

INNOBRIDGE EXPERIENCE BOOK

**Bridging the innovation gap
through converting R&D results
into commercial success in a more
effective and efficient way**

InnoBridge
Interreg Europe



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Research &
innovation



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INNOBRIDGE EXPERIENCE BOOK





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INTRODUCTION

High regional expenditure on R&D does not necessarily lead to innovation and regional competitiveness, especially if the regional economy makes insufficient exploitation of its own R&D results. Enhancing SME competitiveness is at the core of the InnoBridge project by “Bridging the innovation gap through converting R&D results into commercial success in a more effective and efficient way”. The project enables SMEs to turn their innovation potential into business success and catalyse regional growth.

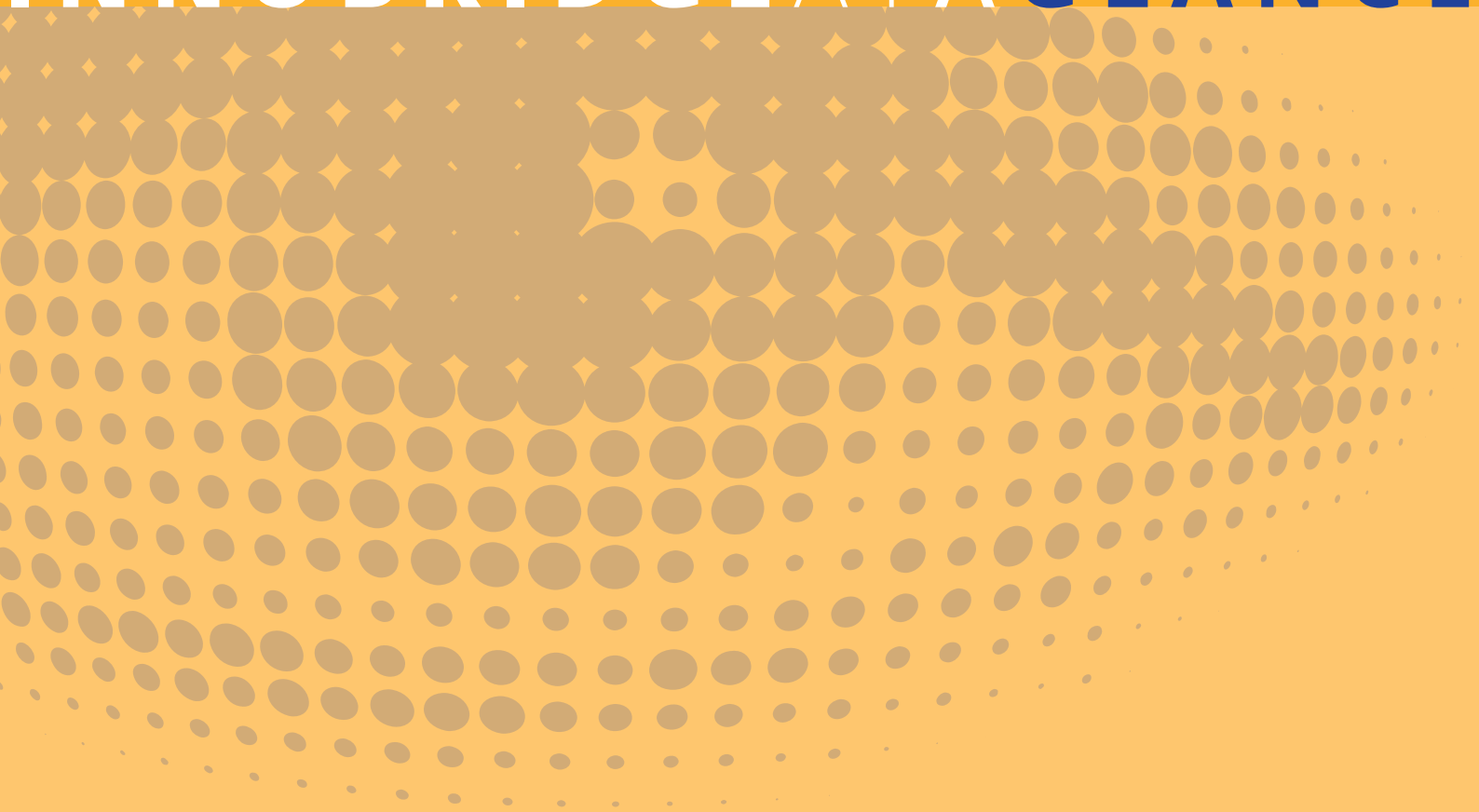
The InnoBridge Experience Book reflects the first 3 years of the interregional learning process going through series of Peer Reviews, Capacity Building Workshops, Staff Exchanges, Study Visits and in-depth analyses. The Book gives an overview of the InnoBridge process and methodology alongside with the ultimate achievements within this period.

The key InnoBridge milestone are the individual Action Plans developed by the partners to improve efficiency of the policy instruments that bring R&D results to local and global markets. A pool of regional profiles and recipes on “How to commercialise R&D results” provides further highlights into diverse and tailor-made approaches of the 8 InnoBridge partner regions.

Based on the interregional learning process and the steering role of the Lead Partner of the Government of Lower Austria, the Applied Research and Communications Fund (ARC Fund) and the support of IDEUM, a set of experience-based Policy Recommendations towards better R&D commercialisation efficiency was elicited by the InnoBridge partners.

The Policy Recommendations are shaped by the strengths and challenges of each partner region, its regional perspectives and smart specialization, since no general solution could be applicable to all EU regions towards seamless R&D commercialisation processes. The recommendations are supported by highlights from Peer Review findings, links to partners’ Action Plans and Good Practices identified by the InnoBridge partnership.

INNOBRIDGE AT A GLANCE



ACTION PLANS

for all 8 policy instruments were designed to upgrade existing actions, pilot new activities and build 'innovation bridges' for R&D commercialization in our home regions. Action Plans implementation starts in April 2019, while single actions have been already launched.

POLICY RECOMMENDATIONS

present in a nutshell our main experiences to assist decisions in most levels of government. We designed our InnoBridge Experience Book to share recipes for innovation, lessons learnt and policy advice on how to make R&D a commercial success for SMEs and regions. With the strong involvement of the responsible authorities we keep the dialogue till 2021 and beyond.

CAPACITY BUILDING WORKSHOPS

empowered InnoBridge partners and regions to find ways and scenarios for better, more targeted and efficient measures to bridge commercialization gaps of R&D results. New actions were discussed and peered to bring desired changes in the regions.

STAFF EXCHANGES

are the InnoBridge mobility schemes that brought closer looks to the real live innovation cases in host regions. Partners joined regional champions and practitioners to learn, share and make new networks. Cases were built in action plans for future support measures.

STUDY VISITS

made bridges between policy and practice by showcasing innovation and social success stories in regions. Held within the capacity building events they offered opportunity to InnoBridge partners and regional key actors to gain knowledge and meet great people.

PEER REVIEWS

were carried out for 8 policy instruments and regions to identify strengths, opportunities and common challenges. As peers we explored key issues for addressed policy instruments, identified Good Practices, and got Regional Stakeholders on board of InnoBridge!

EVOLUTION MODEL

"How to convert research into commercial success story" focusing on 8 key activities for innovation management with relation the 9 Technology Readiness Levels (TRLs) was analysed and used in the Peer Reviews.

GOOD PRACTICES

working well in the host regions, they serve as knowledge pool for others - to design new actions and strengthen partnerships. 19 Good Practices of regional R&D+I policy are identified and available on the website.

REGIONAL STAKEHOLDERS

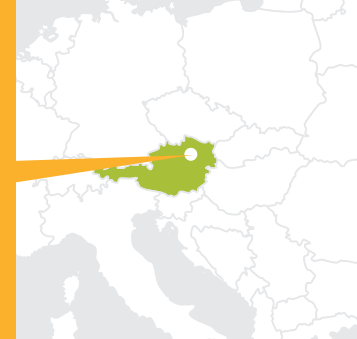
are a key part of the knowledge capture and exchange process. Wide range of actors took part in more than 28 InnoBridge events as counselors, speakers, Good Practice and success story providers as well as results validators.

REGIONAL RECIPES TO INNOVATION



Region and country **LOWER AUSTRIA · AUSTRIA**

Partner organization
OFFICE OF THE REGIONAL GOVERNMENT OF LOWER AUSTRIA



Region description

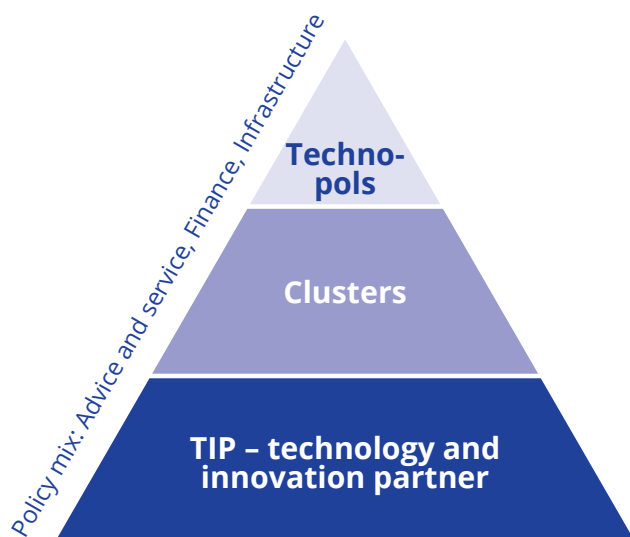
Lower Austria is with 19,178 km² the largest Austrian region with about 1.66 million inhabitants. GDP per capita has increased to 33,100 Euro driven by an economy characterised by a broad spectrum of products and long intraregional value chains, combined with attractive factors such as green environment, availability of land, skilled human resources and well developed transportation routes.

Also interregional cooperation is an important driving factor: Lower Austria, Vienna and Burgenland form together the Vienna Region, characterised by formidable economic dynamism with the strongest concentration of research institutions and universities in Austria.



Lower Austria regional recipe on “How to commercialise R&D results”

“Entrepreneurial Territory Lower Austria – Proper Growth. Better Living” is the vision of the Economic Strategy Lower Austria for 2020 with goal-oriented development of R&D sites as one main opportunity. That is why “Research, Development and Market Implementation” is one core pillar and at the same time the Smart Specialisation Strategy (RIS3) of Lower Austria.



With its Innovation Pyramid – reflecting the S3 priorities – Lower Austria is providing a comprehensive system of bespoke road maps of R&D and support services to bridge the innovation gap and to strengthen the business site Lower Austria. The more basic oriented R&D is, the longer is the way to innovation and commercial success, which requires long-term road maps like for the Technopols.

The more applied oriented the research and development activities are, the more pragmatic and innovation oriented is this road map. The Technology and Innovation Partners (TIP) – identified as a European Good Practice by the InnoBridge partners – are offering such service portfolio for regional SMEs.

Based on InnoBridge Peer Review findings further improvement of the long-term impact of these TIP services on their customers through introduction of “R&D+I Portfolio for SMEs” is one focus in Lower Austria’s Action Plan with the aim to increase SME’s strategic R&D+I competencies through further development of own skills and/or access to external competencies.

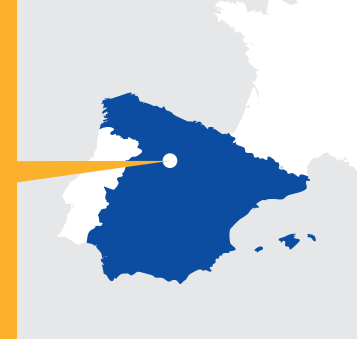
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Region and country **CASTILLA Y LEÓN** · SPAIN

Partner organization
**UNIVERSITIES AND HIGHER EDUCATION FOUNDATION OF
CASTILLA Y LEÓN (FUESCYL)**



Region description

Castilla y León has a university system with significant critical mass and experience in key areas for economic and social regional development. The universities of Castilla y León gather around 60% of the staff dedicated to R&D in the region.

Since 2008, the Regional Government of Castilla y León has supported knowledge transfer from universities to companies through the University-Business Knowledge Transfer Plan (known as its acronym in Spanish 'TCUE Plan'), which aims at taking advantage of university knowledge to boost regional growth. The same Regional Government approved, in April 2018, the new TCUE Plan for the time period 2018-2020.



Castilla y León regional recipe on “How to commercialise R&D results”

The need of bringing university and business closer is still one of the most important aspects for the social and economic development of Castilla y León. Thus, it is included in the RIS3 of Castilla y León 2014-2020 as well as in the Regional ERDF Operational Programme 2014-2020.

The TCUE Plan 2018-2020 develops the actions of the RIS3 and the ERDF Operational Programme of Castilla y León in relation to knowledge transfer in the university environment during the time period 2018-2020.

The TCUE Plan 2018-2020, which is currently been implemented, includes many of the lessons learnt, recommendations and suggestions resulting from the

experience exchange within the InnoBridge project, incorporating the Good Practices from other regions and reinforcing some own experiences taking into account the expertise from the partners.

A clear example of it is that the TCUE Plan 2018-2020 includes rapid prototyping laboratories (FabLabs), based on the Good Practice of the Portuguese partner ADRA: 'FabLab ÉvoraTech'. The establishment and management of FabLabs in the public universities of Castilla y León will directly reinforce the Market-Oriented Prototypes Programme, one of the Good Practices of Castilla y León within the framework of the InnoBridge project.



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Region and country **AUTONOMOUS PROVINCE OF BOLZANO - SOUTH TYROL · ITALY**

Partner organization
AUTONOMOUS PROVINCE OF BOLZANO - SOUTH TYROL



Region description

The Province of Bolzano – South Tyrol is an autonomous province, which, located in the heart of the Alps, works as a bridge between the German and the Italian cultures.

Characterised by micro and small enterprises mostly in the traditional sectors, it has well-known innovative products in the alpine technologies and agro-food sectors.

Research institutes and the university are young and dynamic with many outstanding research activities. In 2018 the new technology park “NOI Techpark” was opened, hosting numerous laboratories, ecosystems (clusters), offering innovative and start-up services, networking and know-how transfer.

◀ Research Centre Laimburg – Arome and Metabolites Laboratory
Source: © VZL/Ivo Corrà/2018

South Tyrol regional recipe on “How to commercialise R&D results”

In the Province the competence for R&I is unified in a single department, which enables synergies’ development between enterprises and research institutes and University.

The Department for Innovation, Research and University supports enterprises and researches relevant for the territory and this in turn creates a positive effect on the development of the region thanks to R&D&I resulting products, for instance in agriculture, tourism and alpine technologies (some of South Tyrol outstanding fields), that are sold firstly on the local market.

The cross-sectoral cooperation between the economic sectors (agriculture, manufacture, tourism, and services) allows each to benefit from the others’ competences and to create synergies. This is possible also thanks to the small dimension of the region.

Moreover, the technology park with its multitude of laboratories allows the actors of the research and innovation fields to meet and start new projects. R&D cooperation projects have been increasing over time, thus, they will continue to be supported in the future.



▲ NOI Techpark
Source: © IDM/Ivo Corrà/2018

Also municipalities will be involved in innovation activities in the future. Thanks to the InnoBridge experience exchange the importance of these actors of innovation has been highlighted and municipalities have already been involved.

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Region and country **WEST TRANSDANUBIA · HUNGARY**

Partner organization
**PANNON NOVUM WEST TRANSDANUBIAN REGIONAL
INNOVATION NON-PROFIT LTD.**



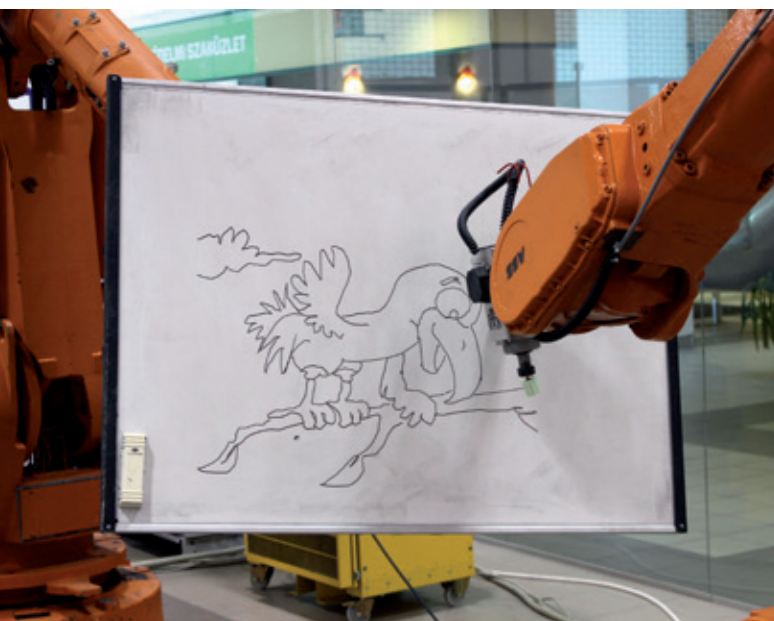
Region description

West Transdanubia is bordered by 4 countries (Slovakia, Austria, Slovenia, Croatia) and belongs to Centrope multinational region in the heart of Europe. Both universities, companies and local governments are partners in investments and developments in targeted sectors aligned with smart specialisation directions: automotive, machinery, logistics, ICT, cultural and creative, food and wood industry. Foreign automotive subsidiaries of Audi, Schaeffler, Opel, BPW, SMR, Dana, Nemak are integral part of the region's economy and cooperate with the local R&D capacities. Start-up community becomes more active. One of the major issues is developing skills for the future.

West Transdanubia regional recipe on “How to commercialise R&D results”

Collaboration between university and large multinational companies in automotive industry is intensive but there is room for improvement in communication and technology transfer between university and SMEs. Szechenyi Istvan University in Győr is working to create an open collaboration platform based on its industrial relations, experiences, human resources and research infrastructures in order to serve the industrial needs of SMEs and implement effective knowledge and technology transfer.

Student's designed prototype electric car in the Szechenyi Istvan University of Győr



Technics Playground 4.0 Mechatronics and Training Centre in Győr

Main take-aways from Staff Exchange in Tampere are: Kampusareena services towards companies (Kampusklubi, co-working spaces, facilitated innovation process) and Demola / Koklaamo programmes that focus on student projects with industry and community.

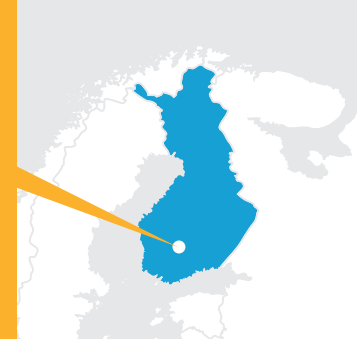
InnoBridge partners and stakeholders confirmed that individuals, students and their teams, coming from not only higher education institutes but also primary and secondary schools can open new ways for innovation. Part of the Action Plan is to create a FabLab (personal digital fabrication) as great opportunity to boost prototyping among students and encourage entrepreneurship. Organizing workshops with scholars to meet problems of community and companies, as well as work on projects will help developing skills for the future.

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Region and country **TAMPERE REGION · FINLAND**

Partner organization
COUNCIL OF TAMPERE REGION



▲
Atacan Ergin · Source: Business Tampere

Region description

Tampere region has a well-developed ecology of organisational actors that together provide the regional innovation system. The identity and coherence of this system has been supported by a strong national and local innovation policy since the mid-1990s. The common aim is to support a more entrepreneurial-focused and open mode of innovation through the innovation platform approach and ecosystem building. The tradition for cooperation provides the basis for common trust. Cooperative actions are needed in order to help the region to keep on with the industrial transition and digitalization.

Tampere Region recipe on “How to commercialise R&D results”

Innovation platform thinking has been adopted as an approach to develop the new innovation policy in Tampere region and that has been actively developed in already for more than 10 years. The region has limited funding resources, which need to be utilized with maximum impact. Open innovation platform policy has been seen as an effective way to spread the benefits wide to create better impact. In a complex innovation environment it is very difficult to prove the clear results and therefore monitoring systems and tools need to be developed particularly for that. Platform-based thinking and co-creation need developed tools and instruments to become mainstream for the actors.

Our Staff Exchanges in South Tyrol and Małopolska regions gave an important input for understanding the complexity of data collection and utilization system building in regional context. This has helped us to develop our Action Plan better to avoid the usual risks that exist in monitoring system development.



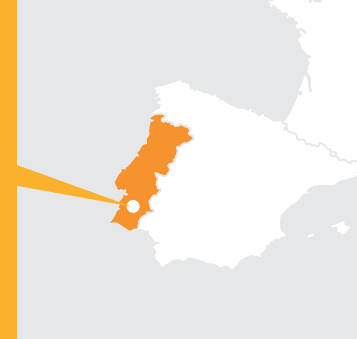
The Council of Tampere Region has been using Situational Picture of Innovation as a tool to monitor the development of the regional innovation environment. This process has been nominated as a Good Practise in InnoBridge and it has been taken into use also in other regions in Finland.

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Region and country **ALENTEJO** · PORTUGAL

Partner organization
ADRAL - ALENTEJO REGIONAL DEVELOPMENT AGENCY



Region description

The Alentejo region is characterized as a region of low density, in dimensions such as population structure, but also in the organization and dynamics of its business network.

The business fabric of the region presents an expressive productive dynamic based on diversification, with emphasis on agricultural activities, agro industrial activities and the exploration of geological and mineral resources, among others.

The business community of the Alentejo region has been consolidating skills and setting innovative economic activities over the last decade.



Alentejo regional recipe on “How to commercialise R&D results”

The innovation capacity of the Alentejo companies proves to be fundamental for the increase in competitiveness of the region's economy. Support factors do not exclusively depend on the integration of Information and Communication Technologies, but also relate to differentiation and genuine innovation activities within companies.

Development of ICT skills as tools that can provide practical and effective solutions to the day-to-day management of local companies, the culture of “practicing innovation”, the pro-active thinking about differentiation and stimulating the market are key issues discussed with InnoBridge partners in experience sharing rounds. Establishment of these competences in key and multiplying actors for the whole process has to be guaranteed, in order to verify an effective growth in competitiveness for the Portuguese companies.

The Regional Innovation Scoreboard 2017, classifies the Alentejo as an “Innovative Moderate” region although it underlines an increase of this performance over time. The FabLab ÉvoraTech designed as a small-scale workshop offering free or low-cost digital fabrication to students, micro companies and citizens is an example of such enabling activity. The FabLab is also part of the InnoBridge pool of Good Practices transferred to other regions.

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Region and country **SOFIA MUNICIPALITY · BULGARIA**

Partner organization
**SOFIA DEVELOPMENT ASSOCIATION AND APPLIED
RESEARCH AND COMMUNICATIONS FUND**



Region description

Sofia gains popularity as place where local and foreign businesses can build their success stories. It is one of the few cities in Bulgaria that has own smart specialisation strategy to transform the city into a tech hub for the region. This municipality-based programme integrates ICT, creative industries and quality of life innovations to boost local businesses and lifestyles. The strategy is based on strong city metrics - vibrant start-up community, more than 25 000 coding and creative talents, top positions in global outsourcing. A key instrument to infuse public-private funds and grow young talents is Sofia Fund for Innovations.

Sofia regional recipe on “How to commercialise R&D results”

Despite economic growth, innovation does not fall like manna from heaven. It is the product of intentional human action. To have more of it, the starting point of regions is to know very well their research and commercialization portfolio in order to enact policies that connect R&D investments to firms and investors in the communities they are located.

R&D in Bulgaria is primarily a national policy and funding domain, while companies increasingly locate their R&D in employment intensive areas for proximity to research infrastructure and talent. This opens a unique opportunity for Sofia to exchange knowledge with InnoBridge regions and to venture new pilot programs supporting experimental approaches to technology transfer and commercialization.

Sofia orchestrates regular large-scale innovation events to generate good ideas and turn them into products or services. They help the city find the right talent, encourage collaboration and risk taking, organize the innovation process from beginning to end. Most importantly, it all is a communal – public-private - effort and financing. Sofia innovation landmarks include Sofia Public-Private Fund for Innovations – one of InnoBridge Good Practices, Sofia Balkan Hackathon – one of the actions in the Action Plan, and the city as a testing bed for prototypes. Sofia has your back!



▲
Source: Sofia Balkan Hackathon, 2018

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Region and country **MAŁOPOLSKA REGION · POLAND**

Partner organization
MARSHAL OFFICE OF THE MAŁOPOLSKA REGION



Region description

Małopolska is renowned for its scientific potential (second-best in Poland) and outstanding cultural heritage (top tourist destination). Kraków is the capital city of Małopolska. It is among top European cities to locate investments in BPO&SSC (especially in IT and accounting). Another hallmark are life science and chemical companies.

With 3.4 million inhabitants, 380 000 enterprises, 160 000 students, and 464 research units the region is characterized by continuous population and economic growth.

The Committee of the Regions and the European Commission awarded Małopolska the title of European Entrepreneurial Region for entrepreneurship in 2016.



Małopolska regional recipe on “How to commercialise R&D results”

As a partner of the InnoBridge Małopolska was looking for new solutions and modifications that would help to streamline regional support for companies willing to innovate. The InnoBridge brought two answers concerning:

◀ Małopolska companies invest a lot in Life Sciences R+D

- improving procedures. A set of procedures has already been implemented including shorter and more effective evaluation of applications, longer time calls, simplification of eligible costs. All of those made the application for regional R+D support easier and more user friendly;
- introducing brand new functionalities to the Małopolska online platform for innovation vouchers based on solutions applied in Tampere Region. The aim is to make a process of searching and selection of innovative service providers far easier for companies.

Another focus of Małopolska was to find a way to have more and more high-quality innovative projects submitted. The EU money for innovation can be invested effectively and efficiently, only if many good companies apply with many high-quality projects. The solution came from Lower Austria with their proactive approach to entrepreneurs under the TIP Programme. That is supposed not only to increase number of quality projects, but also to boost innovation culture in companies. All the above are a part of the Małopolska Action Plan.

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POLICY RECOMMENDATIONS



Establish a Technology and Innovation Broker System

Nowadays in numerous SMEs the opinion is still dominating that R&D investment means in particular hiring staff and buying physical equipment while investments in soft factors like mind set and collaboration are underdeveloped. InnoBridge Peer Reviews revealed in several partner regions the weakness that the level of innovation and competitiveness of SMEs is hindered by severe lacks of their innovation culture and openness for collaboration. Rural areas as well as long distances among single SME locations and between SME locations and public R&D sites are exacerbating this problem of weak R&D collaboration as we learn from InnoBridge regions like Alentejo and Castilla y León. In other cases, SMEs are just not aware of the importance of innovation and related public support opportunities: e.g. only some of about 370,000 entrepreneurs in Małopolska are innovative companies, even though a great deal of them are potential innovators. Lack of private innovation and collaboration culture is leading to a moderate absorption rate of SMEs with low utilization rate of public R&D funding schemes compared to national level as we see in the InnoBridge regions of West Transdanubia, Małopolska and Alentejo. This fact is a missed opportunity for regional SMEs using public R&D+I schemes to strengthen their competitive position.

The Regional Innovation Scoreboard 2017¹ is underpinning these findings: Innovation Leader regions have an approx. 5 time better performance compared to Modest Innovator Regions in terms of the two indicators “R&D expenditures in the business sector” and “Innovative SMEs collaborating with others”.

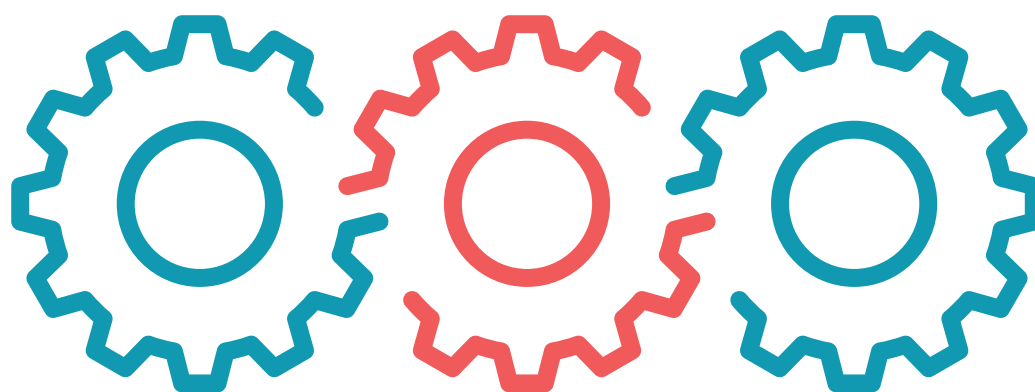
In order to improve the regional innovation intensity with better exploitation of SMEs’ potentials and of public R&D competences regional R&D+I policy

should establish a Broker System. Brokers can raise awareness for innovation and act as innovation coaches for SMEs. They can stimulate new ways of thinking in SMEs and raise critical questions like qualification of R&D staff. Brokers are at the same time networker matchmaking the regional players and bridging the gaps between private business and public Research and Technology Organisations (RTOs). A higher transparency of existing technology and accessible R&D laboratories/equipment in the region will increase the collaboration activities of R&D players and thus lead to more R&D+I projects with higher quality.

Broker services can be manifold, but in order to be accepted by all players Brokers must have a neutral role and must not be in competition to any other player of the ecosystem, which means that Brokers are only allowed to offer those services which are not offered by any other private or public organisation. We see that a regional coordination of Broker services with all other R&D+I services is a pre-condition for the success of a Broker System.

The sole change of their mind set towards a better developed innovation culture and increasing their openness for external collaboration is usually no service SMEs are willing to pay for – this is also the experiences of the Technology and Innovation Partners in Lower Austria, a Good Practice identified in the InnoBridge project. Thus the regional R&D+I policy should establish such a Broker System free of charge for the regional SMEs in order to exploit innovation potentials including existing R&D results in the best way. It might happen that a specific Broker service is free of charge in a first phase and then continued in a second stage as fee-based service by a private consultancy if SMEs are developing the willingness to pay for this valuable service. Whether such a Broker System should be public and/or private,

¹ Regional Innovation Scoreboard 2017, page 16, ©European Union, https://ec.europa.eu/growth/industry/innovation/facts-figures/regional_en



INNOVATION BROKER SYSTEM

depends on the regional situation, but requires always the neutral role of the Brokers.

Several InnoBridge partners decided to establish such a Broker System and to elaborate a respective action in their Action Plan like the regions of West Transdanubia, Alentejo and Małopolska. These regions expect that the Broker system will not only accelerate the R&D+I activities and improve the competitive situation of many regional SMEs, but also to create leverage effects in terms of submitting more successful applications of regional SMEs to national and European R&D schemes.

West Transdanubia highlights in its action the importance of trust building among the intermediaries of the ecosystem allowing SMEs a collaborative and

holistic approach by bundling several complementary external services from different intermediaries/R&D providers. Alentejo sees the Broker system as a great opportunity to gather from a neutral position more and qualified information about the current R&D+I situation and related needs of regional SMEs allowing the improvement and orientation of the regional R&D+I policy towards the actual competencies and needs of the regional SMEs. Małopolska points out the importance of the pro-active approach of the Broker System visiting SMEs on-site to get a full picture of their actual situation. At the same time this pro-active approach opens R&D+I support services also to regional SMEs which are not active so far or have no transparency about the offered support services.

Approaches and tools towards a more balanced development within regions



Małopolska companies invest a lot in Life Sciences R&D

Phenomena like urbanisation and development of the central areas are common to the European regions. These, in turn, cause an unbalanced development within the single regions, where the more peripheral areas are usually less developed than the central ones. Reasons for that are showcased in regions with strong metropolitan areas where governance, financial and talents resources are concentrated in capitals or big cities compared to micropolitan areas. It is also often due to centralised S3 governing systems where capital cities are the gravity centres for innovation and business opportunities. Regions with rural or mountainous landscapes are also facing nature-made challenges towards bridging their territories. Notwithstanding some advantages of centralisation, a balanced development within a region is positive.

Several approaches to tackle the gap between central parts and peripheral areas came up at the InnoBridge Capacity Building and Action Plan Facilitation talks suggesting investments in rural universities, empowering municipalities, supporting key sectors like tourism, digitalization of SMEs and broadband connectivity to reduce distances in the region as well as promoting competences of manufacturing sector to other sectors (cross-sectoral and KET cooperation to retain companies in rural areas).

The case of South Tyrol shows that such developments have their benefits. Being an alpine region, the development and integration of its peripheral areas does not happen by default. There are some approaches and tools which can help actions towards more balanced development of all areas.

A key tool to integration is the active involvement of municipalities. This is for example a recent trend in South Tyrol in the context of the innovation activities, since municipalities have just started to perceive themselves as actors of innovation. Their key role is also a lesson learned from other InnoBridge partner (first and foremost from Tampere region and Sofia, where municipalities are strong actors in regional eco-systems). Municipalities are capable to offer services both to enterprises - by creating makerspaces, opening innovation procurement processes and offering open data for innovation development, and to citizens and NGOs, to whom they are more proximate than the region or the state. Examples of services to citizens stemming from the InnoBridge regions of Tampere, Bolzano, Alentejo and Sofia feature co-working spaces, FabLabs and physical spaces where people can get experiences in innovation processes, develop talents and skills for better jobs and access to labour markets. This overall active role of municipalities results in a reinforced development of the peripheral areas. Remote municipalities can also be taken on board by attracting them to networks of technology parks, which are infrastructures usually located in main cities and need better territorial integration. The facilities and specific services offered by the Parks can generate synergies between peripheral and central areas through more coherent industrial systems, utilities and public services. Some specific services typical for a central technology park can be located in

the peripheral areas; all those units can then interact in a network among infrastructures and thus also obtaining better specialization.

A further tool to promote the development of the whole territory is to enhance digitalisation of SMEs in the region. A good example for that is the broadband connectivity in Bulgaria that covers equally cities and villages in the whole territory of the country. In the case of South Tyrol, being it an alpine region, the realisation of such digital infrastructure requires big investments in order to bring the broadband also to mountain areas and valleys. Big initial investments are fundamental for providing enterprises with all the conditions that allows them to get digitalised. Furthermore, private investments by local companies in ICT are also required.

While supporting local enterprises, their link with the territory should be considered and strengthened. If enterprises are integrated in the territory, they are better accepted by business partners and local communities, thus supported and considered as fundamental part of the local eco-system. This is showcased in South Tyrol where enterprises operating in alpine technologies, agro-food sectors, automation and machinery, are recognised as key assets for the region. The Autonomous Province of Bolzano creates the framework conditions which enable also the enterprises in the rural areas to be competitive. Other InnoBridge examples include



Study Visit at Research Center Laimburg and its apple orchard, South Tyrol

targeted support to social and creative industry start-ups in Sofia to improve urban environment as well as integrated regional mobility services in the sparsely populated areas in the Tampere region. The trials in Tampere are enabled by the Mobility as a Service technology and collaboration between public and private actors.

In supporting local manufacturing enterprises, actors of other economic sectors should be involved as well. In the specific case of South Tyrol the agricultural, touristic, service and trade sectors can lead to cross-sectoral cooperation that promotes competences of the manufacturing sector across other industries.

Having strong links with the territory can also foster new market opportunities. Local enterprises can benefit from market niches and consumer trends in the area, test new products, change business models and see, if they are competitive. The local market acts then as a springboard for scaling up activities and reaching foreign markets.

Creating balance and multidisciplinary among new technologies, support measures and local cultural assets (food, crafts, traditions and tourism) could be a recipe for bridging innovative development in all parts of the region.

New and service oriented role of public administration required



Peer Review Workshop in Győr, West Transdanubia

In numerous countries nowadays the role of the public administration in national and regional R&D+I policy is often primarily focusing on providing the financial sources for public support services as well as on formal controlling spending and outputs.

This limited role of public administration is hampering the direct personal contacts with the beneficiaries of the R&D+I policy, R&D institutions (HEI, RTO) as public knowledge and technology providers as well as enterprises being the final innovators exploiting private and public R&D results. In such a case, public administration is always depending on the information from financed service providers about the needs of regional beneficiaries in terms of R&D support and its commercialisation. The longer the communication chain and the higher the number of involved communication nodes is, the more difficult it is to provide relevant information just in time. And at the same time the risk of losing information is increasing, going hand in hand with an increased bias of information.

Consequently, SMEs, R&D institutions and service providers are perceiving the public administration not only as marginal player, but even worth as a less constructive part of the R&D+I policy system: "the controller". At the same time, the risk of managing public money not in the most efficient way is dramatically increasing.

Is this role of public administration the most appropriate one in order to organise R&D+I policy in the best way and to ensure a most effective and efficient commercialisation of R&D results?

InnoBridge partners strongly recommend that public administration has to become an active, direct and constructive partner of the research and business community – in order to be able to meet society's

quickly changing challenges as well as to demonstrate strength and resilience in turbulent operating environment. Fast changing needs require customer orientation, flexible financial instruments and proper resource allocation from the public sector.

The first step is to establish direct personal contacts of the public administration with the private business through providing own support services for the beneficiaries and to gather the needs directly from SMEs in terms of R&D+I. An increased knowledge of customers' needs fosters a higher customer orientation by the public administration, like it is practiced by the InnoBridge partner region Lower Austria since more than 20 years. This direct contact enables the public administration to become a direct service provider of the business community and to react on a short-term basis on the needs directly communicated by the regional companies.

Customer orientation means for the public administration also to concentrate on added value processes and to reduce administrative burdens. Based on the Peer Review findings several InnoBridge partners and stakeholders like the Marshal Office of the Małopolska Region, the Hungarian Ministry for Finance and the Autonomous Province of Bolzano – South Tyrol have streamlined guidelines and adapted the target group for calls within the reviewed policy instruments as customer oriented service for the SMEs.

The second step is to establish the public administration as full and equal partner in R&D+I activities in terms of solving complex societal challenges like health care in an aging society or integrated regional mobility services. Tampere Region is running Open Innovation Platforms since some years with addressing complex societal challenges to motivate partners of the quadruple helix and to join forces. Inspired by the InnoBridge lessons learnt from Tampere Region, Lower Austria decided to take this next step for its public administration and to become an equal partner in a partnership of Open Innovation Platforms.

Summarising, the mind-set of public administration requires a considerable change: the primarily control and financier functions can be fulfilled in a more partnership-oriented way than it is practised today in most cases. "Trust in public administration as equal player of R&D+I" should be the highest maxim for regional R&D+I policy under the frame condition "acting in a manner that complies with law and regulations". JOIN US!

Decentralised and diversified sources of funding

The Policy Recommendation concerns financing a regional innovation policy. The sources of financial support for regional innovation policy should be both decentralized and diversified. Why are decentralization and diversification so important with regard to financing a regional innovation policy?



Capacity Building Workshop on scenario in Krakow, Małopolska region

Diversification

Regional innovation policies in general are financed either by own regional budgets, central level grants for regions, or the EU funds. Usually, those policies are predominantly covered by only one of the above sources. However a regional innovation policy can be much more flexible when it is based on diversified financial sources (a region is more flexible with various sources for financing its policies). The benefits of diversification include also more financially sound and balanced innovation policy.

A successful diversification lies in capability to use funding from different funds in a synergetic way. Cooperation between different funds should be more easy then. Actions financed should be more strongly linked together regardless of the source of funding. It is also important to link a project into a wider whole and to constitute entities that exceed the funds (ERDF, ESF, etc.). Experiences have been really good when multifunding has been used.

In the program preparation there is a need to recognize the themes and the actions, which can be incorporated into the objectives of ERDF as well as ESF financing. This kind of themes could be e.g. business transformation processes, entrepreneurship, training and availability of talented work force. Also the connection of general development projects and company-specific projects should be intensified. It is important to be able to build chains of effectiveness in which the publicly awakened theme will be put into practice in the projects of the companies.

Decentralisation

Empowering regions and cities to manage public funds has been a general trend in the EU for years.

One of the major advantage is that regions are able to better grasp the local innovation potentials and develop them efficiently and effectively. As it proves to be successful in practice, the managing of innovation funds by regions is very much widespread throughout the EU. That is also in line with the EU principle of subsidiarity ensuring that powers are exercised as close to the citizen as possible.

Well-organized decentralization entails however the need for effective cooperation and coordination between central and regional levels. Moreover, it has to be two-way coordination (central level – regional level; regional level – central level, by the active involvement of practitioners working “in the field” with companies). In fact, a central government in cooperation with regional authorizes should use suitable policy and financial instruments to ensure balanced development of regions and to bridge interregional gaps (so that all regions could flourish).



Peer Review on open innovation platforms in Tampere

Following the peer reviews and interregional exchange streams several new pilot actions have been designed by the InnoBridge partners to diversify funding for the next 2 years in the regions. Examples include involvement of the Małopolska Region and Tampere Region in the Vanguard Initiative aiming to mobilize alternative financial resources for cross-regional and cross-sectoral industry collaborations and to move away from the traditional subsidies. As frontrunner in open innovation platform activities, Tampere region is now building capacity on ecosystems that mobilize diverse applicants and resources. The Sofia public-private fund for innovations is a working example of a pilot instrument that leverages private donations with public money to support start-ups while also providing free access to city infrastructures.

Enhance entrepreneurial spirit in universities

Already in 2008, the European Commission, through the Recommendation on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organisations, recommended that Member States of the European Union should:

- Support the development of knowledge transfer capacity and skills in universities and public research organisations, as well as measures to raise the awareness and skills of students – in particular in the area of science and technology – regarding intellectual property, knowledge transfer and **entrepreneurship**
- Cooperate and take steps to improve the coherence of their respective ownership regimes as regards intellectual property rights in such a way as to facilitate cross-border collaborations and knowledge transfer in the field of research and development



Action Plan Facilitation Workshop in Valladolid, Castilla y León

Both aforementioned recommendations are currently perfectly valid.

The world is changing nowadays at vertiginous speed. We are witnessing a process of radical change, where disruptive technologies (transformers of society) are generating an unstoppable process of change in the society and in the economy, which is already marking our present and will also determine our immediate future. This process will be responsible for deep transformations in which new economic activities will emerge.

In order to be able to face this new challenge, it is necessary to act urgently, promoting a new regional ecosystem that enhances entrepreneurship and innovation and that favours the appearance of new business activity and the creation of new companies based on the knowledge generated in universities and research centres.

A regional ecosystem that makes compatible, from a legal point of view, the teaching and research activity of the university professors with their participation in the spin-offs and start-ups that may be result from their work.

An ecosystem that also encourages internships and fellowships of university students and recent graduates in technology-based companies and in support infrastructures to this type of enterprises (Science and Technology Parks).

The regions should boost education and training in entrepreneurship throughout the whole education system in the coming years. They should promote the entrepreneurial spirit among the undergraduate students, the graduate students and, in general, the researchers from the universities and technology centres. An especial emphasis should be made in those projects that have an integrating or interdisciplinary transversal component and, especially, when they address relevant social aspects.

The regions should also favour the appearance of new tools that improve the financing of the knowledge-based companies, including specific seed capital funds and venture capital funds, oriented towards this type of new companies emerging from the higher education environment.

The European regions and Member States have a main role to play in all this process.

Working with school teachers and children in West Transdanubia and Sofia as well as the seed capital fund of Castilla y León aimed at financing the creation and growth of innovative start-ups emerging from the university environment are some of the InnoBridge examples for actions that boost entrepreneurship at universities and schools.



Study Visits to MOBILIS Science Center in Győr, West Transdanubia and to the children's science center MUZEIKO in Sofia, Bulgaria

Revise and simplify GDPR to make it a working and applicable mechanism



Good Practices Workshop in Valladolid, Castilla y León

The General Data Protection Regulation (GDPR), in place since May 2018, protects users regarding their personal data while at the same time changes the way companies access, acquire, use, share, store and provide individuals with access to their personal data. It is a complex policy that creates a big challenge for start-ups and SMEs that use analytics and digital tools for their services and advertisement. It also imposes serious fines for any in compliance that may lead to complete close down of businesses.

In order to comply with GDPR, companies have to make comprehensive analyses of their business data flows by thinking about every aspect, from suppliers and vendors, to customers, advertisement technologies and website. It is also crucial for start-ups and SMEs to define their role in the personal data operations – whether they are processors or controllers of the data and to apply the respective procedures. Often start-ups rely on their own efforts to cope with the GDPR requirements but at certain stages they need expert assistance by lawyers or other professionals that raise additional costs to their tight budgets. The GDPR also requires that businesses put in place appropriate technical and security measures that may also demand IT external expertise and bring more costs. All these requirements pose difficulties to start-ups and may lead to their failure.

The innovation voucher systems and coaching applied in most of InnoBridge regions are good existing platforms for start-ups to subsidise consultancy services by coaches, lawyers and IT experts in order to

build in GDPR practices into their day to day routine. Additional trainings of Data Protection Officers in companies may also be considered for businesses that deal with large amount of private data.

Combination of legislative advice and business coaching can be very beneficial for start-ups and SMEs to use GDPR for their benefit, especially for designing privacy friendly settings into products and services at the outset. For example, Founder grants – small grants by private persons to facilitate setting start-ups (to be launched in 2019 in South Tyrol), can also be a potential support mechanism for a business strategy design. In the case of Castilla y León region, the seed funding for university students and researchers to start a company or capitalize a start-up will also bridge science with specific commercialization issues

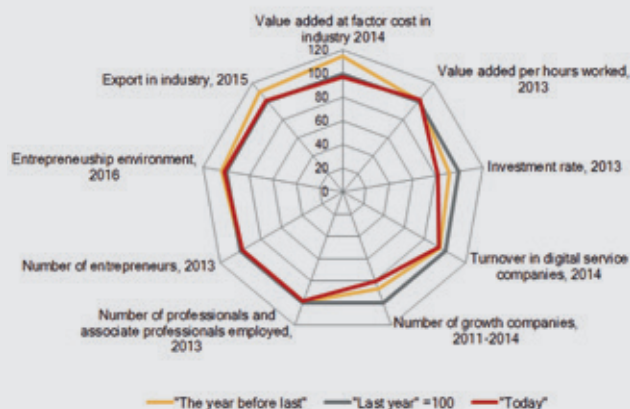
Support schemes on GDPR for start-ups and SMEs can serve as learning experience and test-beds for innovative measures to other upcoming EU regulations related to markets, standards and consumers.

Innovation policymaking needs advanced monitoring

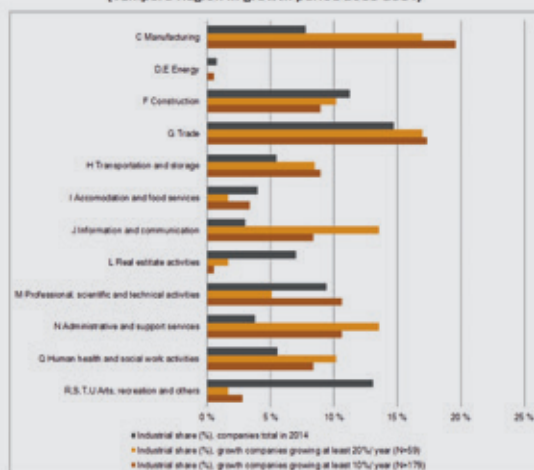


Example Visualisations 2016

1. Key observations in traffic lights
2. Situational picture
3. In Depth analysis



Growth companies by stand. industrial classification
(Tampere Region in growth period 2011-2014)



Innovation policymaking deals with complex environments, where multiple actors, many different fields of businesses and interdependencies combine an ecosystem that is hard to control. In order to support the regional needs for innovation policy measures, policy makers need to understand the current situation and future trends of the regional innovation environment. Turbulent and fast changes in business environment require resilience and wide understanding of the regional context for R&D commercialisation and its development needs. This demands data collection, analysis and utilization as part of the knowledge management and development of a public body. It is the way to build the decision making based on knowledge and therefore to make the policy impact and added value visible.

The quality of knowledge based innovation policy can only be as good as the quality of the underlying data and its interpretation. Monitoring process of innovation environment is usually based on traditional indicators and information sources, such as official statistics or case studies. However, the official statistics are updated only intermittently. Such official statistics are significantly lacking behind the current situation and sometimes – particularly in countries where the administration is centralized – data on regional or local level are often scarce or even not available for regional policy making at all. InnoBridge partner regions like Alentejo or West Transdanubia are facing such constraints. Decision-making processes are also often spread out among different ministries, even between national and regional levels, that do not share common evidence databases and analytical tools for prospective decisions.

Digitization have brought new opportunities to collect, utilize and share information. Digital solutions enable information to be gathered and combined efficiently and automatically. However digital monitoring demands new competencies of data analysing and knowledge management. Regional experiences from Tampere region innovation ecosystems have shown that one of the biggest challenges in monitoring is the collection of digital data. Different innovation actors are collecting their operational data manually and it is not designed in a way that stakeholders could utilize it. Public sector has to create incentives to a mindset change for more developed digital data collection, open data and build trust in between the data providers and users. This is a new role of a public sector as a proactive data user, provider and promoter. InnoBridge partners identified Tampere Region's tool "Situational picture of innovation" as a Good Practice in this field.

Even though digitalisation and open data offer great opportunities to collect and combine information faster and better than ever before, public policy aims first and foremost to create impact for the region. Impact is more abstract than direct outputs, which can be measured with traditional indicators. Data about the impact of regional policy instruments is nowadays not ensured in all European Regions as the Peer Reviews results of InnoBridge have revealed. In some cases, only information about the input and output of regional policy instruments is available, but not about their impact and in-process effects. InnoBridge regions such as Alentejo and Małopolska, focus parts of their Action Plans on accelerating regional monitoring systems. Consequently, the Action Plan for Tampere Region comprises one action which is dealing with a novel Open Innovation Platform evaluation tool for the project applicants and also the people handling the ERDF proposals.

Policy impact for regions is created when new knowledge has affected in a way that it changes thinking and ways of doing things. This happens through networks of actors and is spread wider than to a single policy making authority. Providing information in the pace of policy instrument implementation to multiple actors, is the way to communicate impact and create ownership over the development processes in regions. However, this impact cannot be shown without developed monitoring, building a regional joint vision and sense making based on the monitoring results. The results of monitoring give the justification and legitimacy for the policymaking.

OUTLOOK TO PHASE 2



Our InnoBridge interim conference held in Tampere, February 2019 and featuring dynamic moderated talks and interactions with stakeholders verified the set of policy recommendations and gave outlook on the next two years of the InnoBridge. After three years of intensive interregional learning process and the elaboration of 8 Action Plans the partners are now “ready for implementation” and moving ahead into the second phase of InnoBridge – Bridging the innovation gap through converting R&D results into commercial success in a more effective and efficient way.

The bandwidth of the actions is reflecting the diversity of the addressed policy instruments in the InnoBridge

partner regions and their regional specifics. Certainly, science – business collaboration is at the core in all partner regions, but single actions are also aiming at raising awareness for innovation at a very early stage in schools. A number of partners are working on simplified administrative processes of the policy instruments and positioning the public sector as a more customer-oriented and pro-active partner of the regional SMEs. Alongside with the SME focus of the elaborated actions, the stronger engagement of municipalities and the creation of Open Innovation Platforms that integrate all relevant players of the addressed ecosystem are likewise among the core topics of the Action Plans.

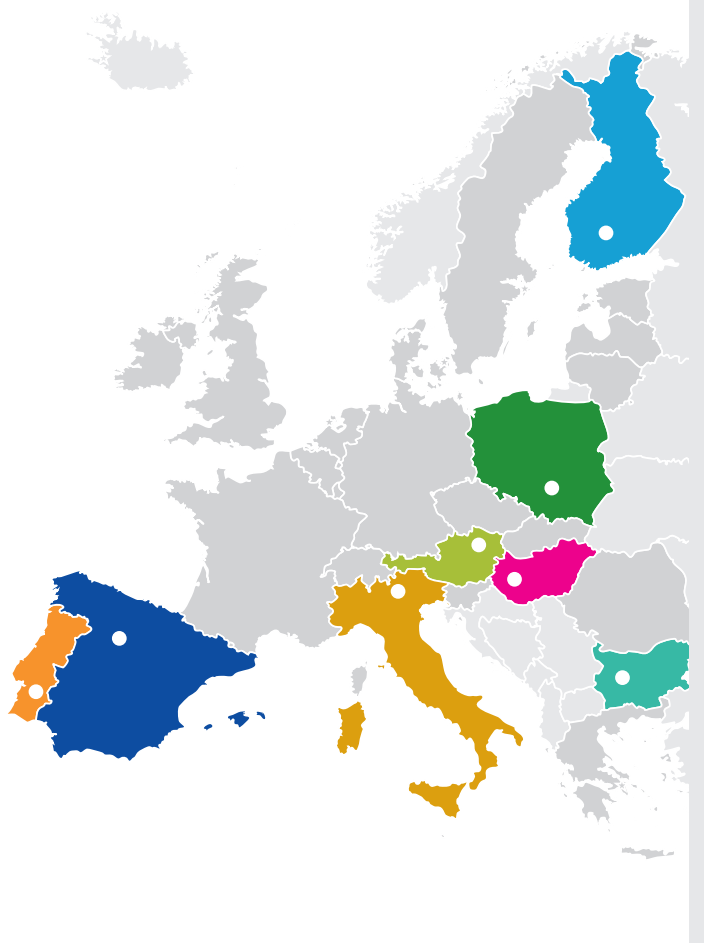
Titles of Actions of InnoBridge



Some actions are already in the pipeline to implementation or are taking place in different partner regions to demonstrate the improvement of the addressed policy instruments. The strong consensus on the elaborated Action Plans built by multiple local and inter-regional facilitation workshops and stakeholder meetings in the last three years is a key enabler of smooth and sustainable Action Plan implementation over the next two years. Definitely some new questions and challenges will pop-up while implementing the developed actions. Therefore, the InnoBridge partners will continue to actively exchange, learn as peers and interact with stakeholders to solve immediate issues and share new lessons learnt.

We are keen to share with you our results and success stories on the Action Plan implementation for more efficient policy instruments that bridge the innovation gap through converting R&D results into leveraged commercial success. Therefore, we invite you already now to the final conference of InnoBridge by the end of 2020 in Sofia, Bulgaria. Meet you there!

PARTNERS



- Office of the Regional Government of Lower Austria - Lead partner **(AT)**
- Universities and Higher Education Foundation of Castilla y León (FUESCYL) **(ES)**
- Autonomous Province of Bolzano - South Tyrol **(IT)**
- Pannon Novum WestTransdanubian Regional Innovation Nonprofit Ltd. **(HU)**
- Council of Tampere Region **(FI)**
- Alentejo Regional Development Agency (ADRAL) **(PO)**
- Foundation "Sofia Development Association" **(BG)**
- Applied Research and Communications Fund **(BG)**
- Marshal Office of the Małopolska Region **(PL)**

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