

A Policy Brief from the Policy Learning Platform on Research and Innovation

November 2022





Table of Contents

Summary	2
1. Introduction	3
2. Fab Labs	5
3. Collaborative Spaces in Small- and Medium-Sized Towns	7
4. Innovation Centres	g
5. Living Labs	11
6. Innovation Districts	13
Sources of further information on spaces for innovation	15

Summary

This policy brief explores the importance of five types of **spaces for innovation** for local and regional development—namely Fab Labs, collaborative spaces in small- and medium-sized towns, living labs, innovation centres, and innovation districts. The five spaces of innovation were selected due to their relative novelty and for the importance of public policies to support the creation and implementation of such spaces. Spaces for innovation can target many different users—start-ups, SMEs, private companies, students, researchers, citizens... Many Interreg Europe projects have experimented with policies to promote the development of spaces for innovation offering many insights for local and regional policy learning. This policy brief introduces the topic of spaces for innovation and their importance for local and regional development. Each space for innovation features a foreword, a short description, some policy recommendations using good practices from Interreg Europe to inspire regional policymakers to promote spaces for innovation in their specific regional contexts.

Acknowledgements: The authors would like to particularly thank our external contributors, Anne-Christine Habbel, Harri Kuusela, Julie Wagner, and Wim De Kinderen for their insightful contributions into some of the key policy issues regarding spaces for innovation.



1. Introduction

The importance of spaces for innovation

Since the late 2000s, **new collaborative spaces**—such as hacker spaces, makerspaces, Living Labs, FabLabs, co-working spaces, innovation centres, and innovation districts—have appeared with the emergence of the knowledge and collaborative economy (**Akhavan**). These collaborative spaces for innovation participate to knowledge-based development by spatially concentrating knowledge workers, organisations, and infrastructures in physical spaces. **Spaces for innovation** connect diverse factors that are essential for knowledge-based development, namely the **software** (skills and knowledge), the **orgware** (learning and capacity building), and the **hardware** (infrastructures and urban amenities).

The emergence of collaborative spaces for innovation is the result of concurrent trends fostered by the knowledge economy such as changing learning, social, and working patterns, and the operationalisation of innovation concepts such as quadruple-helix model of innovation, open and social innovation, informal networking, and external knowledge diffusion. These physical spaces aim to promote collaboration among different types of actors and to provide a sense of local buzz offering actors a competitive advantage by just being there (<u>Gertler and Wolfe</u>). The main premise is that geographical proximity matters for accelerating research and innovation processes.

Geographical proximity matters due to the localised nature of tacit knowledge (<u>Von Hippel</u>). Tacit knowledge refers to the knowledge, ideas, concepts, or insights that individuals possess but cannot fully express since tacit knowledge is ill-defined, uncodified, unpublished. Tacit knowledge is distinct from, but complementary to, codified knowledge, a formalised knowledge, which consists of information that can be easily transferred in various forms in a standardised manner through technical blueprints or operating manuals. Tacit knowledge is transferred through face-to-face, formal and informal, repeated interactions and as such is more difficult to transfer through distance, and thus, is more localised.

Spatial clustering alone does not create mutually beneficial interdependencies; the diffusion of tacit knowledge does (<u>Asheim</u>). Tacit knowledge is localised, but its regional diffusion might suffer from interaction and fragmentation failures (<u>Asheim et al.</u>). As a result, the policy rationale to support the creation of spaces for innovation is to reduce fragmentation and to promote interactions among innovation actors in the regional innovation ecosystems. Spaces for innovation allow for repeated face-to-face contacts, open innovation, informal networks, serendipity encounters, co-presence, and co-location of people that promote a sense of belonging and proximity, favouring the building of trust. Indeed, successful regional innovation ecosystems not only have few barriers to the diffusion of innovations, but also strong informal structures for the exchanges of ideas and knowledge (<u>Storper and Venables</u>).

Spaces for innovation require political support and must achieve financial sustainability. There are many possible funding models that must be adapted to the regional and national funding opportunities and contexts. However, there are some common elements. First, policymakers can use a mix of public and EU fundings (regional, national, and European) for building the infrastructures. Second, private funding is also needed for balancing running costs and can be secured through service delivery and renting spaces. Third, private funding can sponsor equipment, services, and events/contests. Finally, policymakers can take advantage of competitive funding calls.

The revolutionary nature of information and communication technologies (ICTs) and more recently the COVID-19 pandemic have led some experts to think that space would become irrelevant (<u>INC</u>). Digital and tech companies were among the first to go fully remote at the start of the pandemic two years ago before changing their policies to hybrid remote working. However, the digital and green twin transitions are creating some opportunities for more peripheral regions in attracting knowledge and creative workers. Rural areas and small- and medium-sized towns that aim to attract hybrid workers to work in digital multilocalities can create collaborative spaces for innovation (<u>Bürgin et al.</u>).



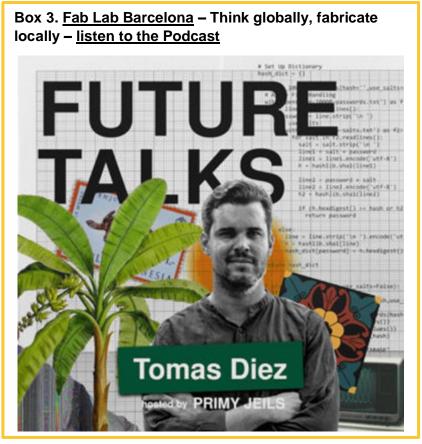
Box 1. Technology parks are also transforming themselves.

Although <u>Technology parks</u>—also known as science parks, research parks, and technopoles—are spaces for innovation with a long history, they are still important <u>policy components of regional research and innovation ecosystems</u> (read our article on <u>Technology Parks to promote regional economic transformation</u>). Due to evolving life/work models, many technology parks are reinventing themselves as it is the case in the <u>Sophia Antipolis Technopole Ecosystem in France</u>, the oldest and largest technology park in continental Europe. Indeed, the <u>Sophia Antipolis Technopole Ecosystem</u> is supporting the creation of an 8,700-square-meter innovation centre or "Pole Innovation" planned for 2025 in the heart of the technopole. The innovation centre will serve as an anchor with different activities such as startup incubation services, office spaces, co-working spaces, event spaces, an auditorium, and a showroom to showcase innovation from Sophia-Antipolis combined with networking/third places such as a rooftop restaurant and bars. The Pole Innovation illustrates the importance to spatially concentrate innovation actors, support services, and amenities.

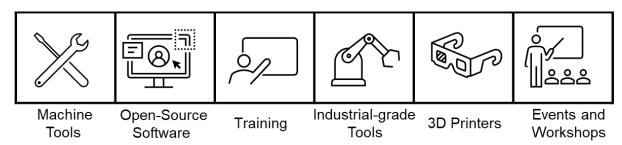
Box 2. The Policy Learning Platform can help you to better deliver policies to build spaces for innovations

The <u>Interreg Europe Policy Learning Platform</u> can help local and regional policymakers to better design and implement context-specific spaces for innovation by facilitating the exchange of experience from different institutional contexts and showcasing success stories via the <u>Good practice database</u>. The <u>Policy Learning Platform</u> can provide a forum for direct discussions among partners from different projects – either in thematic workshops, <u>matchmaking sessions</u>, <u>peer reviews</u>, or in webinars and online discussions, and provide expert advice through our ondemand <u>policy helpdesk service</u>.





2. Fab Labs What is a Fab Lab?



A **Fab Lab or Fabrication Laboratory** "is a collection of commercially available machines and parts linked by software and processes we developed for making things" (<u>MIT</u>). They are physical spaces offering access to digital and industrial-grade fabrication and electronics tools, open-source software, and programmes to support prototyping. They are a place to play, to create, to learn, to mentor, to invent: a place for learning and innovation. They offer tools such as Numerically Controlled (NC) knife cutting, laser cutters to make 2D and 3D structures; microcontroller equipment; NC machining to make circuit boards, precision parts, and mold casting; 3D Printers; wood routers; access to sensors, actuators, and displays; and wired and wireless communications (see <u>the list of machines and materials here</u>). The concept of a Fab Lab has been used across the world to empower different beneficiaries—from students to entrepreneurs—and to address local challenges—from promoting an entrepreneurial mindset to responding to local societal challenges (read our article on <u>Fab Labs: a flexible policy tool for place-based challenges</u>).

Policy recommendations

Fab Labs are often top-down initiatives and aim for ideation purposes. They are often dependent on existing public or private institutions and, therefore, financial sustainability remains one of the main challenges in the maintenance and continuity of Fab Labs (<u>Capdevila</u>). As a result, policymakers must



ensure the financial sustainability of such places with a strong business model (see recommendations from the <u>Fab Foundation</u>). Additionally, **Fab Labs are flexible policy tools.** They can target different types of regional stakeholders such as students, SMEs, or civil society. They can respond to multiple local policy challenges or opportunities ranging from promoting STEAM and entrepreneurship to facilitate prototyping for SMEs and finding solutions to place-based societal challenges (read our insights from the **online discussion on Fab Labs and Makerspaces**).

Box 4. Fab Labs in Interreg Europe

Fab Lab can support STEAM skills and the creative industries. In <u>URBAN M</u>, <u>STEAMhouse</u> is an innovation space that combines co-working spaces and makerspace. It focuses on developing science, technology, engineering, art, and mathematics (STEAM) skills to create innovative products and services in the Greater Birmingham and Solihull (GBS) city region. The initiative promotes the development of creative and cultural industries through diffusing the adoption of new technologies and digital equipment. STEAMhouse will create in its next phase a large-scale innovation campus in Birmingham which will support research development, co-creation of knowledge, incubation...

Fab Labs can be engines of urban regeneration and local transformation. In <u>URBAN M</u>, the Municipality of Lisbon decided to open a <u>Fab Lab</u> in a central location of the city and reconverted an unused food-market—Mercado do Forno de Tijol—into a fully-equipped laboratory for digital makers where all kind of users from students to professionals can have access to knowledge and resources to prototype their ideas. Fab Labs have difficulties to be financially sustainable. Lisbon City Council supports Fab Lab makers and technicians with municipal budget: in seven years they promoted more than 900 workshops and prototyped more than 3,000 projects, contributing to the creation of a more innovative urban environment. The success of the initiative could encourage other municipalities to follow the example of Lisbon in supporting the creation of Fab Labs to promote urban regeneration.

Fab Labs can adopt design thinking methods. In <u>CLUSTERIX2.0</u>, the cluster organisation, **NOI AG**, is responsible for managing and developing the South Tyrol Science and Technology Park—which involves more than 70 companies and innovative start-ups, 4 research institutions and 3 faculties of the Free University of Bozen/Bolzano—in leading regional priority sectors. The cluster organisation, an in-house company of the Autonomous Province of Bolzano, introduced a policy change regarding the design of services for digital fabrication at Makerspace. Learning from the good practice <u>Strategic Use of Design</u> from Denmark, NOI AG was able to add concepts such as Danish design ladder, process mindset and iterative processes in its makerspace service for prototyping.



3. Collaborative Spaces in Small- and Medium-Sized Towns

Box 5. Harri Kuusela, Regional Council of Päijät-Häme, Finland.

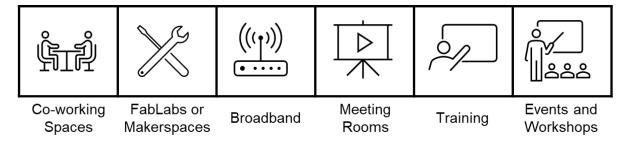
Innovation needs collaboration. People are social creatures, and so is innovation as it is a social construction. How to create opportunities for fostering innovation, namely in rural areas? In my experience, the key is to bring people together.

In rural areas, where distances are long, and inhabitants scattered across wide areas, it is not enough to provide virtual and digital platforms to connect people. Physical spaces are needed to facilitate trust and long-lasting collaboration through face-to-face interactions, real handshakes, and eye contacts... virtual presence can complement, but not replace face-to-face interactions.

However, a physical space is not enough. Innovation requires the right atmosphere for collaboration inside and outside the physical space. Many ingredients are needed to build the right space with the right atmosphere for collaboration: location, accessibility, decoration, furniture, colours, sounds, and even smells. Furthermore, the sponsor of the physical space has a strong role to play by being here, by welcoming guests, and by animating the space. A collaborative space for innovation must have familiar faces who contribute to build trust, provide ownership, and engage citizens through emotions.

The role of collaborative spaces can be key to engage citizens and local community, which in turn can generate the basic conditions for lasting innovation and addressing local challenges. I cannot say for sure how to make these spaces successful, but I am going to share an educated guess: give it some time, provide (mental) space, ensure financial sustainability, and build trust. It may fail, but if successful, the impact will be valuable, long-lasting, and well worth the effort.

What is a collaborative space in a small- and medium-sized town?



A collaborative space in rural areas or small- and medium-sized towns (SMSTs) is a space that regroups multiple amenities to act as an anchor space for creative and knowledge actors, namely workers, students, and community. It acts as a one-stop shop to engage the local community regarding research and innovation activities and through participatory processes. The amenities that can be proposed in such collaborative spaces are co-working spaces, Fab Labs, high-speed internet, meeting rooms, training and support services to promote, for instance, entrepreneurship, and events and workshops to engage its users and the local community.

Policy recommendations

It is more relevant for local and regional policymakers to promote the creation of collaborative spaces in SMSTs that have a population of between 5,000 to 50,000 inhabitants and that do not already possess a space for innovation. The creation of such collaborative space must engage local quadruple-helix stakeholders in co-creation processes to rally local actors around a common vision for the town. A public-private partnerships (PPP) can be established to create and manage such collaborative spaces. This PPP can be done, for instance, with a leading place-based private company or a branch university. Moreover, such collaborative spaces can participate to address some place-based challenges specific



to SMSTs such as the promotion of an entrepreneurial culture and mindset, digital literacy, and support community engagement. For instance, the <u>Lormes the living village Hub</u> in Nièvre, France, illustrates how to foster digital Inclusion through micro-collaborative rural spaces. However, it is important for such spaces, especially in rural areas, to have access to fibre broadband. The deployment of fibre broadband can trigger the creation of collaborative spaces in SMSTs.

Box 6. Collaborative Spaces in Interreg Europe

Collaborative spaces can help bridge digital divides. In INNO INDUSTRY, the Business and Shared Services Centre is a collaborative space to promote information and communication technologies (ICTs) in the City of Fundão, Portugal. The creation of the collaborative space was the result of a quadruple helix leadership to address the region's high unemployment rate and brain drain. The collaborative space has attracted many international companies and private companies. The good practice shows the importance of combining physical spaces with initiatives to promote IT skills and training, and an entrepreneurship and innovation culture among schoolchildren and citizens.

Collaborative spaces can attract hybrid workers and digital nomads. In ISLANDS OF ISLANDS OF

Regions can structure regional networks of collaborative spaces. In <u>NEXT2MET</u>, the <u>Digital Innovation Room Mecklenburg-Vorpommern</u> consists of 6 collaborative spaces throughout the rural region of Mecklenburg-Vorpommern, Germany. The initiative is coordinated by The Ministry of Energy, Infrastructure and Digitalisation and provides physical spaces for start-ups and creative and knowledge workers. The spaces' users benefit from both physical infrastructures—including facilities and equipment—and soft skills through learning experience from senior entrepreneurs or more mature companies. The initiative highlights that animation is important through involving more than 3,000 participants and offering workshops, coaching services, and networking events.



4. Innovation Centres

Box 7. Anne-Christine Habbel, Hof University, Germany.

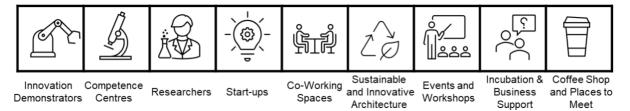
In 2019, **the Einstein 1 business incubator** (see below the good practice in Box 8) was founded on the campus of Hof University of Applied Sciences, followed by a Maker Space, allowing for experimentations with machine tools, such as large-scale 3D printers. There is a centre for water and energy management under construction and a project to create a research institute for biopolymers.

Why mentioning these spaces? **Hof University** is the innovation engine of a rural region that is aiming to concentrate many innovative and research players on its campus. In the initial phase, the role of public policies through incubation programs was important to build a critical mass of startups. Public intervention was combined with financial support and a strong commitment from private companies to the incubator. Many private companies lead and organise creative and design thinking workshops on the campus and in the region.

The "principle of short distances" has a positive effect on collaboration and brings not only internal but also many external actors to the campus, for example when we have events. It is no longer necessary to travel to individual organisations, the university campus offers a central meeting place to all. Our students are supported to become researchers and entrepreneurs. There are start-up courses embedded in the learning and study curricula. For the city and greater Hof, which has a population of around 100,000 inhabitants, the concentration of spaces for innovation is important for students and young people from the surrounding rural areas to meet, study, and experiment.

In the <u>DIGITAL REGIONS</u> project, we have learned a lot and were inspired from other European regions on how to successfully build spaces for innovation from <u>innovation centres</u> in Barcelona to the management of <u>Fab Labs</u> in Slovenia and the <u>Swiss Smart Factory</u> in Biel/Bienne, Switzerland. These examples show that spaces for innovation are important for regional development and that policymakers have an important role to play to sponsor them.

What is an innovation centre?



An innovation centre is a building or group of co-located buildings that provides collaborative spaces for knowledge-based actors, namely to innovative companies, start-ups, support intermediaries, research centres, and other users such as venture capital companies, Fab Labs, training or learning centres, start-up accelerators and/or incubators, and/or not-for-profit associations (Morisson). An innovation centre aims to promote collaboration among triple and quadruple-helix stakeholders by centralising innovation support services such as, for instance, with innovation demonstrators or incubation services. An innovation centre offers a wide range of high-level amenities such as coffee shops, restaurants, leisure spaces, conference rooms, and arcade and/or game rooms to retain its users within the innovation centre with the objectives to promote formal and informal face-to-face interactions, the creation of networks, and the spread of tacit knowledge. The events organised within an innovation centre aims to foster collaboration, networking, and the diffusion of extra-regional knowledge.



Policy recommendations

An innovation centre is most appropriate in a region with a large urban area of >100,000 inhabitants that already has a strong local innovation ecosystem but suffers from dysfunctional interactions among triple-helix innovation actors. A public-private partnership model can be adopted to build and operate such an innovation centre where services to private companies and rents contribute to the innovation centre's financial sustainability. The innovation demonstrators and services must aim to diffuse new technologies to SMEs in the region (watch our virtual visit to the Switzerland Innovation Park Biel/Bienne). An innovation centre can have a sectoral focus related to regional S3 priorities such as food/agritech or a regional societal challenge such as healthy living. Finally, it is important that policymakers animate such spaces with events open to the public and physical presence in the building. Innovation centres can also promote the international visibility of the region and become platforms for internationalisation by offering soft landing spaces for international startups and companies. Innovation centres can be seen as a "one-stop-shop" innovation anchor for innovation actors in the region (read our article on https://www.novembergion.org/

Box 8. Innovation Centres in Interreg Europe

Innovation centres can be steppingstone for local economic development and initiatives. In <u>BETTER</u>, the <u>Technology Transfer Centre</u> is a space for innovation located in Nyíregyháza, Hungary. The Technology Transfer is a 1,000-square-meter space established in a former army barrack and offers business support services such as: co-working spaces for start-ups, offices, events, training, and workshops. The good practice illustrates that the space was the catalyst for the creation of the local economic development office.

Innovation centres can anchor innovation. In <u>DIGITAL REGIONS</u>, <u>Einstein1</u> is a Digital Start-Up and innovation centre located in the Hof University campus of Applied Science working as an anchor space for start-ups and entrepreneurs in the city of Hof, Bavaria, Germany. The innovation centre offers multiple services to start-ups and entrepreneurs such as coworking spaces, office, and meeting spaces, networking opportunities, dedicated events and seminars, and support services (incubation) for entrepreneurs and start-ups. The innovation centre aims to foster a digital ecosystem focusing on digital and Big Data start-ups with potential applications for industrial, energy, and healthcare sectors. The <u>Digital Start-Up Centre "Einstein1"</u> highlights the **positive spillover effects of being located within a large university campus** both for the entrepreneurs and the university. Indeed, such initiatives can benefit from specialised knowledge, existing networks and university-industry linkages, as well as privileged access to specialised workforce, namely students and faculty.

Innovation centres can be dedicated to a regional strategic sector. In <u>REGIONS4FOOD</u>, the <u>Technocampus Alimentation (TCA)</u> is an innovation centre in the agri-food sector located in Nantes, Pays de Loire, in France. The innovation centre works as an anchor building space to house organisations and actors in the agri-food sector such as Food Development Group, WEENAT, Capsulae, IFRIA, Ligeria... The innovation infrastructure is located at the centre of an agri-food innovation ecosystem with INRAE (National Institute for Agronomic and Environmental Research), ONIRIS (National Veterinary, Agrifood and Food School) and the Loire-Atlantique Chamber of Agriculture. The innovation centre provides supports for the development of technical solutions, training services, fund-searching assistance, events, and collaborative spaces, including a laboratory for prototyping and testing. The innovation infrastructure was inaugurated in 2018 and was financed through various public funds (ERDF, Nantes metropolis, Regional Council).



5. Living Labs

Box 9. Wim De Kinderen, Brainport Development, Eindhoven, the Netherlands, and Vice-Chair ENoLL-European Network of Living Labs

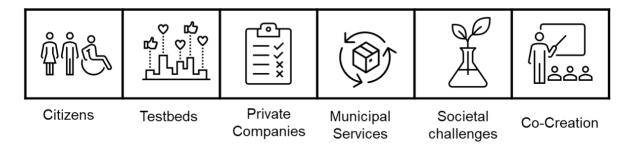
Innovation is necessary to respond to societal challenges. Many approaches and methodologies to stimulate and facilitate innovation exist. Dedicated "spaces for innovation" allow to make innovation more tangible. Living Labs are one example of a 'space of innovation". They are "user-centered, open innovation ecosystems based on systematic user co-creation approach, integrating research and innovation processes in real-life communities and settings. They operate as intermediaries among end-users, research organisations, companies, cities and regions for joint value co-creation, rapid prototyping, or validation to scale up innovation and businesses".

Living Labs' user-centricity and real-life aspects are key and diminish substantially the naturally 'risky business' of innovation: by telling in an early phase whether or not a product or service is liked by future clients, Living Labs are instruments of de-risking innovation, telling promotors what works and what doesn't and informing them on how to re-orient developments, or to stop them.

Most of today's challenges, in particular the most pressing ones, i.e. the transition to climate neutrality, defy purely technocratic solutions. With end-users mostly being citizens, Living Labs allow to broaden the scope of innovation and respond to specific challenges that require more integrated and inclusive solutions such as lifestyle and behavioural changes. As a result, Living Labs allow citizens to not only be passive end-users but also become drivers of positive change themselves.

Within the large spectrum of different 'spaces for innovation", which are partly overlapping. Living Labs occupy a special position due to the above unique and distinguishing characteristics. They contribute to shaping durable performances in a broad range of domains, thereby being a key instrument for local and regional development.

What is a living lab?



Living Labs (LLs) are open innovation ecosystems in real-life testbed and experimentation environments using iterative feedback processes throughout a lifecycle approach of an innovation to create sustainable impact (**ENOLL**). They focus on co-creation, rapid prototyping and testing and scaling-up innovations and businesses, providing (different types of) joint-value to the involved stakeholders. In Livings Labs, end-users participate in the conception of products by testing and improving prototypes and thus contribute to open innovation. **Living Labs** can also be spaces for finding solutions to urban challenges and place-based societal challenges through engaging citizens. Living labs operate as intermediaries/orchestrators between citizens, research organisations, companies and government agencies/levels (**ENOLL**).



Policy recommendations

There is a wide variety of living labs models. Living Labs can operate in a physical space or platforms to observe users, co-create innovations with users and other stakeholders, co-research with users and stakeholders, and democratise innovation (FugIsand et al.) Living labs have evolved originally, and mainly, within information and communication technology fields, but have spread into more general applicable areas such as service innovation, urban planning, and more recently, into public welfare services. Living labs are described as experimental settings for public innovation different from the traditional, more controlled, internally driven environments of public innovation. Living Labs can be used to engage and rally a broad range of quadruple-helix stakeholders around place-based societal challenges or to test public innovation. As a result, thanks to its flexibility, the regional model must be tailored to the regional needs. Living Labs can support and be an integral part of other spaces for innovation such as innovation centres or innovation districts, thus sharing resources and creating critical mass and enhanced visibility.

Box 10. Living Labs in Interreg Europe

Living Labs can use cities as urban laboratories and activate private-public challenges. In INNO4SPORTS, the Vitality Living Lab is a 4-year project aimed to develop an innovation and business sport ecosystem. 13 public-private partners from Cluster Sport and Technology are collaborating to create innovative socio-economic solutions through case-based approaches in practical environments. The good practice underlines the importance that innovative sport ecosystems must focus on promoting active lifestyles and must be based on strong public-private cooperation. Innovative sport ecosystems can address societal challenges such as health care costs, social cohesion, and healthy and active ageing. The project fostered new start-up activities and employment (+5 start-ups; +35 innovative solutions validated in living-labs; new innovation hub for sport and vitality). The good practice illustrates that open data systems can provide insights for innovative solutions and pursue cross thematic issues such as the role of sport in healthy living.

Living labs can help find solutions to place-based societal challenges. In <u>HELIUM</u>, the <u>Centre for Collaborative Innovation in Dementia</u> is a living lab that aims to generate sustainable solutions to the everyday challenges of living with dementia. The programme has adopted an open innovation approach to engage users, SMEs, researchers, and healthcare professionals in cocreation processes to address a social challenge. The living lab mostly focuses on social and process innovations in the healthcare sector.



6. Innovation Districts

Box 11. Julie Wagner, President, The Global Institute on Innovation Districts

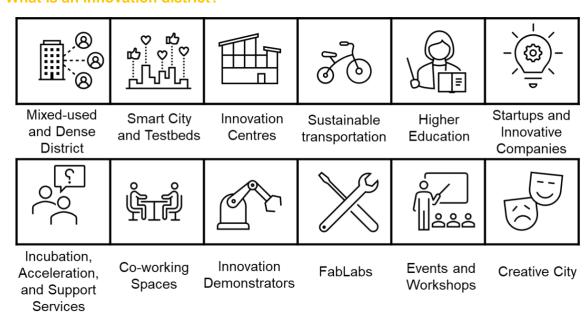
For over the past 50 years, the landscape of innovation has been dominated by places like Silicon Valley—suburban corridors of isolated corporate campuses, accessible only by car, with little emphasis on integrating work, housing, and recreation. Over the past 20 years, researchers have witnessed the rise of a more urban geography of innovation: **innovation districts.**

Innovation districts demonstrate the 'collapse back' of innovation into urban, walkable centers. They combine academic and medical institutions, corporate R&D, startups, and entrepreneurial support organizations in mixed-use communities that promote creativity and collaboration. Analysis by The Global Institute on Innovation Districts identifies that there are over 100 innovation districts around the world.

Districts are rising in response to changing global economic and demographic trends, some growing in importance with the pandemic. As office work has dispersed, many highly complex problems—such as COVID-19 and cancer—require an agglomeration of actors and assets, including unique 'innovation infrastructure'. The physical proximity of R&D actors and assets in districts helps accelerate highly complex, multidisciplinary research such as next-generation energy and new materials. New drugs, including the development of the COVID-19 vaccine, evolved through the combined disciplines of chemists, biologists, big-data specialists, and engineers in computer science.

Innovation districts are also an economic growth strategy for city-regions with strong R&D institutions but whose landscape has experienced decades of deindustrialization and underinvestment. While districts often grow and evolve organically, they can evolve to help reset decades of economic imbalances. In conclusion, innovation districts—given their unique assets and attributes—are well positioned to solve 'wicked problems' and drive new waves of growth at a time of economic contraction and inequality.

What is an innovation district?





An innovation district is a place-based urban development strategy that aims to regenerate an underperforming downtown neighbourhood into a desirable location for innovative and creative companies and workers (Morisson). One of the early models of an innovation district is 22@ Barcelona which was launched in 2000. Innovation districts are spaces for innovation that have four different components—urban planning, productive, collaborative, and creative—coordinated under a strong leadership—often a public intermediary organisation. Innovation districts aim to be mixed-used, diverse, dense, inclusive, walkable, bikeable, green, and sustainable with a thriving street-culture and vibrant after work scene and nightlife. Innovation districts have spaces for multiple formal and informal collaboration among quadruple helix stakeholders with innovation centres, living labs, workshops, and events. Innovation districts have knowledge and productive activities such as innovative start-ups, clusters, competence centres, intermediary organisations, universities, startup incubators and accelerators, research centres... Innovation districts have creative spaces for artists and designers, museums, creative events, pop-up event places, third places—bars, coffee shops, restaurants... Finally, innovation districts have leadership to establish zoning regulations and to animate their innovation ecosystems and thus create a strong and dynamic image of the city/region (Brookings).

Policy recommendations

Innovation districts must have a critical mass of innovation and creative activities to co-locate and are thus more relevant to initiative in large urban areas with more than 500,000 inhabitants. When publicly led, an innovation district is a long-term urban transformation project and must secure funding for at least 10-15 years. An independent organisation is often well placed to provide the necessary leadership and the mandate to animate and transform the district's different components—urban planning, productive, collaborative, and creative. Moreover, it is important to co-create with and to engage civil society and not-for-profit organisations in such an important urban project. Finally, innovation districts must pay attention to issues related to gentrification and digital divides (Morisson and Bevilacqua). Innovation districts can provide opportunities for urban regeneration to transform old industrial districts or large-scale events (for instance, MIND Milano with Expo 2015)

Box 12. Innovation Districts in Interreg Europe

Innovation and creative districts must engage civil society and not-for-profit organisations. In <u>CREADIS3</u>, <u>ZAWP</u>—Zorrotzaurre Art Work in Progress—is a public-private not-for-profit initiative that aims to promote urban, cultural, and creative transformation of a degraded industrial area in Bilbao, Spain. The industrial buildings and warehouses are used a laboratory for social innovation and urban experimentations. ZAWP aims to combine urban and creative transformation while promoting participatory and co-creation approaches among a broad range of stakeholders. ZAWP has allowed to promote a more inclusive and creative, urban transformation process while engaging a broad range of stakeholders and community-engagement.

Industrial heritage and culture are assets that can be exploited to promote urban regeneration. In URBAN M, Art factory LOFTAS highlights the opportunities for urban policymakers to retrofit existing industrial heritage into spaces for experimentation for creative and innovative workers. LOFTAS offers the community with spaces to promote experimentation with makerspaces, spaces for festivals, urban amenities, and workshops. LOFTAS highlights the importance of event programming with workshops, festivals, urban art exhibitions, and innovative and creative events. The good practice points out that the urban fabric can inspire and contribute to promoting an innovation and entrepreneurial mindset. Moreover, it offers a physical space for meetings, face-to-face interactions, and anchors the innovation process for creative and innovative workers. Moreover, such initiatives participate in the process of urban regeneration of traditional industrial neighbourhoods.



Sources of further information on spaces for innovation

- Collaborative Spaces <u>Collaborative Spaces</u>
- European Commission <u>Place-Based Innovation Ecosystems</u>
- Fab Labs <u>Fab Labs</u>
- IASP International Association of Science Parks and Areas of Innovation
- Innovation Centres Innovation Centres
- Innovation Districts GIID
- Living Labs ENoLL
- Interreg Europe Policy Brief Clusters
- Interreg Europe Policy Brief <u>Open, Social, and Responsible In</u>novation
- Interreg Europe Policy Brief University-Industry Collaboration

If you have any additional policy questions regarding spaces for innovation, do not hesitate to contact us through our on-demand <u>policy helpdesk service</u>. If you would like to explore the policy challenge of spaces for innovation in your region in more details, you can consider a Policy Learning Platform <u>peer review</u> or <u>matchmaking</u>.

Annex 1: Selection of relevant Interreg Europe projects dealing with innovation governance

Project	Objective
CREADIS3	To promote Smart Specialisation Creative Districts
DIGITAL REGIONS	To promote regional Industry 4.0 policies
ECORIS3	To support knowledge transfer from RTOs and HEIs to regional private companies.
ERUDITE	To enhance rural and urban digital innovation territories
IMPROVE	To better manage and implement Structural Funds Programme.
INNOHEIS	To encourage higher education institutions (HEIs) and their research and innovation infrastructures (RIIs) to participate as enablers of S3 and the EDP.
INNO INDUSTRY	To improve innovation delivery of policies within 4.0 industry
INNO INFRA SHARE	To share strategies for European Research and Innovation Infrastructures
NEXT2MET	To promote attractiveness through soft digitalisation measures
OSIRIS	To solve real-life societal challenges through open social innovation methods - stimulating a bottom-up co-creation process for regional development
PASSPARTOOL	To develop key tools to assess and improve soft innovation policies, namely related to social, organisational, institutional, and open innovation
RELOS3	To implement regional Smart Specialisation Strategies (RIS3) in a local context.
TRACS3	To support regional innovation infrastructures to build research excellence.
URBAN M	To promote urban manufacturing through collaborative maker spaces

Cover image credit: Interreg Europe Policy Learning Platform.

#ResearchAndInnovation #InterregEurope #spacesforinnovation #collaborativespaces #policylearning



Thematic experts: Arnault Morisson & Marc Pattinson

a.morisson@policylearning.eu

m.pattinson@policylearning.eu

To cite this Policy Brief: Morisson, A. & Pattinson, M. (2022). *Spaces for Innovation*. Lille: Interreg Europe Policy Learning Platform.

