... successful innovation policy combines the need to set directions from above with the ability to enable bottom up experimentation and learning.

> Mariana Mazzucato, Mission-Oriented Innovation Policy

Action Plan

Baden Württemberg









Policy context

The policy instrument included in the application (OP Baden-Württemberg ERDF 2014-2020) is no longer active. As the University of Tübingen is no Managing Authority for Baden-Württemberg's Operational Programme (EFRD) itself, influencing policy change there is not very likely to achieve for us. As an important actor of the regional innovation system, however, the University is a key stakeholder for the implementation of another regional development policy instrument: *Innovationsstrategie Baden-Württemberg (Fortschreibung* 2020) – Innovation Strategy Baden-Württemberg (Update 2020).

With this Action Plan we aim to impact especially the following chapters of the Innovation Strategy:

- 3.2. Innovation durch Interaktion (Innovation through interaction)
- 3.3. Innovation beeinflussende Faktoren (Factors influencing innovation)
- 5.6. Innovationsdynamik steigern: Time-to-Market verkürzen, KMU starker am Innovationsgeschehen beteiligen, Start-Ups fördern (Increasing innovation dynamics: shortening time-to-market, involving SMEs more strongly in innovation, promoting start-ups)
- 5.7. Regional Innovationssysteme stärken (Strengthening Regional Innovationsystems)
- 5.10. Europäische Zusammenarbeit und Internationalisierung weiter intensivieren (Further intensify European cooperation and internationalisation)

With this updated innovation strategy, the state of Baden-Württemberg wants to "contribute to securing the outstanding position of Germany's southwest as a location for business and as a location for business and innovation." Based on a critical appraisal of the current situation, the innovation strategy identifies specific growth areas on which Baden-Württemberg is focusing, i.e., digitisation, artificial intelligence and Industry 4.0, but also sustainable mobility and the health care economy.

Baden-Württemberg's innovation strategy sees itself as "breathing", which is based on continuous dialogue with all relevant stakeholders. It draws on the experience and knowledge of the various stakeholders from business, science and civil society. Only in this way can an agile and active innovation process function. Therefore, innovation policy must increasingly be understood as a regional task in order to strengthen the innovative capacity of the country as a whole.

According to the strategy, Baden-Württemberg also relies on cooperations in Europe and worldwide. Through further strategic specialisation, the consistent expansion of the research infrastructure and the technology transfer, as well as by opening up new topics in research and development, small and medium-sized enterprises (SMEs) in particular are to be more closely integrated into the innovation process. This is exactly what this Action Plan is about to support. In close collaboration with various stakeholders from business, science and civil society this policy instrument will be improved by shaping new calls as well as using already planned calls and programmes for the set-up and sustainable operation of a (trans)regional and public panel database which will support the involvement of SMEs in open innovation processes.

Regarding the policy instrument, this action will therefore 1.) strengthen innovation through





interaction (Chapter 3.2. of B-W's Innovation Strategy), 2) increase innovation dynamics by shortening time-to-market, involving SMEs more strongly in innovation and promoting start-ups (chapter 5.6.), 3) strengthen regional innovation systems (chapter 5.7.) and also 4.) intensify European cooperation and internationalisation (chapter 5.10.).

Details of the actions envisaged

ACTION 1: set-up a (public) panel database

The background

As part of the ACSELL project phase 1, the OSAT method was implemented to identify strengths and weaknesses of the innovation ecosystem.

The OSAT results for Baden Württemberg in cooperation with a selection of relevant cross-sectoral local stakeholders were that 1) user empowerment, 2) evaluation methods and 3) breadth of ambition are all dimensions that could use improvement. Over the course of the project – due to conversations within our regional stakeholder group but also at the level of the Transfer Panel and through twinning activities – University of Tübingen has been tackling a specific challenge which we would like to focus on in Phase 2 (Action Plan Implementation) of the project: How to successfully involve SMEs in open innovation?

According to the open innovation (OI) paradigm, valuable ideas flow through markets, both within and across companies. Prior research on Open Innovation often tend to concentrate on large firms, without addressing the unique challenges and contexts that confront small and medium-sized enterprises (SMEs) engaged in Open Innovation. One argument is that SMEs depend more on Open Innovation and likely can achieve greater benefits from it than larger firms because they tend to be more flexible, more willing to take risks, less bureaucratic, and quicker in both their decision making and their reactions to market changes.

However, it is also true that SMEs suffer challenges due to their small size, including limited cognitive capacities, organizational flexibility, and collaboration experience, as well as inertial tendencies, all of which can create barriers to SMEs' effective uses of Open Innovation.

While the cluster policy is a central element of the innovation policy of the state of Baden-Württemberg in aiming to strengthen the innovation capacity and competitiveness of small and medium-sized companies by systematically supporting the (further) development of clusters and cluster initiatives, it is nonetheless necessary to better integrate quadruple-helix stakeholders from companies, research institutes and universities, administration and policy decision-makers and above all the general public in an concerted innovation process fostering an intense and effective interaction and user-centered development and demand-driven innovation practices.

Therefore, we have been looking for instruments that could be of help not only for SMEs, but help diversify actors involved in the open innovation process (which in turn will improve and de-risk innovation pursuits for SMEs) – and found them in **Northern Denmark** (Cocreation in a hospital Health Hub and the Innovation Department of the City of Aalborg,





responsible for procuring social and technical innovation for health and care in the city), Friuli Venezia Giulia (the coordinated innovation approach at the national and regional level of the ARGO system), Scotland (the DHI, or Digital Health and Care Innovation Center, that supports and initiates demand-driven innovation in Scotland through landscaping, co-design and collaboration), Slovenia (the bottom-up and cross-sectoral approach of healthday.si as an active healthcare ecosystem, specifically for SMEs), Timis (the support provided by Tehimpuls Scaleup Competition to SMEs throughout the entire innovation process) and Flanders (with the HEALTH Innovative Business Network Flanders and VLAIO have been successful in effectively connecting SMEs, research and health & care organizations with a focus on involving end users in the innovation process).

Our advisory partner **LiCalab** is another important inspiration and model that showed us during our pilot action that a panel of potential test persons is extremely important to increase innovation capacities of SMEs.

Our participation in the pilot action compounded what we were already aware of, but made it more clear: we need a panel of a diversity of potential end users that is available and accessible to SMEs and can adequately inform their innovation pursuits in the different phases of the innovation cycle.

Action

Based on already existing Good Practices in Baden-Württemberg (BioRegioSTERN, Medical Mountains Cluster, Cluster-Agency Baden-Württemberg, State Competence Center Digital Care etc.) and together with our regional ecosystem we will **set-up a (public) panel database**, based on the guidelines and experiences gained during out Pilot Action and provided by our Advisory Partner LiCalab. This action is therefore not only a follow-up of our Pilot Action activities, but also in line with our common action of the ACSELL project: the set-up of a trans-regional living lab (Action 2).

This is a Type 1 action: Implementation of new projects within programmes of Baden-Württemberg's Innovation strategy and Digital@BW-Strategy that are in line with the "Forum Gesundheitsstandort Baden-Württemberg". An example of such a call is the one on "Living-Labs for AI in Healthcare" which has been launched in the beginning of May 2022 by the Ministry of Social Affairs, Health and Integration:

https://sozialministerium.baden-wuerttemberg.de/fileadmin/redaktion/m-sm/intern/downloads/Foerderaufrufe/220502 Reallabor Foerderaufruf.pdf

Players involved

Stakeholders around the LebensPhasenHaus (University of Tübingen) and the State Competence Center for Digital Care include care facilities like Evangelische Heimstiftung, Bruderhaus Diakonie, amongst others, (applied science) universities such as e.g., Tübingen, Esslingen, Reutlingen and Furtwangen as well as research centers like Fraunhofer IAO and innovation intermediaries such as chambers of commerce, BioRegioSTERN, Medical Mountains Cluster etc.

The State Competence Center is a contact, consulting and networking point that is intended to actively support the targeted transfer and widespread practical use of social and technical innovations. Innovations that are intended to both meaningfully relieve caregivers in their work and enable people with care needs to participate in society in new ways. To ensure





that innovations reach where they are needed as quickly as possible.

Together with the University of Tübingen, which will conduct the survey and coordinate this action, the State Competence Center will act as a trustbroker and network node, bringing together the various stakeholders (demand-side) with all their experiences, partners and (end-)users of past projects that will provide a starting point for the panel database which will then serve as an attractive public offering for SMEs (supply-side) in the region and beyond – for early user involvement right from the beginning (co-creation and human factor studies, design-thinking, focus-groups, market analysis, testing etc.).

Stakeholders like Medical Mountains Cluster, IHK-IWW (chamber of commerce) and BioRegioSTERN as well as transfer organisations like, for instance, Steinbeis Transfer Center Social and Technological Innovation, Startup-Center and Technology Transfer office at the University of Tübingen and Furtwangen University etc. will provide access to SMEs in the region

Timeframe

August 2022-July 2023

- Workshop with regional stakeholders (Month 2)
- Survey ("Living Lab What's in there for SMEs?") (until M5)
- Analysis of survey result (M6)
- Adaptation of guidelines provided by advisory partner within the frame of the pilot action (Licalab) (until M9)
- Implementation of guidelines by Baden-Württemberg (until M11)
- Evaluation of the implementation process and launch of the filling of the database (M12)

Costs

- Staff for coordination, survey organisation and set-up
- Meeting/workshop costs (1.000 Euro)

Funding sources

Own sources





ACTION 2: common action on a transregional learning community

The background

Regions are increasingly realizing the value of effective multi-stakeholder and specifically user-centered approaches, as well as strategies to match different kinds of organization, such as SMEs with academic institutions, to expand their reach and foster their growth within open innovation ecosystems and networks.

The living lab approach allows 1) a better understanding of the actual demands and needs of end users, 2) a better match of demand and supply and 3) an increase in efficiency and effectiveness of the innovation process. This approach will not only inspire policy makers to apply a similar collaborative approach in developing policy, but also help them better understand the innovation process as such. In this way, policy decision-makers will be able to provide better framework conditions inter alia to SMEs. Within the ACSELL project, several partners are considering integrating the development of a living lab in their policy instrument.

For Baden-Württemberg, specifically chapter 5.10. (Europäische Zusammenarbeit und Internationalisierung weiter intensivieren): Further intensify European cooperation and internationalisation of the policy instrument (Innovationsstrategie Baden-Württemberg (Update 2020) – Innovationstrategy Baden-Württemberg) is tackled, where also new calls regarding transregional innovations will be launched.

With this joint action we want to boost the Living Lab approach within the area of health care by building and enhancing the competences of the people who are to run the Living labs.

In essence, the pilot action was the perfect preparation for this joint action to where the direct knowledge gained by two partners in a smaller scale will be shared with and transferred to the other regions. For setting up a living lab or an open innovation ecosystem, it is on the one hand essential to have access to a trusted network of stakeholders, and on the other hand have a profound expertise of living lab methods and methodologies.

While both requirements will be initiated through this action, the ACSELL partnership would like to see this exchange continue beyond the lifespan of the project.

Link to OSAT: Readiness to change; process coordination; evaluation methods

Action

Baden-Württemberg will take the lead of this common action and work with other ACSELL partners to set up a trans-regional learning community and network of living labs to share good practices beyond the lifespan of the project.

Activities:

- Workshop on establishing a learning community at the ENOLL OLLD and sharing pilot action experience (20-23 September 2022, Turino IT) (M2)
- 2-day workshop on operationalising pilot action results paper on how to set up a LL / each ACSELL partner will conduct landscaping & next steps to set up LL will be





defined. (November 2022) (M4)

- Identification of additional contributors / benefactors from, e.g., NWE.CHANCE Interreg project and Vitalize project (https://vitalise-project.eu)
 (November 2022 January 2023) (M4-M6)
- 1-day workshop on successes and challenges in the implementation and defining a continued frame for learning, network mode of operation (B2B with the final high—profile dissemination event + final partner meeting in Brussels) (May 2022, Brussels) (M10)

Players involved

All ACSELL-Partners with their specific regional ecosystems will be involved in this action. In Baden-Württemberg, this will be stakeholders around the LebensPhasenHaus/University of Tübingen (including care facilities, universities, research centers, chambers of commerce, clusters, etc.) (demand-side), as well as other organisations/members of our stakeholder group like BioRegioSTERN, Medical Mountains Cluster etc. (supply-side), representing the quadruple helix of our regional innovation system. In addition to that, ENOLL – in close collaboration with ACSELL's advisory partner LiCalab – will be involved right from the beginning.

Timeframe

August 2022-July 2023

Costs

- Travel Costs of approx. 1000 Euro / person (transport & hotel) / event will be carried by each attending organisation
- Workshop costs 1 x 5000 Euro (catering/room rental)
- Workshop as part of final dissemination event 1 x 2000 Euro (catering/use of room for final event)
- 1. Funding sources

Own sources

Date:

Signature:

Universität Tübingen
Mathemat.-Naturwiss. Fakultät
Institut für Physikelische

und Theoretische Chemie

Stamp of the organisation (if available): Arbeitsgruppe Weimar

Auf der Morgenstelle 15 · 72076 Tübingen Germany

