



P2L2 Project

“Public Policy Living Lab”

Action Plan of Project Partner 1

SenWAH - Ministry of Economic Affairs, Labour and Ports for the
Free Hanseatic City of Bremen

May 2018



Part I – General information

Project: **Public Policy Living Lab (P2L2)**

Partner organisation: PP01 SenWAH Ministry of Economic Affairs, Labour and Ports for the Free Hanseatic City of Bremen

Other partner organisations involved (if relevant): PP03 WFB Wirtschaftsförderung Bremen (until 30 June 2017, then integrated into SenWAH as explained in the partner change process)

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Part II – Policy context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed:

The policy instrument (PI) under investigation in Bremen region is the **RIS 3/ ERDF Operational Programme 'Strengthening a business driven innovation system in the field of advanced materials'**

The overall objective of this PI is to foster research, development and innovation in regional enterprises in the field of advanced materials as a basis for future growth and job creation. Advanced materials have been identified as one of the eleven priority areas of the Bremen smart specialization strategy (RIS3). Advanced materials are seen with a special focus on lightweight construction, innovative materials and surface technologies. These technologies are generally acknowledged as key enabling technologies (KET) capable of generating innovation and highly skilled jobs and have developed into the most important field of activity in terms of R&D and innovation in the Bremen aerospace industry. They are likewise of importance to other major regional clusters such as automotive and wind energy.

In order to concentrate expertise and R&D infrastructures in this area, the **EcoMaT center for eco-efficient materials & technologies** is currently being built in Bremen. EcoMaT shall serve as a focal point for cooperation between different industrial based clusters around the OEM Airbus, supporting thus the field of materials science and its engineering applications. A wide range of stakeholders from industry, SME, knowledge institutes and regional authorities are involved.



Part III – Details of the actions envisaged

ACTION 1 Type 1: implementation of new projects: adjustment of the aerospace R&D program Bremen

- **The background** (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)

The following activities around the EcoMaT are best practices from Bremen as part of these specific policy instruments:

- Research and development investments e.g. FIBRE institute for material research
- Aerospace R&D funding program for the region Bremen (LuRaFo Bremen) as an instrument within the ERDF program:
 - Funding: rd. 16 M€ (ERDF and private co-funding) from 2016 to 2021 for R&D projects
 - State Aid for R&D-projects with focus in aerospace
 - Based on General Block Exemption Regulation, Article 25
 - R&D-Topics: Movables/Highlift, lightweight construction/design, RPAS, space transportation, satellites/downstream
 - Support for the cluster and technology transfer: Accompanying activities for networking, e.g. stakeholder round table and marketing
 - Administration of the program by the WFB (regional business development agency) until 07/2017 and the BAB (development Bank Bremen) since 07/2017

A key challenge for the Bremen PI is the focus of the activities on a single sector Aerospace. However, advanced materials are also important in automotive, ship building or wind industry. A wider range of stakeholders from different sectors will have to be involved. The Bremen innovation clusters so far have a sector-based organisation structure.

Nouvelle Aquitaine (F) serves as an example of a region that focused its Regional Innovation Strategy on key enabling technologies (KET) instead of sectors. They have developed technological roadmaps for the KET advanced materials. Therefore Bremen decided to change the aerospace R&D funding program (LuRaFo) and give it a stronger focus on KETs "advanced materials" and "advanced manufacturing technologies"

- **Action** (please list and describe the actions to be implemented)
 - Evaluation of current aerospace R&D program calls
 - Adjustment with respect to focus on KETs "advanced materials" and "advanced manufacturing technologies". and development of technological roadmaps
 - application for a prolongation of the aerospace R&D Program (LuRaFo) within the running ERDF program 2014-2020

This is considered a "Type 1: implementation of new projects" improvement of the PI.

- **Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

SenWAH Ministry of Economic Affairs, Labour and Ports for the Free Hanseatic City of Bremen is responsible for the RIS3 as well as the strategic framework of the aerospace R&D program Bremen (LuRaFo) (Department Industry, Innovation and digitalization) and the organisation of the EcoMaT partnership activities as well as for the ERDF managing authority Bremen (Department central services)

Therefore SenWAH Department Industry, Innovation and digitalization will organise the action and involve the ERDF managing authority

Development Bank Bremen (BAB) is responsible for the administration of the aerospace R&D program Bremen and will help with evaluation and implementation of changes

AVIASPACE Bremen is one of the regional networks of stakeholders and will be involved in discussions on the focus of the program

Other networks and stakeholders as described in the Case Study will also be involved.



Bremen Parliament (Bremische Bürgerschaft) will take a decision on the prolongation and new focus of the aerospace R&D program.

- **Timeframe**

- 05/2018-08/2018: Evaluation of current aerospace R&D program (SenWAH with Development Bank)
- 07/2018-09/2018: discussion of new focus of the R&D program with stakeholders
- 10/2018: application for a prolongation of the aerospace R&D program funding in coordination with ERDF managing authority
- 12/2018: political decision on the prolongation of the adjusted R&D program
- 01/2019-03/2019: implementation and calls within the adjusted R&D program (Development Bank Bremen)
- 09-10/2019: evaluation of new applications within the adjusted R&D program (SenWAH)

Indicator for success: Number of projects funded under the adjusted aerospace R&D funding program (LuRaFo) with a special focus on Key enabling technologies (KET) in the years 2019-2020

- **Costs** (if relevant)

No costs for adjusting the aerospace R&D program

Change will have an effect on a budget of around EUR 2.5 Mio. in the years 2019-2020

- **Funding sources** (if relevant):

ERDF funding program of Bremen

ACTION 2 Type 2: change in the management of the policy instrument: set up a legal association with advisory board and sub-panels and enhance the cross-border cooperation among northern federal states

- **The background** (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)

Key challenge in Bremen is that the stakeholder engagement is not yet focused on joint technology development and that Bremen as the smallest federal state stands in competition with the neighbouring federal states Hamburg and Lower Saxony.

Podkarpackie Region (PL) has established an "Innovation Council" that serves as RIS3 steering committee and has subpanels (Smart Specialisation Panels) for advanced materials.

The conclusion is to implement a formal legal association for the wide range of partners involved in the field of advanced materials in Bremen and centred around the EcoMaT with subpanels to work on technology roadmaps.

Nouvelle Aquitaine (F) was formed of three former French provinces and is now joining the three former RIS3 and ERDF programmes to one.

The conclusion is to enhance the cross-border cooperation among the federal states to support key-enabling technologies within the existing separate funding programmes or in the German national funding schemes.

- **Action** (please list and describe the actions to be implemented)
 - Prepare for founding of a legal association for the EcoMaT partners
 - Establish an advisory board serving as Innovation Council for the Advanced Materials.
 - Setting up of sub panels to work on technology roadmaps on specific technologies.
 - In 2019 Bremen will have the presidency of the Standing Conference of the German federal states Ministers of Economics. In this year Bremen will propose to focus the work of the conference on KET "lightweight materials". This could lead to further support of the



KET within national funding programmes or joint projects.

- Bremen will establish an ESA-BIC (European Space Agency – Business Incubator Centre) that will serve as a centre for all five northern German federal states. It will support Start-ups linked to the aerospace industry. This can involve technologies with a cross-sectoral application such as advanced materials or the application of existing space technologies in other business fields.

This is considered a Type 2: change in the management of the policy instrument improvement of the PI

- **Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

SenWAH Ministry of Economic Affairs, Labour and Ports for the Free Hanseatic City of Bremen is responsible for the RIS3 as well as the strategic framework of the aerospace R&D program Bremen (LuRaFo) (Department Industry, Innovation and digitalization) and the organisation of the EcoMaT partnership activities as well as for the ERDF managing authority Bremen (Department central services)

Therefore SenWAH Department Industry, Innovation and Digitalization will organise the action

AVIASPACE Bremen is one of the regional networks of stakeholders and will be involved in discussions on the focus of the program for Advanced Materials. AVIASPACE will also be responsible for running the ESA-BIC-

Development Bank Bremen (BAB) is responsible for the administration of the funding of start-ups within the ESA-BIC.

Other networks and stakeholders as described in the case study will also be involved.

- **Timeframe**

- 03/2018-08/2018 prepare the setting up of a legal association
- 09/2018 founding ceremony of the legal association
- 11/2018-12/2018 implement and establish an advisory board for the legal association
- 01/2019-06/2019 establish sub-panels of the advisory board and support their work on different technology roadmaps
- 01/2019-12/2019 discussion of support measures for the KET "lightweight materials" within the Standing conference of the German federal states Ministers of Economics.
- 12/2018..... establishment of ESA-BIC in Bremen
- 01/2019-12/2020 support of Start-ups linked to the Aerospace industry in Northern Germany – indicator: number of Start-ups

This activity will be linked with action 1 as the advisory board and sub-panels can help to evaluate potential new applications within the adjusted aerospace R&D program Bremen.

- **Costs** (if relevant)

No costs for the implementation of the legal association

Around 300 TEUR for the development of technology roadmaps. These costs are covered by the already established accompanying measures to the EcoMaT, which are funded by the ERDF program Bremen

ESA-BIC will be partly funded by the European Space Agency and partly by the ERDF program Bremen (around 1 Mio. €) Additionally 0.7 Mio. € of regional co-funding will be provided.

- **Funding sources** (if relevant): ERDF funding program of Bremen and European Space Agency



ACTION 3 Type 3: change in the strategic focus of the policy instrument: change RIS3 strategy from sector-based focus to KET-based scheme

- **The background** Lithuania and Nouvelle Aquitaine serve as examples of regions, which focused their regional innovation strategy on key enabling technologies (KET) in the field of Advanced Materials
- **Action** (please list and describe the actions to be implemented)

In view of the upcoming ERDF period 2021-2027: Prepare a new RIS3 strategy with a stronger focus on KET as influencing the sector-based clusters in development of innovative products

- **Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

SenWAH Ministry of Economic Affairs, Labour and Ports for the Free Hanseatic City of Bremen is responsible for the RIS3 as well as the strategic framework of the aerospace R&D program Bremen (LuRaFo) (Department Industry, Innovation and digitalization) and the organisation of the EcoMaT partnership activities as well as for the ERDF managing authority Bremen (Department central services)

Therefore SenWAH Department Industry, Innovation and Digitalization will organise the actions.

Other departments and regional Ministries for Science and Education as well as all relevant stakeholders will be involved.

The action will lead to empowered stakeholders across the whole range of the Bremen socio-technical systems, e.g. scientists, policy-makers, CSOs, business and innovators, educators. Structures and organisations involved will provide opportunities and support for actors to be responsible, ensuring that cross-sectoral innovation becomes and remains a solid and continuous reality in Bremen.

- **Timeframe**

04/2018-12/2018 pilot implementation of new KET-based strategy in test fields, e.g. advanced layered manufacturing and focus of existing funding program on the adjusted priorities

01/2018-09/2018 write a report on the output indicators of the existing RIS3 and draft key points for the new RIS3 focus on KETs.

10/2018-12/2018 political decision on new focus within the current ERDF funding for cluster and innovation

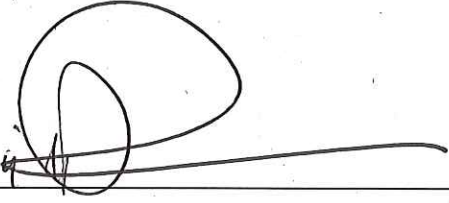
01/2019-12/2019 draft new policy documents (Innovation and industrial policy and RIS3) and prepare political decisions in the Bremen Parliament

- **Costs** (if relevant)
Work will be done by the existing staff.
- **Funding sources** (if relevant):
ERDF funding program of Bremen



Date: Bremen, 13.06.2018

Im Auftrag

Signature: 

Ministry of Economic Affairs, Labour and Ports of the Federal State of Bremen
Head of Department 4 Industry, Innovation and Digital transformation,
Hans-Georg Tschupke


Der Senator für Wirtschaft, Arbeit
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Zweite Schlachtpforte 3

Stamp of the organisation (if available):


28195 Bremen

