



INKREASE – INnovation and Knowledge for REgional Actions and SystEms

Action Plan R&D by

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| Other partner organizations involved (if relevant) | |
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| NUTS2 region | Lower Austria |
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1. Policy content

1.1 Aim of the Action Plan

The Action Plan aims to impact:

- ☒ X Investment for growth and jobs program
- ☐ European territorial cooperation program
- ☐ Other regional development policy instrument

Name of the policy instrument addressed:

ERDF Programme Investment in Growth and Jobs Austria 20142020, Investment Priority 1(b) R&I Investments/Synergies, measures, Policy Instrument number 3: Application Form, page 17: „ERDF Program Investment in Growth and Jobs Austria 20142020, Operational Program for ERDF, A.1, 1.b

Measure M6_FTI_IP1b_MN4: Clusters/Networks, Location Management“

In addition to our project-contract the activities will contribute to:

Measure: M3_FTI_IP1b_MN1 Betriebliche F&E und TechnologietransferProjekte“ (Business R&D and Technology Transfer Projects), Lower Austrian state aid scheme „Research and Development – R&D“ as part of this measure.

1.2 SWOT Analysis of the Policy Instrument tackled

The Lower Austrian government, the Department for Economic Affairs has ordered a SWOT analysis in preparation for Interregional Europe projects, the following results have been found in order to provide the INKREASE action plan:

1.2.1 Brief description of the measure

The aim of the R&D funding program is to support Lower Austrian companies in their R&D activities with a specific focus on market entrance.

The R&D program of the Lower Austrian government comprises of several state aid schemes such as:

- R&D funding – experimental development

Support is provided for Lower Austrian companies in the field of developing new products, new services as well as new processes. The support is carried out in the form of a grant; the cash equivalent is controlled by the General Block Exemption Regulation (GBER) of the European Commission. The funding rate is between 25% (for large enterprises) and 45% (for small enterprises). In case of a collaborative project the funding rate is increased by 15% points.

- R&D funding – technical and economic feasibility studies

Studies are only eligible if they are performed as preparation of a concrete R&D project in order to verify the market relevance or the technical feasibility.

- **The Technopol program Lower Austria (responsible for INKREASE)**

The measure supports new and existing networks in order to decrease competitive disadvantages of SMEs, close gaps in the innovation system, organize collaboration along the value chain and speed up diffusion of new technologies and collaborative competence development at the Technopols. At regional level it is implemented by Intermediary Bodies (IB) based on their RIS3 strategies in coherence with the national RTI strategy; in Lower Austria through the region's Technopol program.

Technopols are centers of technology and business which are purposefully established in direct proximity to recognized educational and research facilities. The Lower Austria Technopol program combines education, research and business. The Technopol program Lower Austria 2015-2020 provides support for the Technopol management. The implementing body of the program is the Lower Austrian Business Agency ecoplus, a regional development agency owned by the regional government of Lower Austria.

In 2013 we conducted an economic study explaining the importance of the Technopol program for Lower Austria. At regional level, in 2014 a total gross added value effect amounting to 684.9 million € was recorded by the Technopol sites and their partner companies. This corresponds to 1.3 percent of the gross regional product of Lower Austria.

1.2.2 SWOT Analysis from the Lower Austrian Government

for R&D funding has been the basis for other Lower Austrian Interregional Projects and serves as a guide for the design of the INKREASE activity plan

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|---|---|
| <p>STRENGTHS</p> <p>S1 Grant</p> <p>S2 No limit with regard to the amount of the grant</p> <p>S3 Quick feedback through pre check of the project idea</p> <p>S4 Submission of proposals always open,</p> <p>S5 Quick decisions of approval</p> <p>S6 Open for all sectors and topics</p> <p>S7 Proposal support by network partners</p> <p>S8 Good collaboration with other program services on national and regional level (TIP, FFG, other)</p> <p>S9 Broad supply chain for R&D support, strong link with services/programs</p> <p>S10 Impact Assessment and strong need orientation</p> <p>S11 Long term perspective</p> <p>S12 Mixture of schemes for high and lower R&D level applicants</p> | <p>WEAKNESSES</p> <p>W1 Pre-financing of project costs through beneficiary</p> <p>W2 High administrative effort and documentation</p> <p>W3 Decreasing number of submitted proposals</p> <p>W4 Many regular customers</p> |
| <p>OPPORTUNITIES</p> <p>O1 Simplifying cost controlling (lump sums ...)</p> <p>O2 Acquisition of new customers</p> <p>O3 Increase of target group through <i>F&E Kleinprojektförderung</i> ("small scale R&D projects")</p> <p>O4 Strengthening R&D cooperation's</p> <p>O5 Funding cross regional R&D projects</p> <p>O6 Extending collaboration on cross boarder / international collaboration</p> <p>O7 Improved cooperation with other funding agencies (like FFG)</p> <p>O8 Target oriented marketing</p> | <p>THREATS</p> <p>T1 Budget restrictions</p> <p>T2 ERDF requirements</p> <p>T3 Not reaching a critical mass of submitted applications</p> <p>T4 Many regular customers</p> <p>T5 Economic frame conditions (for companies)</p> |

The long-term perspective of the R&D program over several framework periods and the openness of the program for companies as well as open calls, are considered as strengths of the R&D program. The Lower Austrian project managers as well as INKREASE partners assess the impact of the R&D program as positive with its wide spectrum matching the needs of regional companies.

Administrative work and reporting are seen as a weakness for applicants this is strongly interlinked with the formal requirements demanded by the ERDF structural funds. This might also be a reason for a decreasing number of submitted applications.

Improving marketing with topic specific calls within the R&D program might motivate other regional companies, which have not participated in these R&D state aid schemes.

In addition, new ways of motivating Lower Austrian companies to strive for more intensive R&D activities need to be established in Lower Austria's R&D + I policy.

International research and European funding programs show that digitalization will be necessary to stay competitive on the international markets. Additionally, the Lower Austrian Life Science branches have remarkable research activities therefore R&D departments have to increase their international cooperation.

Two ideas are in the focus to motivate Lower Austrian SMEs to develop innovation and to use the R&D state aid scheme more intensively in the future:

- a) Increasing innovation of research companies as well as cooperation with Life Sciences by **competence mapping**.
- b) Finding overlapping projects between different industries and research sectors – **Digitalization** by using a competitive innovative network. Additional specified calls and project incentives for digitalization projects will be necessary.

2. Action 1:

Increasing the degree of innovation in research companies and increasing cooperation by competence mapping

2.1 The Background

The main part of the project INKREASE is to learn from technology centers and networks from other European partner regions. It is important to create partnerships between the research institutions of Lower Austria, to learn from other technology centers and develop cooperation between research, companies and universities. Lower Austria has developed a tool for discovering and clarifying the relevant competences of companies and research departments. During the INKREASE project we tried to use competence mapping for Life Sciences and we exchanged our views with other regions about the usefulness of this kind of analysis and new ideas from the Life Science industry. (INKREASE staff exchange in Denmark from 30.11.-1.12.2017 and Learning Camp in Vienna 26.2.2018). New opportunities had been discussed with the Lower Austrian stakeholder group during the stakeholder meeting (30.05.2018) and with the IMC University of Applied Sciences.

The research departments of campus Krems, especially the University of Applied Sciences and the Danube University have remarkable research activities for cancer and extracorporeal blood cleaning systems. During our competence mapping work with technical companies at Technopol Wiener Neustadt and Wieselburg we discovered that companies gain a new awareness of their skills and can represent and market their competences better. During our workshop and Learning Camp in Vienna (26.2.2018) we had learnt from Italian stakeholders, that the results of competence mapping are a useful basis for searching international project partners at the European Union. Competence mapping describes the resources and the know-how of the research departments and their personnel in a specific way. This is a unique process, which we had not found in the other regions of INKREASE project partners. Especially research at Life Science as it is very specific, difficult and expensive. One of the key messages our project partners told us was the importance of building trust with new project partners.

ecoplus is always involved in this process of competence mapping. The specific information we receive about our project partners allows us to improve our marketing and to enlarge our network. (SWOT O2, O4, O6, T2). Many of our INKREASE partners and stakeholders from the Life Science sector were interested to learn from this process. Our consulting company IMG held a workshop in Bologna and the Danish partner was interested to take part at a Learning Camp in Austria, but the political situation of our Danish INKREASE partners had changed and they couldn't follow our invitation.

In this way the research departments at the Danube University had started a cooperation with the research departments in the Emilia Romagna region (partners from Italy had participated at the learning camp in Vienna on 26.2.2018).

The process of competence mapping with the IMC University of Applied Sciences in Krems was very successful. During our learning camp with partners from the region Emilia Romagna, we discussed the target of competence mapping. The international project partners and our stakeholders had explained that the competence map is the best basis to find international project partners and to open new markets in the area of cross sector industry. Therefore, we decided to continue competence mapping with other Life Science research departments of Lower Austrian Universities.

In November 2018, a delegation with the Lower Austrian Minister for Economy and Technology had several meetings where we could strengthen the cooperation between research institutions and universities as well as in political activities.

2.2 Action

To strengthen international research activities, it will be necessary to increase know-how at the campus Krems. In 2018, the institutions had implemented a core facility to use infrastructure together and to optimize investments for technical equipment. A combination with a competence mapping for all R&D Partners at the campus Krems will be an important part of the successful implementation of core facility (shared infrastructure). During our INKREASE activities project, stakeholders of Life Science from the Emilia Romagna region and the Technopol Krems started a research cooperation. There is an interest to implement competence mapping at Techopols in the region of Emilia Romagna in Italy.

Next steps of action during phase II of the project INKREASE:

Step 1: competence mapping at the campus Krems – workshops with two research departments at the Danube University; Karl Landsteiner University is a new private university which needs support in order to focus on specified research technology fields.

Step 2: roll-out the results for competence mapping in Life Sciences to our INKREASE stakeholder partners for example in the region of Emilia Romagna.

2.3 Players involved

- Technopol management Krems
- Karl Landsteiner Private University, Danube University, IMC University of Applied Science Krems
- Consulting company IMG

- Project partners of the region Emilia Romagna

2.4 Timeframe

Competence mapping process with Life Science departments at the Danube University and Karl Landsteiner University started at the beginning of 2019 and will end after one and a half years.

<https://www.donau-uni.ac.at/en/departament/kmbt/index.php>

<https://www.kl.ac.at/en/research>

<https://www.fh-krems.ac.at/en/research/>

The first introduction meeting was held on 28th January at the campus Krems. The workshop with 2 research departments at the Danube University will start in April. Workshops with Karl Landsteiner University will start at the end of 2019.

2.5 Costs

Competence mapping costs for project consulting, workshops and the report will amount to approx. 20.000,--€.

2.6 Funding sources

The competence mapping will be financed by the Technopol program Lower Austria (Policy Instruments addressed), by the research departments of the campus Krems and by the government of Lower Austria (regional funds).

3. Action 2: Finding overlapping topics between the different industries and research sectors - Digitalization

3.1 The Background

Digitization is the technology of the future. It affects all of us - and makes a profound change in every area of life. The digital transformation offers great opportunities for a better quality of life, revolutionary business models and more efficient management.

The European Union had emphasized that there is a general need for action.

Industry is one of the pillars of the European economy – the manufacturing sector in the European Union accounts for 2 million enterprises, 33 million jobs and 60% of productivity growth. We stand on the brink of a new industrial revolution, driven by new-generation information technologies such as the Internet of Things (IoT), cloud computing, big data and data analytics, robotics and 3D printing. They open new horizons for the industry to become more adventurous, more efficient, to improve processes and to develop innovative products and services. Recent studies estimate that digitalization of products and services can add more than €110 billion of annual revenue in Europe in the next five years.

At different INTERREG meetings at project INKREASE we had learnt from other regions and the S3-strategic topics how to build up this very important technological sector in the innovation system. The region of Brittany is especially successful in implementing digitalization at SME and companies. For this reason, stakeholders from the Lower Austrian government and the INKREASE project team of ecoplus visited Rennes (16. – 17th of April 2018), because the region of Brittany has several competences in technology field data, cyber security and different technological platforms. (Best practice: KRAFT, plug in labs Ouest). During our Learning Camp we were informed about creating new online platforms such as KRAFT: How they attract their members, how they keep their content actual and the motivation of joining this platform and the benefit for its members, as well as information about the financing model. KRAFT seems to be a new model which will also be of interest to other European regions. One significant advantage is that the regional government has better knowledge of its innovative companies and networking is easier, as well as the setting of new technology measures.

In June 2018 the Lower Austria government had defined digitalization, technology field "Data" as a new field in its "FTI Program" (Research, Technology and Innovation program). In this strategy we tried to use several different policy instruments making companies, especially SME's more innovative.

A new project called "Haus der Digitalisierung" "virtual house of digitalization" funded by the policy instrument addressed was launched at beginning of January 2018:

The Lower Austrian innovation system will create a new platform and network for improving digitalization of Lower Austrian companies especially for SME's.

Step 1: Creating a network in the area of data, IT and digitization

Step 2: Designing and programming an interactive online platform
"Virtual House of Digitalization"

Step 3: Conception of a "Real House of Digitalization" (infrastructure)

In January 2018, we started the project "Haus der Digitalisierung". A full time employee and five different net-work-centers in technology IT-hotspots of Lower Austria will create a new platform (ecosystem) within the next three years.

Within the first year, an open innovation process will be started and project management and stakeholders will create a network with the most important players – they have to identify the demand of companies and customers. An important part of the platform will be a matchmaking-tool for searching topics or technologies across all services. It should help to find potential project partners.

During spring in 2018 different workshop departments of digitalization at universities and innovative companies as well as members of the Lower Austrian government started with the aim to create a new interactive virtual online platform with different services. During our Interreg. study visits we learnt from other regional platforms, especially "KRAFT" from Brittany who have given us valuable insights.

The new platform know-how and policy instruments have given important input in the workshops to create the platform "virtual house of digitalization". The programming of the platform started in September 2018 and was finished at the end of January 2019. We are now ready to build up a network-community.

Main topics of the project:



DIGI - Forschung

- Increasing the speed of transformation of Lower Austrian companies
- Low-threshold access for companies to scientific institutions
- Strengthen and build interdisciplinary and international research
- Guidance and demonstration projects on all topics
- Raising awareness in the population

Possible miss-information, should change to seeing opportunities and a growing interest (SWOT: O2, O4, O5, O6, O7, T2)

During our visit to Denmark we were introduced to the innovation hub of Aarhus - "Digit center and INCUBA" which is a tailor-made infrastructure for technology-oriented start-ups and companies and research departments (staff exchange in central Denmark 30.11.-1.12.2017). INCUBA was created as a merger of three former research institutions in 2007 and is an amalgamation of "Innovation Network Centre for University and Businesses of Aarhus". The primary goals of the institution are to strengthen cooperation between research institutions and companies with consultancy and by raising capital for projects.

3.2 Action

The new platform "Virtual House of Digitalization" was designed and programmed with inputs from our INKREASE partners. At the end of January, the interactive webpage is now online www.virtual-haus.at (this is part of our INKREASE action plan). We are now able to activate the new network and gain new ideas and innovative projects.

Step 1: Creating and programming a new interactive online platform and a network with not only key players but also users of digitalization. In July 2018 we created a Europe-wide tender which includes product, deliveries and services. This project started end of August 2018 and the first version was completed in January 2019.

With this project we plan to exchange knowledge and experience with other INKREASE partners.

Step 2: Additionally, "DATA" is a new subject area of the Lower Austrian RTI program (Research, Technology and Innovation program) since June 2018. In Phase II of INKREASE we plan to intensify cooperation with stakeholders, to offer calls for further activities for research facilities and companies as well as to develop projects with a high regional impact. http://www.noe.gv.at/noe/Wissenschaft-Forschung/f_FTI_Programm.html

We aim for cooperation project at EU and/or national level to create a digital innovation hub with the existing platform community.

Step 3: The Lower Austrian government has decided to build a new infrastructure for companies with education facilities as a "Real House of Digitalization" at Technopol Tulln. The content conception and planning of the building will take place in phase II of the INKREASE Project. The financing of this building is not part of this action plan, but the conception of a real house of digitalization, the financing model and cooperation between regional government and universities.

3.3 Players involved

- Government of Lower Austria, Department Economy and Technology WST3 (financing and building up a network)
- Government of Lower Austria, Department for Research K3 (financing calls and projects)
- Government – Department for Research - K3 (financing calls together with WST3 at certain technology fields, also DATA)

House of digitalization The network.

This network links experts in centers throughout Lower Austria with the target group of business enterprises and the general public in Lower Austria - making connections throughout the entire region.

ecoplus -
Lower Austrian Clusters
and Technopoles
St. Pölten

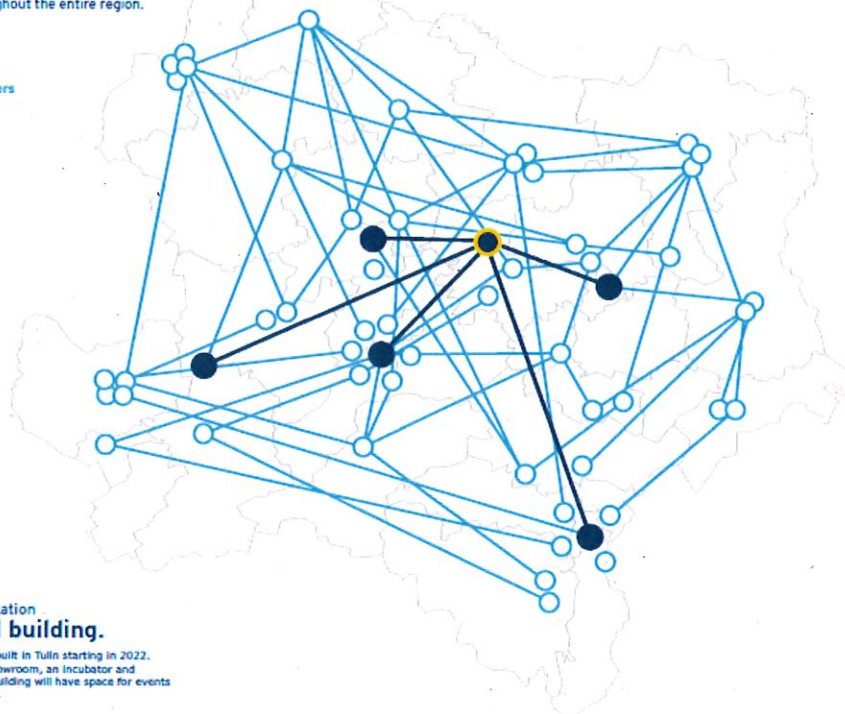
ris up
Consultancy centers
Amstetten
Bernsdorf
Gmünd
Hollabrunn
Korneuburg
Krems
Melk
Mistelbach
St. Pölten
Ternitz
Waldhofen an der Ybbs
Wolkersdorf
Wi. Neustadt
Wi. Neustadt

accent
Start-up
service centers
Krems
St. Pölten
Tulln
Wi. Neustadt

tecnet equity
Venture capital and
technology transfer
St. Pölten

House of digitalization The actual building.

A physical center will be built in Tulln starting in 2022.
In addition to a digital showroom, an incubator and
a coworking space, the building will have space for events
and networking functions.



Hub experts
Korneuburg
Krems
St. Pölten
Tulln
Wieselburg
Wi. Neustadt

**Economic Chamber of
Lower Austria**
Regional offices
Amstetten
Baden
Bruck an der Leitha
Gänserndorf
Gmünd
Hollabrunn
Horn
Korneuburg
Korneuburg-Stockerau
Krems
Lilienfeld
Melk
Mistelbach
Mödling
Neunkirchen
Purkersdorf
Schwechat
St. Pölten
Tulln
Waldhofen an der Thaya
Wi. Neustadt
Zwettl

TIP
Technology and
innovation partners
Amstetten
Gmünd
Hollabrunn
St. Pölten
Wi. Neustadt

**Institute for Economic
Promotion (WIFI)**
Lower Austria
Amstetten
Gänserndorf
Gmünd
Mistelbach
Mödling
Neunkirchen
St. Pölten

- ecoplus. The Business Agency of Lower Austria (lead of project – one full time employee and an assistant).
- Universities of Applied Sciences Krems, Wiener Neustadt, St. Pölten, Danube University, Institute of Science and Technology Austria (ISTA) and the Lower Austrian Chamber of Commerce (experts who will help to build up this network).

3.4 Timeframe

- 1) Creating and programming a new interactive online platform and a network with not only key players but also users of digitalization. The platform is currently in operation, we are now building up the network. The platform will be active until the end of phase II.

During this process we have to find new innovative project ideas. Different calls by the Lower Austrian government will help to realize new project ideas coming from the new "Virtual House of Digitalization".

- 2) The Lower Austrian government is planning to build a new infrastructure as a "Real House of Digitalization" at the Technopol Tulln. The concept for this building has to be finalized by the end of 2019.

3.5 Costs

The total costs for the project House of Digitalization are 1.767.000 €.

Due to the project INKREASE: an additional 761.000 € has been allocated for additional personal costs, programing and maintenance of the virtual online platform.

The relevant action plan budget, which was influenced by the regional exchange (learning and study visits/ staff exchange) from INKREASE partners amounted to 761.000,-- € that means these are the costs for designing, programing and hosting this virtual platform and for creating a new network during the next two years (this is an additional funding application to the Lower Austrian government).

This costs are financed by:

409.200 € national (hosting and service for the virtual online platform, WST3 Lower Austrian government)

351 800 € ERDF (programing the virtual online platform and additional personal costs for marketing and hosting the platform).

3.6 Funding sources

Lower Austrian government, Department of Economy and Technology WST3 and the EU – ERDF



European Union
European Regional
Development Fund

INKREASE
Interreg Europe



ecoplus. The Business Agency of Lower Austria

4. Signature

Place, date: St. Pölten, 2019-06-30

ecoplus. The Business Agency of Lower Austria

ecoplus. Niederösterreichs
Wirtschaftsagentur GmbH

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