectives. This should contribute to the measures on achieving the 3% national GDP investment target in R&I in the EU.

For such increase, improving the flow of private capital towards R&I is necessary. Private investment into R&I should be incentivised with robust de-risking measures. The Innovation Act should establish links with the Scaleup Europe Fund and the Savings and Investments Union to better facilitate and further encourage such investments. Coordination with these instruments, with an emphasis on R&I, can contribute to restoring industrial competitiveness in an innovative, sustainable manner, supporting the European Union's and its partners' position on the global stage.

c. Improving the commercialisation of publicly funded academic R&I

Robust scientific foundations are essential for the EU's innovative base. The European Innovation Act provides an opportunity to reinforce Europe's excellence in research and innovation while addressing gaps in valorisation and competitiveness. Its success depends on recognising that excellent research is the foundation of sustainable innovation.

While innovation and valorisation are often considered as mature stages of R&I, it is critical that the EU supports the whole R&I pipeline, from fundamental research to valorisation. Technology transfer offices – and by extension, the entire research support ecosystem – should be reinforced by the Innovation Act.

A strong and autonomous European Innovation Council (EIC), linked with an independent European Research Council (ERC) can support the pipeline from academic, fundamental R&I to commercialisation. However, this should not be detrimental to collaborative research, the researcher-led, autonomous governance of the ERC, nor for research projects with long-term perspectives. To maintain coherence between research, innovation and valorisation, the preparation of the Innovation Act should be coordinated and linked with the ERA Act.

Streamlining the intellectual property framework and making it accessible for the R&I community could incentivise the commercialisation of research. This could be achieved by strengthening links between the European Patent Office and the EIC.

d. Supporting innovative organisations in developing and testing their innovations

Innovative organisations should be supported by a robust, self-standing EU R&I Framework, the governance of which is focused solely on R&I. Collaboration, supported by such a framework – Horizon Europe – is key for innovation. Therefore, R&I collaborative approaches should be fostered, spanning inter-organisational, international, and interdisciplinary partnerships, as well as collaborations in fundamental research.

Supporting such collaborations with partners in and beyond Europe, in an equitable manner, will leverage the added European value to achieve growth, This growth needs to be sustainable and regenerative. To this end, R&I collaboration should be maintained in a complementary manner with, but without detrimental interference from other policy priorities, especially considering the close links between Horizon Europe and the European Competitiveness Fund.

Support to organisations engaged in fully curiosity-driven research, without directionality, is important. Such blue-sky approaches often serve as a catalyst for breakthrough innovation.

High-risk, low regulation components can support organisations fostering disruptive innovation. However, public funds play a fundamental role here, as they can incentivise investment by de-risking. A "Regulatory Sandbox" approach, applied in a way that retains scholarly values, can support testing innovations. However, transplanting the ARPA model into a European context requires careful implementation.

To achieve growth, the Act should continue to support the scaling up of innovative businesses and processes. For this reason, the Act should be coordinated with the Startup and Scaleup strategy, and enable the effective use of instruments such as the EIC fund. Placing Research and Technology Infrastructures under a dedicated pillar in Horizon Europe to reduce the innovation gap within Europe should advance the focus on improving these infrastructures in countries with lower R&I capacity, and thus support innovation.

e. Enabling innovative organisations to better attract and retain talent

The complexities related to mobility are one of the key structural barriers to attracting talent. Bureaucratic difficulties also arise on the local level, particularly in relation to relocation. Furthermore, the lack of supporting networks can be detrimental, as well as the difficulty of integration or limited career options. Research organisations should be incentivised to be innovative, to provide the means to move away from low or insufficient financial compensation, unhealthy work/research cultures, high-pressure environments, and provide more long-term and attractive career opportunities.

To better support talent circulation, applicant-centred, administrative simplification is necessary. Mobility issues could be addressed by an effective EU visa system and assistance with relocation (including financial and administrative support and assistance for family members). From an R&I perspective, dedicated programmes for talent retention and attraction are needed. This should not disadvantage other countries: instead of brain drain, brain circulation should be the goal. For this reason, the provisions of the Innovation Act on talent attraction and retention should also be implemented in close coordination, and avoid overlap, with the ERA Act.

In addition to international talent circulation, the Act should also foster mobility between academia and industry. Funds supporting stronger links, and the flow of talent between universities, research organisations and industry can directly support valorisation and commercialisation efforts.

Science Europe has developed 6 key recommendations for policies to foster talent circulation: increasing national investment; improving research cultures; boosting factors to attract/retain talent; strengthening support expertise and capacity; enhancing mutual learning and networking; and promoting diversity.

Talent retention can also benefit from dedicated support for young/early career professionals and researchers. The 'Choose Europe' programme has the potential to boost innovation output and impact. Host institutions should be supported to provide long-term opportunities to incoming talent, and further implementation challenges should be discussed in consultation with the R&I community.

f. Facilitating access to, and improving Research and Technology infrastructures

The Innovation Act should link with the Research and Technology Infrastructures (RTIs) strategy. RTIs should be aligned, and not compete against each other for resources, nor with other initiatives. Horizon Europe should also provide strong support to RTIs.

Long-term sustainability strategies and a life-cycle funding approach is needed, as well as improved access for researchers in support of mobility (trans-national access) and equality (inclusive access processes). Innovative forms of access should be considered (clustered, virtual etc.). Exploring a single common platform of RIs could be beneficial – therefore the inclusion of a 'one-stop-shop' approach in the RTI strategy is welcome. Access to infrastructures can be made operational by involving RTIs in development, testing, validation and certification. SMEs, startups, and cross-border users, especially in less-developed regions, should have simple access.

RIs should develop stronger connections with broader R&I priorities. They can further enable open science innovations and infrastructure, as well as improve the attractiveness of research careers by offering training and access to specialised facilities, resources and services.

Strengthening the links between RIs and policy discussions on initiatives such as the Coalition for Advancing Research Assessment (CoARA), research careers, and the open science movement will ensure that RI policies and practices maximise the impact of the EU's investments in these facilities, resources, and services. At the same time, targeted investments in skills development are essential to address the widening skills gap that affects the effectiveness and sustainability of RTIs.

Conclusion

The Innovation Act is set to provide a unique opportunity to align research and innovation policies, facilitate valorisation of research outcomes and bridge the innovation gap. In doing so, it should support the entire pipeline that leads from fundamental research to innovation and valorisation of scientific knowledge. Linked to the ERA Act, the Innovation Act should contribute to the establishment of a balanced, holistic, open and collaborative European R&I ecosystem.