

Council of the European Union

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From:	General Secretariat of the Council
To:	Delegations
Subject:	Draft Council conclusions on Strenghtening knowledge valorisation as a tool for a resilient reindustrialisation and open strategic autonomy in Europe
	- Presidency text

Delegations will find attached a Presidency text on the *draft Council conclusions on Strenghtening knowledge valorisation as a tool for a resilient reindustrialisation and open strategic autonomy in Europe* with a view to the Research Working Party meeting on 17 January 2024.

DRAFT COUNCIL CONCLUSIONS ON STRENGHTENING KNOWLEDGE VALORISATION AS A TOOL FOR A RESILIENT REINDUSTRIALISATION AND OPEN STRATEGIC AUTONOMY IN EUROPE

THE COUNCIL OF THE EUROPEAN UNION,

RECALLING

- its conclusions of 26 November 2021 on the Future governance of the European Research Area (ERA)¹, in which it agreed on the ERA Policy Agenda 2022-2024 with an action on upgrading EU guidance for a better knowledge valorisation, having amongst its outcomes developing and endorsing Guiding Principles for knowledge valorisation;
- its conclusions of 17 November 2022 on the New European Innovation Agenda (NEIA)², which stressed the importance to accelerate the access to scale-up financing for start-ups and small and medium-sized enterprises (SMEs), to foster, attract and retain talents, including deep-tech ones, to improve and consolidate innovation ecosystems and to tackle the innovation gap in Europe;
- its conclusions of 2 December 2022 on Research Infrastructures³, which recognised the open access policies of Research Infrastructures as a major contribution to stimulating knowledge and brain circulation and enhanced Europe's international collaboration in Research and Innovation (R&I) and reinforcing the competitiveness of the European R&I ecosystem globally;

¹ 14308/21.

² 14705/22.

³ 15429/22.

- its Recommendation (EU) 2022/2415 of 2 December 2022 on the guiding principles for knowledge valorisation⁴, supported by the Code of Practice on the Management of Intellectual Assets and the Code of Practice on Standardisation⁵, adopted in March 2023. The recommendation emphasised the importance of developing entrepreneurial culture, practices, and of fostering transversal skills and also established guiding principles that should concern policy initiatives aimed at all ecosystem actors involved in R&I activities, including intermediaries;
- its conclusions of 23 May 2023 on High-quality, transparent, open, trustworthy and equitable scholarly publishing⁶, which reiterated the importance of accelerating the transition to open science, and which invited the Member States to make scholarly publications immediately openly accessible under open licences and to apply the principles of FAIR (findable, accessible, interoperable and reusable) and "as open as possible, as closed as necessary" to research data;
- its conclusions of 8 December 2023 on Strengthening the role and impact of research and innovation in the policy-making process in the Union⁷, which recalled that regional development is primarily the responsibility of national and regional governments, which can use Union cohesion policy funds and the Smart Specialisation Strategies (S3) to increase the interactions and cooperation among the different innovation ecosystems' stakeholders and reduce disparities; which encouraged the Commission, in cooperation with the Member States, to promote the role of scientific and evidence-based knowledge and its cross-cutting integration in public policies, by continuing the actions on mapping the existing practices of knowledge valorisation in policymaking, and invited the Commission to promote instruments and activities that value the 'Science for Policy' concept, including its knowledge valorisation dimension.

⁴ OJ L 317, 9.12.22, p. 141-148.

⁵ OJ L 69, 7.3.2023, p. 63–74.

⁶ 9616/23.

^{7 16450/23.}

its Recommendation of 18 December 2023 on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe, which provides recommendations that will support Member States, research organisations, funders and stakeholders in increasing stability and attractiveness of research careers in Europe, fostering inter-sectoral mobility and equipping researchers with transversal skills and an entrepreneurial mindset.

GENERAL POLICY PERSPECTIVES

- REFERS to the Union's efforts to overcome its vulnerability due to the crises and the complex geopolitical situation it faces and to address the challenge to decrease the Union's dependency on energy, electronic components and raw materials, which can impact its industrial competitiveness, global technological leadership, security, and the well-being of its citizens. This situation calls for an urgent enhancement of the Union resilience by strengthening its global positioning through reindustrialisation and its open strategic autonomy, underpinned by a sustainable transition and digital transformation of society.
- 2. STRESSES that the European Union is undeniably recognised for its excellence in R&I in terms of quality, originality, impact, international contributions, and peer recognition. This excellence is a result of sustained support for R&I activities, such as the promotion of entrepreneurship, startups, and scale-ups, including through its successive Research Framework Programmes.
- 3. ACKNOWLEDGES, however, that the EU faces challenges in translating R&I results into societal and economic value and, particularly, in retaining this value within the EU. Obstacles in EU valorisation include overcoming the so-called "valley of death" and bridging the "European innovation paradox". "Valley of death" refers to the difficult early period for innovation and startups after seed funding investments run low in the transition to scale up. The "European innovation paradox" refers to the perceived failure of EU Member States to translate scientific advanced into marketable solutions. Addressing these challenges is vital for the functioning of the internal market. Effective knowledge valorisation of R&I is a cornerstone for catalysing this process, ensuring that the Union generates innovative potential and capitalises on it.

4. CONSIDERS that knowledge valorisation can be a powerful tool for fostering the Union's resilience. By strategically leveraging and translating knowledge into practical applications, the Union and its Member States can reinforce their global competitiveness and resilience. To this end, the Union should focus on strengthening the European knowledge valorisation ecosystem and developing a strong European knowledge valorisation culture along with a strategy to tackle challenges of foreign interference.

STRENGTHENING THE KNOWLEDGE VALORISATION ECOSYSTEM

Funding tools, policies and frameworks to support knowledge valorisation activities

- 5. HIGHLIGHTS the need to boost existing tools and to initiate new approaches designed to facilitate the transformation of research knowledge and intellectual assets into tangible outcomes, fostering innovation and economic prosperity, such as innovation clusters and platforms and networking events. CALLS ON Member States to involve the actors of these initiatives in a common approach, to connect knowledge and expertise to better implement innovations in companies and in society.
- 6. UNDERLINES the strategic importance of current and emerging technologies such as Key Enabling Technologies (KETs), including artificial intelligence, life-science technologies and advanced materials - in strengthening the Union's position in global value chains and driving its resilience, including its strategic reindustrialisation goals. Their widespread adoption is key for maintaining the Union's technological leadership and for facilitating smarter and more cost-effective production within the Union. Additionally, their role extends to addressing major societal challenges such as public health, security, climate change. ACKNOWLEDGES that the development and deployment of these technologies depend heavily on innovative research and technological breakthroughs.

- 7. CALLS ON the Commission to analyse the adequacy and efficiency of EU funding tools for knowledge valorisation activities across EU programmes and initiatives, considering R&I actors' input and ensuring coverage of the continuum of R&I activities from fundamental research to knowledge valorisation by taking into account the different cycles leading to market and societal uptake, and emphasising the importance of this assessment to enhance overall market access performance.
- 8. CALLS ON the Commission to continue facilitating synergies between Horizon Europe, the Digital Europe Programme, the European Regional and Development Fund and other relevant EU funds and programmes.
- 9. CALLS ON Members States and the Commission to ensure that regional, national, European funding programmes as well as the national Recovery and Resilience Plans (RRPs) are complementary and support knowledge valorisation in a coordinated manner, by organising consultations with stakeholders on a regular basis, by asking Members States and the Commission to pursue the remaining actions of the New European Innovation Agenda (NEIA) and new and innovative funding mixes. RECALLS that regional strategies based on the S3 and national RRPs are a framework in that regard.
- 10. INVITES Members States to stimulate the use of incubators, industrial demonstrators and regulatory sandboxes to test-drive innovations, reassure private parties about the efficiency of these innovations, facilitate raising seed capital, train teams, and allow higher education institutions to capture more value.
- 11. STRESSES the need to facilitate access to risk funding and the rise of private and public seed capital, especially for spin-offs, start-ups, scale-ups, and SMEs, by working with the banking sector, private investors and venture capital funds, including through the European Innovation Council. ENCOURAGES Member States and the Commission to explore further possibilities in this direction.

- 12. SUPPORTS the actions of the NEIA that aim to stimulate the uptake of innovation through innovation procurement and, in that regard, INVITES the Commission to further explore ways to support and de-risk the use of this instrument. ENCOURAGES Member States to ensure the recognition of innovation procurement in their national and regional innovation strategies and to promote its uptake with the public buyers.
- 13. INVITES Member States to attract investors by raising the quality of the knowledge valorisation ecosystem, the quality of research infrastructures and technology infrastructures, the skilled workforce, the attractiveness of the regulation system and of international collaboration. CONSIDERS that those are necessary steps to strengthen the knowledge valorisation ecosystem and Europe's open strategic autonomy.
- 14. CALLS ON Member States and the Commission to implement strategies that encourage businesses to collaborate with European researchers and bring innovative products to the market. HIGHLIGHTS, in that regard, the benefits of reshoring and reasoned European production such as reduced time-to-market by minimising manufacturing delays, test times, transportation and storage costs, and overall environmental impact.
- 15. INVITES Member States and the Commission, within their respective competences, to offer enhanced support for SMEs, spin-offs, and start-ups in regulation, as well as standardisation processes and streamlined access to EU programmes. RECALLS the objective to empower SMEs by enabling them to thrive and to navigate within regulatory frameworks.

Closing the gaps in the network of intermediaries and facilitators of innovation

16. ENCOURAGES the Commission to establish a new instrument that strengthens the capacity of academia-business intermediaries in Member States, such as Knowledge and Technology Transfer Offices (KTTOs), to investigate the market and/or the societal potential of intellectual assets resulting from Framework Programme projects, guide the intellectual assets management of KTTOs and provide assistance in selecting methods for further effectiveness testing.

- 17. ENCOURAGES Member States to enhance the role of intermediaries such as KTTOs by strengthening their professionalisation and encouraging capacity building and skills development that will allow them to detect value in R&I knowledge. ENCOURAGES Member States to explore the support of academia-business intermediaries to assist with business development activities and knowledge dissemination.
- 18. ENCOURAGES Member States and the Commission to explore the use of artificial intelligence for identifying the valorisation and commercialisation potential of research results and to promote the development of corresponding instruments in Europe, pursuant to the Artificial intelligence act⁸.
- 19. ENCOURAGES the Commission and Member States to facilitate the interconnection of local innovation ecosystems, technology and research infrastructures, pre-incubators, incubators, start-up workplaces, hubs, KTTOs, IT & digital, legal advisors and other relevant actors throughout Europe, to stimulate a more efficient process of knowledge valorisation and repetitive knowledge dissemination to various beneficiaries.
- 20. ENCOURAGES Member States and the Commission to foster collaboration between the various stakeholders of the knowledge valorisation process and incentivise them to approach knowledge valorisation as a continuous process rather than as separate steps. CALLS ON the Commission, in that regard, to regularly revise and update the aforementioned Codes of Practice. INVITES Member States to promote the use of initiatives that support the networking of various actors in the value chain.
- 21. HIGHLIGHTS the important role of Technology Infrastructures (TIs), including innovation infrastructures, Testing and Experimentation Facilities, and demonstrators, both for the innovation ecosystem for current and emerging technologies, including KETs, and for knowledge valorisation. CONSIDERS that developing an EU approach for TIs is key for avoiding duplication of investments, developing complementary assets based on S3 principles, and de-risking innovation processes in companies.

⁸ 2021/206

- 22. WELCOMES the progress made by the Commission to develop an EU mapping strategy for TIs and CALLS ON the Commission to develop concrete proposals by mid-2025. The strategy should foster a connected EU network with facilitated access for SMEs, and encompass support services related to intellectual assets management, training, regulatory or standardisation aspects.
- 23. ACKNOWLEDGES the relevance of regulatory sandboxes to enable experimentation and create a regulatory environment conducive to innovation and ENCOURAGES the Commission to continue working in this direction. INVITES Member States to develop guidelines for regulatory sandboxes with a specific attention for SMEs and INVITES the Commission to facilitate the exchange of good practices among Member States and further provide guidance, advice and support to foster regulatory learning across the EU.

DEVELOPING A CULTURE OF KNOWLEDGE VALORISATION

Fostering collaboration

24. STRESSES that developing a culture of knowledge valorisation involves fostering an environment where individuals, institutions and businesses recognise, appreciate and actively collaborate in the process of translating knowledge into tangible outcomes. In this context, ENCOURAGES Member States and the Commission to promote a collaborative mindset, including by raising awareness at the leadership level of research performing organisations; recognise and reward knowledge valorisation efforts; integrate knowledge valorisation into education; facilitate networking and communication; streamline administrative procedures and promote diversity and inclusion.

- 25. ENCOURAGES Member States and the Commission to involve the "quadruple helix" (academia, public authorities, industry and society) in the early stages of the research and innovation process. SUPPORTS improved industry-academia co-creation where they proactively pursue a common interest and jointly produce and valorise knowledge. HIGHLIGHTS the need to reinforce the trust of citizens in science and innovation by communicating about the benefits of knowledge valorisation outcomes in citizens' day to day lives. STRESSES the need to encompass both citizen involvement in research and user-driven innovation.
- 26. ENCOURAGES the promotion of multidisciplinary and transdisciplinary collaborations in deep-tech innovations, notably collaborations between STEM (Science, Technology, Engineering, Mathematics) and SSH (Social Sciences and Humanities), that foster partnerships, joint research projects, cross-pollination for innovation and knowledge-sharing platforms across various disciplines and stakeholders to address sustainability and strategic priorities in social, environmental and economic policies.
- 27. HIGHLIGHTS that open science practices enable the valorisation of knowledge. This includes open access to publications, data and early and open sharing of research tools and results. CALLS ON Member States to adopt frameworks that facilitate the strategic management of intellectual assets by research institutions and researchers, thus enabling open science practices, knowledge transfer and valorisation.
- 28. INVITES Member States and the Commission to support organisational change towards more attractive and sustainable careers for R&I talent, fostering an entrepreneurial mindset and cross-sectoral circulation, including through large scale initiatives for intersectoral collaboration.

Improving training programs for entrepreneurship and innovation in all disciplines

- 29. CALLS ON Member States to raise awareness about knowledge valorisation amongst stakeholders, especially at an early stage in their career. ENCOURAGES providing stakeholders with training, resources and guidance on entrepreneurship, knowledge and technology transfer, intellectual assets management and policies; and SUPPORTS the dissemination of best practices amongst Member States.
- 30. STRESSES the need to foster an entrepreneurial culture throughout training and mobility programmes and mentorship networks. CALLS on Member States and the Commission to increase learning opportunities for students and researchers on the specific needs of industry and societal actors which will stimulate their research drive towards innovative solutions as well as their communication skills across sectors.
- 31. ACKNOWLEDGES that it is essential to promote SSH and STEM skills for sustainable careers by raising awareness through education, media or the arts, offering life-long training, and enhancing job market appeal. EMPHASISES the necessity for SSH and STEM fields to collaborate with the industry to address societal challenges -- including bias in gender and diversity, to nurture all talents, to attract role models and communicate widely about the best practices in this context.
- 32. SUPPORTS the promotion of training, upskilling and reskilling of the workforce, especially in the innovation and digital domains. SUGGESTS in that regard to mainstream training on intellectual asset management for researchers and to facilitate effective collaboration with KTTOs.