Action 15: Build-up regional and national R&I ecosystems to improve regional/national excellence and competitiveness
ERA HUBS

Contact point: Slaven Misljencevic (A3)

1. Description	The Council Conclusions on the New European Research Area, adopted in December 2020, set the vision of a new ERA as "a researchers-centred, value-based, excellence as well as impact-driven area, in which researchers, knowledge and technology are supported and can circulate freely." It stipulated that the new ERA "should be based on shared responsibilities, participation of stakeholders and citizens, building on the diversity and strengths of the European R&I ecosystems, being responsive to smart directionality, and in which in particular fundamental research is essential for ensuring excellence, attractiveness and the competitive edge of R&I ecosystems."
	The New ERA policy aims at addressing the challenges and persistent barriers for the ERA to attain its objective of creating a 'single market for R&I'. Despite European efforts such as the framework programmes for research and innovation and the establishment of collaborative structures at European, national and regional levels to capture the opportunities offered by new knowledge and technologies, the ongoing fragmentation and lack of cohesion in the European R&I system has hindered an optimal growth of Europe's knowledge society and its capacity to address existing and future societal, industrial, and environmental challenges.
	Current European initiatives (e.g. the EIT KICs and the Digital Innovation Hubs) most often aim at supporting technology-based industry-oriented innovation. The implementation of regional smart specialisation strategies and related programmes differs largely between Member states and regions, depending on regional specificities and funds available. Implementation is strongly influenced by the barriers for research and innovation and their exploitation and adoption in the local R&I system. Especially in those cases where the smart specialisation strategy is implemented predominantly through ERDF funding, a close-to-unique focus on fostering industrial innovation and economic development can be noted. Finally, OECD studies show that in the EU Member States, challenge-oriented policies and programmes aiming at transformation at the national level are based on arrangements that allow for strategic orientation, a holistic policy co-ordination (across policy silos) and an integrated implementation. In the light of existing regional development and cohesion efforts and the remaining challenges that need to be overcome, the ERA Hub initiative can have a clear added value.
	The ERA Hub initiative offers the opportunity to contribute to the deepening of the European Research Area and overcoming the current R&I divide, while enhancing and speeding up the transfer and

exploitation of research results within the economy and society. Work Package 2 "Designing the ERA Hubs concept as an ecosystem networking framework" in the wide-scoping study "Knowledge Ecosystems in the new ERA" lists some main initial considerations and forms the basis for the further development of ERA Hubs concept. Key features of such an ambitious ERA Hub concept could be:

- A **comprehensive focus on research and innovation**, encompassing the broad spectrum of types of research (from fundamental to applied and experimental development), thus taking account of the critical role of fundamental research for a long-lasting competitiveness in innovation
- A **holistic view on the concept of innovation**, going beyond technological, industry-oriented innovation and building upon existing assets in all fields and types of research, thus facilitating the creation of cross-disciplinary synergies needed for transformation
- A focus on **strengthening internal cohesion** within the EU Member States, fostering collaborations between 'strong' and 'weak' ecosystems in the national territory no matter their location (be it at city, region, country or cross-border level), thus ensuring capacity building towards excellence in the national R&I systems as a whole
- A **smart 'directionality'** of the ERA Hubs, focused on a concrete local sustainable development challenge (a 'mission'), thus ensuring the ERA Hubs' value for society as well as the interest of all relevant actors in the ecosystem (research, education, industry and civil society) to collaborate towards a common goal.
- An 'EU network of ERA Hubs' for the **exchange of practices** and learning around a concrete common sustainable development challenge, allowing for the circulation of talent and the creation of critical mass in research and innovation as well as capacity building in the governance of transformational R&I policies.

Therefore, this action will consist of defining, testing and deploying ERA Hubs as follows:

STRAND 1: Creating a network of ERA Hubs

The objective of this strand will be to co-design the initiative with Member States and stakeholders and set up the network on the basis of technical specifications and a call for expression of interest. In particular, the following activities are foreseen:

- **Stocktaking** of technical analysis of best practices across Europe and mapping of national and European initiatives performed under the Knowledge Ecosystems study referred to above
- **Co-design** of the initiative and the ERA Hubs (mapping of the needs and relevant stakeholders, co-creation process within the ecosystems and actors in the quadruple-helix, definition of ERA Hubs and the joint mission)
- Definition of **technical specifications** with possible models and tasks of ERA Hubs

	• **Call for expression of interest** with Member States and stakeholders for setting up ERA Hubs on the basis of the technical specifications • **Selection**, training , networking of first wave of ERA Hubs and taking stock of lessons learnt **STRAND 2: Towards a project portfolio as a testbed** The aim of this strand which will run in parallel to Strand 1 is to set up a testbed with a project portfolio of ERA Hubs as a result of Horizon Europe calls or other similar initiatives by stakeholders and Member States.
2. Actors	ERA Hubs are meant as the territorial dimension of ERA aiming at boosting place-based growth across the European territory and boost place-based growth and at increasing the attractiveness of European research to the best researchers from all over the world. Accordingly, territorial actors are expected to have a strong role in this initiative. In particular, regions and cities have an important role to play this process in addition to Member States themselves. Participation of stakeholders will be crucial to build on the diversity and strengths of the European R&I ecosystems and ensure their support from the beginning. Collaboration with the European Committee of the Regions in all stages of the initiative will allow reaching out to the regions and to fostering a multi-level dialogue. A dedicated working group will be established with the European Committee of the Regions and relevant stakeholder associations. After the pilot period of two years and once the ERA Hubs concept has been consolidated at the EU level, further enhancement of the international dimension can be planned.
3. Timing and milestones	The two-year piloting of the ERA Hub concept can start in 2022 with the following steps: **STRAND 1: Creating a network of ERA Hubs** Q2 2022: Stocktaking of technical analysis of best practices across Europe and mapping of national and European initiatives; Q2 2022: Definition of technical specifications with possible models of ERA Hubs Q3 2022: Call for expression of interest; Q4 2022: Selection, and launch of first ERA Hubs in those Member States who express interest in engaging with the process; Q2 2023: Training and networking of first wave of ERA Hubs Q4 2023: Fine-tuning of technical specifications on the basis of

	lessons learnt
	STRAND 2: Towards a project portfolio as a testbed
	Q2 2022: Horizon Europe call on pilot ERA Hubs on the basis of the Horizon Europe WIDERA calls
	Q1 2023: launch of pilot ERA Hubs project portfolio as a test bed
	After the pilot period of two years, the initiative should be scaled up. To ensure that all relevant lessons from the pilot period can be captured, an assessment of the pilot period would be put in place.
4. Funding	On the short term, a topic is included in Horizon Europe Work Programme 'Widening participation and strengthening the European Research Area' for the testing of ERA Hubs concept. The total indicative budget of EUR 3.00 million is foreseen. In addition to the Excellence Hubs topic is also expected to contribute.
	Member States expressing interest in the setting up of the first ERA Hubs under STRAND 1 above will also indicate their investments, including synergies with national funds, ERDF and the Recovery and Resilience Facility.
	Finally, a dedicated funding and investment strategy for ERA Hubs in the context of ERA investment targets needs to be developed in close collaboration with the Member States, regions, cities and stakeholders.
5. Expected impact	• Strengthening innovation ecosystems for knowledge circulation and valorisation. • Establishing stronger interconnection between existing collaborative and supportive structures. • Engaging a diversity of stakeholders in multi-disciplinary and cross-sectorial collaborations. • Ensure the availability in all EU cities and regions of high-quality science that can be harnessed to boost innovation and help society and businesses meet the challenges of the Sustainable Development Goals and deal with today's and future crises. • Improving collaboration and exchange of best practices. • Addressing uneven flows of researchers and facilitating brain circulation.
6. Monitoring	In the initial piloting phase of ERA Hubs concept, progress will be monitored and frequently reported to the ERA Forum of Transition.
	After the two-year piloting, the progress of scaling up will be monitored quarterly.
	One of the initiatives will be to map all the ERA Hubs in a clear and concise manner. This will facilitate the quantification of the implementation process, to raise awareness about the initiative and facilitate networking and collaboration among ERAS Hubs.

	The working group consisting of the European Committee of the Regions and relevant stakeholder associations will monitor and steer the developments.
7. Communication	A consultation event will take place in Q2 2022 to take stock of the analysis and mapping performed under the Commission's knowledge ecosystems study and with a view to defining technical specifications for ERA Hubs.
	The Committee of Regions is expected to support communication on this initiative and high-level dialogue with regions.
	The Member States, regions, cities and stakeholders will be consulted in the conceptualisation phase of ERA Hubs through multiple events.
	Once the ERA Hubs concept is finalised, a communication strategy will be developed to raise awareness about the initiative and promote participation.
	With each ERA hub established in a host Member State, one or more communication events will be organised.
	As the number of ERA Hubs grows, networking events will be organised, and a forum put in place to facilitate continuous exchanges and cooperation and allow sharing of best practices among the hubs.
8. Additional information	This initiative is developed in close collaboration with the European Committee of the Regions with the support of related associations for regions and research performing organisations.