EU'35: PIONEERS, PROSPERITY, PEACE Austrian reflection paper on the future of EU research & innovation policies, funding and investment

This paper provides Austria's guiding principles and concrete suggestions for future comprehensive and coherent EU policies, funding and investment for research and innovation.

The Austrian government, in general, supports a strong and self-standing

10th Framework Programme for Research & Innovation and promotes the further
advancement of the European Research Area.

This paper does, nevertheless, not pre-empt Austria's position in the negotiations about the EU's Multiannual Financial Framework (MFF) 2028+, neither in terms of the available budgetary means nor with regard to a possible modernisation of the funding structure of the MFF. These reflections are based on the outcomes of a broad consultation amongst the Austrian R&I community. They also acknowledge the analysis and recommendations of recently published expert reports on the future of EU R&I policy.

Austria is looking forward to engaging in constructive discussions at European level about the future of EU-R&I funding after 2028.

Research and innovation policies and funding play a critical role in fostering excellent academic endeavours, driving economic growth, enhancing competitiveness and addressing societal challenges. Investment in research and innovation is crucial for Europe's future success. The European Union and its Member States have made significant efforts and achieved considerable progress during the last decades to **develop a robust EU R&I policy framework** within the European Research Area (ERA), to foster a knowledge-based economy, and to facilitate the uptake of innovative ideas and solutions by both the market and society.

For 40 years, the most important tool in this context has been, and still is, the EU's Framework Programme for Research and Innovation.

As Europe is falling behind in the global innovation race, now is the time to reflect on the best-possible settings for the future of excellent research and innovation, to provide the best-possible framework conditions for researchers and innovators in Europe, and to promote the vision of a prosperous and peaceful Europe in 2035.

In line with recent expert reports delivered by Enrico Letta, Mario Draghi and the dedicated High Level Group ("Heitor-Report"), EC-President Ursula von der Leyen's political guidelines for the new European Commission stress that addressing today's challenges requires putting research and innovation at the core. They hold the key to unlocking breakthroughs that can provide long-term solutions, power the triple transition (green, digital, societal/human-centred) and strengthen Europe's position in the global innovation race, thus securing Europe's prosperity and competitiveness in the future.

EU R&I measures (i.e. policies, funding and investments) should become cornerstones of a strong, competitive, strategically autonomous and sustainable Europe. With this in mind, Austria shares many suggestions made in the report of the High Level Group chaired by Manuel Heitor.¹

The general framework, including an adequate and stable budget, for the fields of research and innovation should match the ambition to tackle Europe's challenges and increase Europe's excellence, competitiveness and resilience. While the Research Framework Programme is among the financially most successful programmes for Austria, this reflection paper is without prejudice regarding Austria's future position in the negotiations on the EU's Multiannual Financial Framework 2028+.

EU'35: PIONEERS

In an era marked by rapid technological advancements, global, social and geopolitical challenges, and shifting economic landscapes, the importance of the role of excellent researchers, innovators and entrepreneurs – the pioneers of our times – for a prosperous and resilient democratic Europe cannot be overstated. A robust foundation of academic excellence, curiosity, talent and entrepreneurship drives economic growth, enhances societal responsiveness and preparedness, and promotes environmental and social sustainability.

The European Research Council (ERC), as well as world-class research institutions and higher-education institutions across Europe have consistently facilitated and produced ground-breaking discoveries that address critical challenges, from climate change to public health crises. Marie Skłodowska Curie Activities (MSCA) have supported the mobility of researchers within and to the EU, and between sectors. Research infrastructures have provided the facilities for conducting excellent research. Scientific discoveries have been transformed into breakthrough innovations by start-ups and scale-ups, supported by the European Innovation Council (EIC).

Guiding principles: Excellent research institutions and innovators in Europe must continue to be pioneers of global advancement. The appropriate supportive framework conditions need to be established throughout the European Research Area. Europe needs to increase its attractiveness for talent from around the world, and foster an R&I ecosystem where unconventional approaches and blue-sky ideas can flourish, and where businesses can evolve from seed investment-funded undertakings to big enterprises.

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¹ Manuel Heitor et al.: "Act, Align, Accelerate", October 2024.

Austria's suggestions:

- Strengthen the European Research Council (ERC) and ensure its strategic independence: The ERC is a globally acknowledged cornerstone for funding excellent research. The successful design and governance of the ERC and its instruments need to be strengthened, reflecting the high number of excellent proposals submitted throughout the years. In this context, the ERC should be able to focus on funding high-quality and methodically innovative basic research.
- **Foster European University Alliances:** Efforts to further develop European Universities Alliances as networks of institutions that are attractive for higher education, training and research should continue to be supported. This includes strengthening the research component within such alliances, while respecting the principles of excellence and competition in EU R&I funding. Smart synergies should be established between the successors of Horizon Europe and Erasmus+.
- Support researchers' careers and mobility: The Marie Skłodowska Curie Actions (MSCA) should be further promoted. The MSCA's bottom-up approach for defining research topics as well as its focus on supporting career opportunities for researchers need to be preserved. International and inter-sectoral mobility should be facilitated, while also aiming at the improvement of researchers' working and living conditions in areas addressed e.g. by the ERA Talent Platform. Dual-career opportunities could be taken into consideration in order to increase the attractiveness of the mobility programmes, provided that sufficient funding is available for the MSCA programme.
- Promote the European Innovation Council (EIC): The EIC, despite being a new instrument, has proven to be a highly competitive instrument that is very much in demand. Its functioning should be improved, however, by striving for establishing a pipeline along the main investment stages. Further improvements should, for instance, enhance the connectivity of EIC instruments with other areas of the programme to support the efficient transition from research and development to market. Fast-track and plug-in mechanisms to exploit promising projects from other EU and national programmes should be extended. While ensuring operational stability, administrative efforts for innovators should be minimised, also allowing for effective interfaces for follow-up investments to meet the needs of start-ups, corporates and investors.
- Simplify procedures and encourage follow-up measures: Administrative burdens on researchers and innovators need to be reduced significantly all along the project cycle, from application to implementation and reporting. The time-to-grant should be further reduced. Finding relevant calls in the work programmes and on the EC's Funding & Tenders-Portal needs to become easier for potential applicants. Thematically broader calls, without overly precise specifications, should be launched throughout the programme, and two-stage procedures could be used to efficiently manage the calls. While basic values of the EU must

be continuously promoted, political targets should not over-burden individual researchers and consortia. It is evident that artificial intelligence will also play a significant role in simplification measures.

- Improve agenda setting and governance: The process for co-creating thematic priorities should become more transparent. Experts' and stakeholders' advice (e.g. through thematic Councils as suggested by the High Level Group led by Manuel Heitor) should be considered in the agenda setting in any case. However, safeguarding the role of Member States in programme committees, Member States' representatives groups and other European coordination bodies is essential to ensure a continuous and structured dialogue between the European Commission and national administrations.

EU'35: PROSPERITY

In an increasingly competitive global landscape², the interplay between basic and applied research, innovation, sustainable development and economic prosperity is more important than ever. Research is not exclusively an academic endeavour; it serves as the foundation of innovation that drives technological advancements, creates new industries, delivers solutions to the grand challenges of our times, and enhances the quality of life of individual citizens as well as the resilience of societies at large.

Recent studies, such as the ex post evaluation of Horizon 2020³, show that research and innovation activities conducted in projects funded by the EU's Framework Programme do not only result in excellent publications in scientific journals and patents; they deliver applicable solutions for grand challenges and substantial economic effects.

Guiding principles: EU R&I measures must provide strong instruments and means to boost collaborative, transnational and inter-sectoral research and development in Europe, acknowledging that research and production go hand in hand. The focus of EU-R&I funding should be on topics of European added value, aiming at faster uptake and deployment of research outcomes to tackle transformative challenges and increase Europe's prosperity, sovereignty and competitiveness by 2035.

Austria's suggestions:

- Strengthen the European R&I ecosystem through collaborative R&I, partnerships and cooperation between research and industry: EU R&I funding should continue to promote transnational collaborative research to join forces on research topics of European added value, create critical mass, and link the strongest minds and skills. A new bottom-up mechanism – on the one hand for smaller consortia, and on the other hand with the aim of

² Mario Draghi, "The future of European competitiveness", October 2024.

³ European Commission, "Ex post evaluation of Horizon 2020, the EU framework programme for research and Innovation" (Report to the European Council and the European Parliament), January 2024.

mid- to long-term strategic cooperation between research actors and industry – should be established as an additional model to strengthen demand-driven cooperation. While acknowledging the relevance and value of European Partnerships, procedures for identifying candidates for the establishment or continuation of Partnerships as well as their implementation and monitoring must be improved to enable them to continue to serve as focal points for coordinated R&I within their respective domains. Partnerships, including the EIT's Knowledge and Innovation Communities (KICs), should be evaluated regarding their performance. Support for efficient approaches should be continued, while aiming at rationalising the overall number of Partnerships, e.g. by increasing synergies to ensure a more strategic portfolio. No new KICs should be established. To ensure the impact and optimised use of European resources, implementation and management procedures – including possible co-financing needs – must be designed to be as straightforward as possible, based on transparent and coherent quidelines for participants as well as for implementing agencies. Member States, stakeholders, industry and SMEs should be able to effectively contribute their experience and strategic considerations regarding the mid- and long-term direction to the agenda-setting for collaborative R&I and Partnerships.

- Reinforce research and technology infrastructures and knowledge valorisation: Cooperation between scientific and economic actors must be strengthened by also supporting world-class research and technology infrastructures for both basic research and application-oriented technologies in domains of common European interest, including Social Sciences, Humanities and the Arts. Inter-regional technology and research clusters, along with centres for knowledge valorisation, should be further developed to strengthen strategic topics and their research and development in the EU, including the involvement of industry and SMEs. Pre-competitive research needs to be reinforced to increase industry participation, with a focus on research in key technology areas, including standardisation activities. To improve the uptake of research results, portfolio management and follow-up activities should be embedded systematically and monitored adequately. Data security and control (including professional secrecy, in particular IPR), should be supported throughout the implementation of the programme, while maintaining the overall target of open access to publicly funded research results.
- Address the triple transition and Sustainable Development Goals: To safeguard its competitiveness and resilience, Europe must significantly boost R&I in areas of technologies and innovations that drive the triple transition (green, digital, and human-centred/societal). R&I policies should also contribute to further follow-up on the sustainable development goals (SDGs). Research and innovation are essential for managing the triple transition that will define Europe's role in the global economy, harnessing market opportunities, and ensuring a sustainable future. Future EU R&I measures should support a robust portfolio of innovative solutions to be developed domestically, paired with mechanisms to ensure their effective implementation. Navigating through the on-going transformation processes requires close interaction between the European level and Member States, as well as effective portfolio management across programme lines. European R&I funding should

continue to follow a mission-oriented approach. Stronger interfaces between research and sectoral policy-making (including complementary funding from other relevant parts of the Multiannual Financial Framework) can boost the outreach and implementation of EU Missions. Nonetheless, it needs to be ensured that researchers and their institutions and corporates can primarily focus on research and innovation, and that the accompanying societal processes are designed as simply as possible. In addition, the "triple transition" should also contribute to sustainable growth.

- Maximise the focus on key and critical technologies: Europe needs to significantly increase its efforts and investments in key and critical technologies⁴ and advanced materials. These areas are core building blocks in reinforcing Europe's strategic sovereignty and competitiveness while also playing an important role in the triple transition. Future EU R&I funding should be well designed to bundle financial support to the EU's technological capabilities on key and critical technologies, industrial renewal and resilience, and the preparation of the next phase of industrial development (preparing the ground for further uptake e.g. by industrial alliances and IPCEIs⁵). Foresight activities should be used to identify the most pressing needs.

EU'35: PEACE

By driving economic growth and addressing grand challenges, research and innovation act as catalysts for fostering peace and stability. R&I can help to minimise the root causes of conflict: by providing individuals with livelihoods and opportunities for advancement, societies are less likely to experience civil unrest. All areas of research can contribute to peace and stability in society. This potential should be leveraged and exploited.

Guiding principles: Future EU R&I policies, funding and investments should contribute to addressing the geopolitical challenges Europe is facing and which pose substantial risks to Europe's democracy and security, including within the field of R&I itself. The European Defence Fund (EDF) remains the main instrument at EU level for defence-related research.

Austria's suggestions:

- Focus on research with civil applications, while acknowledging the possibility of dual use applications: EU R&I measures need to take the current geopolitical situation as momentum for increasing synergies between civil and military research, being aware of the blurry boundaries between the two areas. Allowing for the possibility of dual use applications, both for civil and military purposes, should be facilitated, while avoiding

⁴ In its government programme 2025-2029, the Austrian federal government identifies the following areas as examples: Quantum physics/technology, production technology, microelectronics, life sciences, materials research, artificial intelligence and space research. See "Doing the right thing now. For Austria." (Government Programme 2025-2029, February 2025, p.40).

⁵ IPCEIs = Important Projects of Common European Interest

unnecessary restrictions and administrative burdens for researchers.

- Advance international cooperation and science diplomacy, while strengthening research security: In light of an increasingly competitive global landscape and a shifting geopolitical situation, a stronger focus on protecting the EU's strategic interests and enhancing research security is essential. Based on the guiding principle "as open as possible, as closed as necessary", and building on Council Recommendation C/2024/3510 of 23 May 2024, an effective and proportionate approach to tackling foreign interference in science and research should be implemented. The EU needs to keep an open and pro-active approach towards international cooperation to facilitate mutually beneficial collaborations based on shared values and principles. To this end, it is necessary to identify the main topics that call for global joint action as well as the strategically relevant partner countries for such collaboration. Science diplomacy should be actively used as a facilitating tool in this context.
- Support research on civil security, the geopolitical challenges for Europe, peace-building, and peace-keeping: While the next Multiannual Financial Framework of the EU needs to address threats to Europe's security from different angles, including military/defence aspects, EU R&I measures should continue to promote civil security research (e.g. research on fighting organised crime, terrorism, border management, displacement and irregular migration, resilient infrastructure, cybersecurity, and disaster-resilience). Furthermore, EU R&I measures should also cover research on the geopolitical challenges for Europe, on Europe's role in its neighbourhood and in the world, as well as on dimensions of conflict prevention, peacebuilding and peacekeeping.
- Foster research on the basic values of the European Union: EU R&I measures shall also in the future promote and fund research on topics related to the Union's values enshrined in Article 2 of the Treaty of the European Union⁶. The Social Sciences and Humanities, including the Arts, should contribute to strengthening interaction between science and society. EU R&I measures should also support science-based knowledge creation for evidence-based policymaking and for building more trust in science.

POLICY ENABLERS FOR AN R&I-UNION

The success of future EU R&I measures and the advancement of the ERA depend on national efforts. Evidence (e.g. referenced in the expert reports quoted above) shows that Member States which provide **adequate national framework conditions** progress well in their overall R&I performance and in their participation in the Framework Programmes.

⁶ Article 2 (TEU): "The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail."

Enabling policies, which are backed by European coordination and support, include the ERA Pact for R&I and the ERA Policy Agenda(s). EU R&I measures should contribute to the further implementation and strategic alignment of these policies and the ERA actions, explicitly integrating key ERA values and principles such as high standards in scientific excellence, international cooperation, ethics and integrity, open science, gender equality, scientific freedom, research assessment and knowledge valorisation, and attractive and sustainable research careers.

The key enabler, however, remains the national level. In this regard, more emphasis on the analysis of the Member States' research, technology and innovation policies and their potential for synergies in joint pan-European R&I initiatives could help to identify bottlenecks. National framework conditions and reforms enhancing and encouraging R&I activities should be understood as a prerequisite for success.