

# **Building thriving innovation ecosystems**

An Interreg Europe Policy Learning Platform event

19 November 2024 Skopje, North Macedonia

https://www.interregeurope.eu/policy-learning-platform/events/building-thriving-innovation-ecosystems



**Summary:** The Interreg Europe Policy Learning Platform, in cooperation with the Ministry of Economy and Labour and the Ministry of Education and Science of North Macedonia, organised a capacity-building event on 19 November 2024, in Skopje, North Macedonia. The event was held at INNOFEIT, the Centre for Technology Transfer and Innovations. It focused on building innovation ecosystems through university-industry collaboration, emphasizing specific policy tools such as promoting research and innovation infrastructures, innovation vouchers, and open challenge competitions. Participants engaged in hands-on knowledge exchange, explored examples from Interreg Europe projects, and co-created policy tools to foster university-industry collaboration.



# 1.Highlights

Building successful (emerging) innovation ecosystems is a topic of great interest for the Interreg Europe community. The event was dedicated to **exploring the main successful elements to build such an ecosystem**: its governance, the ways to engage innovation players, the design of place-based policies and possible financing schemes. For each element, good practices from the Interreg Europe community were featured (see section 2 of this document). Two case studies were analysed and developed with the participants: **setting up innovation vouchers** and **designing innovation challenges**.

#### Introduction

The European Commission aims to create more connected and efficient innovation ecosystems to support the scaling of companies, foster innovation, and stimulate cooperation among national, regional, and local innovation actors (see <a href="Horizon Europe Pillar III European Innovation Ecosystems">Horizon Europe Pillar III European Innovation Ecosystems</a>). An innovation ecosystem is defined as an evolving, complex network of diverse organizations collaborating to achieve shared innovation goals (OECD). The innovation process requires frequent and iterative interactions among innovative actors, with universities and private companies playing a central role. For policymakers, <a href="university-industry collaboration">university-industry collaboration</a> is a key element of the innovation policy mix, as the successful exploitation of R&D results is fundamental to building thriving regional innovation ecosystems.

#### Focus of the group discussions

Participants were actively involved in brainstorming discussions, leading to the following main outcomes which aim to provide actionable insights for building thriving innovation ecosystems through university-industry collaboration.

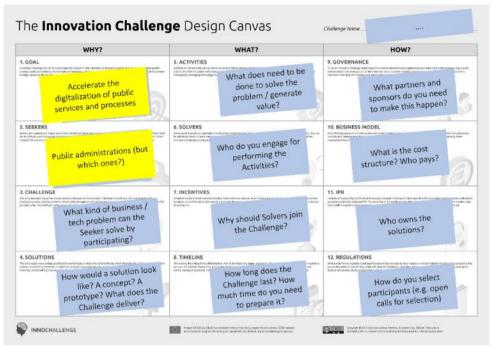
#### Innovation vouchers

- Innovation vouchers can take many different forms and are a very flexible policy tool that can be designed to respond to specific national and/or regional ecosystem needs and/or SMEs needs.
- Ideally innovation vouchers are part of a broader policy initiative and contribute to wider strategic objectives, for example the S3 priorities, encouraging cross sectoral cooperation.
- Innovation vouchers can serve as a catalyst for small and medium-sized enterprises (SMEs) to participate in research and development (R&D) initiatives, especially for the first time. They offer an incentive for SMEs to change their mindset and to show them that it is possible for them to engage in innovation projects.
- Thanks to their low barriers of entry, innovation vouchers are an excellent starting point for SMEs to start engaging with other regional innovation policy support measures and especially with research and innovation institutions.
- Innovation voucher schemes should be administratively simple to ensure they are attractive to SMEs (effort to apply, implement and report versus amount of funding available).
- Digital platforms are increasingly used for scheme/project submissions and monitoring of schemes
- Co-financing rates and cash flow (i.e. spend before reimbursement) are also important for SMEs when dealing with larger vouchers and can impact on their attractiveness
- Innovation ecosystem agencies/intermediaries can be useful actors to manage and implement voucher schemes. They often combine good knowledge of the target audience (SMEs) and have often trust based relationships and the technical knowledge to evaluate funding requests and facilitate matchmaking
- Evaluation, monitoring of KPI's are important elements to facilitate learning, impact measurement and adaption of future voucher schemes
- Promote success stories and communicate on results to illustrate benefits of innovation for SMEs



#### Open innovation challenges

Working groups used the innovation challenge design canvas provided by Nicola Doppio (see below)
to discuss challenges related to traffic congestion in Skopje and the modernisation of public services in
North Macedonia.



The working groups discussed:

- Open innovation challenges are flexible policy tools that can engage regional actors to address a
  broad range of regional challenges from business to societal, including but not limited to resolving
  urban traffic congestion and nurturing an entrepreneurial mindset among high-school students.
- Open innovation challenges contribute to agenda setting and the enhancement of regional innovation ecosystems. They support public authorities in identifying crucial regional issues and engaging the wider regional innovation ecosystem, thereby promoting collaboration between public authorities and local stakeholders. Furthermore, they easily generate public excitement and media interest.
- <u>Open innovation challenges</u>, however, require significant resources and time efforts. Public sponsors must pay great attention to the design of open innovation challenges. For instance, the selected challenges must not be too narrow nor too vague. It is important to properly frame the challenge to generate public excitement.
- Open innovation challenges enable public authorities to explore innovative policy tools and potential solutions. They provide a platform for experimenting with ideas and uncovering opportunities to address place-based societal challenges. Additionally, they can serve as an initial step for engaging regional policymakers in promoting more policy experimentation and designing a comprehensive and inclusive regional policy mix including innovation procurement. Effective communication and empowerment of the solvers are essential for public authorities, along with regular reporting to showcase the outcomes of solutions.
- The <u>example of Trento open innovation challenges</u> and the <u>open challenge design canvas</u> can inspire policymakers to design their own version of a challenge competition.



## 2. Success factors for a thriving ecosystem

The following section highlights success stories of innovation ecosystems stemming from Interreg Europe good practices.

## Centres of Competence and financial sustainability

**Ivan Popov**, Deputy-Executive Director of the Executive Agency "Programme Education", Bulgaria, presented the work done to establish centres of competence in Bulgaria. The primary operational objective of Centres of Competence (CoCs) is to strengthen university-industry collaboration, thereby accelerating the innovation process and fostering economic growth. This collaboration is reinforced through:

- Private sector participation in management and governance structures,
- Dedicated services tailored to private sector needs,
- Steering academic work towards more applied research, and
- Facilitating interregional linkages through the involvement of international companies.

A country like North Macedonia could benefit from establishing 2–3 such centres in strategic sectors with a critical mass of research and innovation actors. These centres could focus on the diffusion of innovations to SMEs and capitalise on areas with growth potential aligned with S3 priorities.

**Ivan Popov and Balázs Barta,** Managing Director of Pannon Business Network, Hungary, mentioned the importance of capacity-building support schemes and diverse access to multiple funding sources. For **regional policymakers**, ensuring the financial sustainability of research and innovation infrastructure is critical. This can be achieved through access to multiple funding streams beyond public sources.

#### Innovation vouchers



Innovation vouchers are small credits (€2,000—€20,000) provided by regional or national governments to SMEs (Small- and Mediumsized Enterprises) to purchase services from knowledge providers like universities, research centres, or consulting firms. Their goal is to help SMEs introduce new products, processes, or services. Zdeněk Hušek, RIS3 manager at Usti Region Authority (CZ) highlighted that vouchers must be integrated into a broader ecosystem rather than being treated as isolated actions. To achieve this, an ecosystem orchestrator, such as an innovation agency or technology transfer centre, should promote vouchers within a well-defined

context. Active efforts like promotion, marketing, and key account management are essential to ensure their success. Vouchers themselves are an innovation and should be approached with strategies aimed at early adopters. Additionally, the process should include simple and efficient evaluation mechanisms, complemented by comprehensive impact assessments, such as those guided by frameworks like the World Bank.

#### Open innovation challenges



**Nicola Doppio,** Hub Innovazione Trentino (IT), presented the <u>Innovation Challenges</u> in Trento that are initiatives organised by Hub Innovazione Trentino that use a prize-based approach to connect and encourage SMEs to collaborate with other entities. The goal is to drive innovation in business, products, services, or technology.

In these challenges, SMEs work directly with students, researchers, or other companies to address industrial problems. The solutions

generated are typically practical, taking the form of new technologies, business ideas, prototypes, or insights derived from field testing. Like prizes, Innovation Challenges are usually framed as competitive opportunities, offering incentives to "solvers" who develop viable solutions.



# 3.Interreg Europe resources

This section shows several Interreg Europe good practices and resources that are relevant to innovation ecosystems, as additional sources of information.

### Centres of competence: BioCC OÜ - Estonia (from the project NICHE)

The <u>BioCC OÜ</u> is a competence centre in the food sector in Estonia. The competence centre provides support from basic research to market commercialisation thus covering the full spectrum of product development. <u>BioCC OÜ</u> involves a triple-helix model of collaboration among Estonian companies, universities (University of Tartu), and public organisations in the frame of the Estonian Competence Centre Programme. In the <u>BioCC OÜ</u>, 20 food SMEs are working with academics to generate new product food innovations. The competence centre was successful in developing new food products, such as the cheese HARMONY™ that containing probiotic strain L.plantarum TENSIA® to stabilise blood pressure.

# Attracting international researchers to develop R&D projects: <u>TECNIOspring</u> – Spain (from the project <u>S3CHEM)</u>

The programme <u>TECNIOspring</u> is a mobility scheme to attract international researchers to develop R&D projects in Catalonia, Spain. The programme provides 100% financial support to offer fellows 2-year employment contracts to develop applied research projects with focus on technology transfer. <u>TECNIOspring</u> is an example of a technology push initiative that gives financial incentives for private companies to conduct and to invest in R&D. In addition to incentivise private companies, the programme allows for extra-regional knowledge flows and linkages with other R&D centres.

#### Hackathons for urban challenges in Sofia: (from the project INNOBRIDGE)

The Sofia Development Association was created by the Municipality of Sofia, Bulgaria, to promote quadruple helix engagement and to pilot and test innovative solutions. The Association has organised more than <a href="Monosto-based urban challenges">20 hackathons to solve place-based urban challenges</a>. Hackathons are short-term competitions where teams compete to develop minimum viable products (MVP) before presenting them to a jury. The winners receive a prize money to further develop their MVP and prototypes. The Sofia Development Association is involved to frame the challenges, to find funding for the prize money thanks to co-sponsorship, to assist prototype development, and to support further public procurement or commercialisation.

### Innovation vouchers: Tampere region innovation voucher – Finland (from the project INNOBRIDGE)

The <u>Tampere region innovation voucher</u> initiative was executed with flexibility and agility, allowing companies to choose service providers under a first-come, first-served basis, without public authorities' preselection, as there was no competitive tendering process for service providers. Additionally, a digital platform was developed to manage applications. The project had a budget of 1.7 million euros, with 1.0 million euros allocated to distribute as vouchers to companies, with a maximum amount of 5,000 euros per company.

### Other resources from the Interreg Europe Policy Learning Platform:

#### **Publications:**

- <u>University-industry collaboration</u>
- Research valorisation
- Innovation in less-developed regions
- Innovation Inducement Prizes
- Innovation vouchers
- Centres of Competence

- <u>Innovation Inducement Prizes: small steps</u> to transformative changes
- BioCC OÜ
- <u>TECNIOspring</u>
- Tampere region innovation voucher









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