

WPT4

D.T4.3.1

Transregional exploitation plan for
Advanced manufacturing sector

Version 1
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CHAIN REACTIONS

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Abbreviations

IGA – Innovation and Growth Alliance

TIA – Transnational Innovation Activities

TIIA - Transnational industrial innovation Agenda

TEP – Transnational Exploitation Plan



1 INTRODUCTION

CHAIN REACTIONS project addresses the challenge for industrial regions not benefitting from innovation activities from large leading corporations to increase regional capacity to absorb new knowledge and turn it into competitiveness edge and business value. There is a strong need to help SMEs to overcome capacity shortages for innovation and integration into transnational value chains. The project aims at empowering regional ecosystems with the knowledge and tools to help businesses overcome those barriers and generate sustained growth through value chain innovation.

In order to create transnational open spaces for collaboration (e.g. value chain based) the activities for Building open collaboration spaces for transnational RIS3 implementation (WPT4), will be based on previous project activities, mostly IGAs established in each of the target regions (O.T2.1) and Value chain innovation models and instruments implemented in each target region as a driver to S3 (O.T3.2).

More specifically, the activities for preparation of **Thematic transnational exploitation plans and open collaboration spaces** (O.T4.3) will be based on **Thematic industrial innovation roadmaps** (O.T4.1), which have been developed in each of the selected industrial sectors by transnational networks of relevant innovations stakeholders will be established and build on identified technological and societal trends of potential innovative developments (technologies, processes, business models and their interactions) and **Thematic innovation agendas** (O.T4.2).

For the purpose of setting up Thematic transnational exploitation plans and open collaboration spaces two activities will take place:

- A.T4.3.1-5: Transregional exploitation plan (TEP) for each of the 5 identified sectors
- A.T4.3.6-10 Transnational open space (TOS) for each of the 5 identified sectors

Overall, the thematic innovation agendas are one of the three outputs within the WPT4, linking the identified potential with plans for transnational exploitation:

- O.T4.1 Thematic industrial innovation roadmaps;
- O.T4.2 Thematic innovation agendas;
- **O.T4.3 Thematic transnational exploitation plans and open collaboration spaces.**



2 TEP for the Advanced manufacturing sector

2.1 Background

The TEP is based on the previous project activities:

- D.T4.1.6 - transnational industrial innovation roadmap workshop,
- D.T4.1.7 - transnational industrial innovation roadmap for the Advanced manufacturing,
- D.T4.2.2 - Transnational innovation agenda workshop 2,
- D.T4.2.3 - Transnational industrial innovation agenda for the Advanced manufacturing.

The Transnational Industrial Innovation Agenda (TIIA) for the Advanced manufacturing, is aiming to achieve the development in two main activities which are:

- Fostering the collaboration in the Digital innovation hub networks
- Expanding the usability of the virtual reality in the medical sector

These two activities arose from previous meetings and workshops as best feasible, with high potential for transnational cooperation and sharing of know-how. The primary goal of both activities is to expand new technologies into practice, whether in the advanced manufacturing or health sector. In this document, consortia of partners who would participate in these activities are further elaborated.



2.2 TEP setup

Transregional exploitation plan for the Advanced manufacturing, based on the TIIA of the west Hungary and west Bohemia is focused on two previously mentioned innovation actions where both regions have found the possibility of cooperation. The table below provides the overview of those actions and elaborated the participation of transnational stakeholders.

Transnational industrial innovation agenda for the advanced manufacturing						
Name of TIA	Timeframe	Partners involved	Expected impact	Estimated costs	Source of founding	Transnational stakeholders
Development of collaboration in the Digital innovation hub networks	2022-2027	PBN, RDA, WTP	There are three main areas that will be a subject of future cooperation: development of research activities, creation of educational programmes, development of strategies.	1.350.000 EUR	Interreg CE / Digital Europe	Municipality of Szombathely University of Óbuda am-LAB at.home University of West Bohemia COMTES FHT Cluster mechatronics DIH HIVE
AR/VR utilisation in medical sector	2022-2024	PBN, RDA, GAPR	To create a VR application which provides musculoskeletal therapy, Neurorehabilitation and ergotherapy.	480.000 EUR	Interreg CE / Horizon	Municipality of Szombathely University of Óbuda am-LAB at.home University of West Bohemia



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						DIH HIVE VR medical
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2.3 Stakeholder role within TEP

The following stakeholders of west Hungary region and west Bohemian region will be responsible for the implementation of the TEP.

Stakeholder	Region	Role within TEP
Municipality of Szombathely	Hungary	Supporting PBN with the research in the field of health and advanced manufacturing.
University of Óbuda	Hungary	Supporting PBN with background research.
at.home	Hungary	At home is a unique demonstration and test environment based on a decade and a half of international business development, ten years of healthcare and five years of digitization experience.
am-LAB	Hungary	PBN's DIH is responsible for technological, digital support and health related technologies.
University of West Bohemia	Czech Republic	University will support the consortium with background research.
COMTES FHT	Czech Republic	The research centre will support the consortium with background research.
Cluster mechatronics	Czech Republic	The cluster network will be used for mapping the needs of the companies in the digitisation area.
DIH HIVE	Czech Republic	Regional DIH will foster the transfer of knowledge to practice and will also provide relevant needs from the companies.
VR medical	Czech Republic	The SME which will cooperate on the development of VR applications



3 Conclusions

The PP PBN and RDA Pilsen will provide the networking among key stakeholders in West Hungary and West Bohemia in order to contribute to the Output O.T4.3 Thematic transnational exploitation plans and open collaboration spaces in the thematic sector of Advanced Manufacturing.

The conclusion is to establish a responsible stakeholder list for the advanced manufacturing sector, combining this with the health sector. The COVID-19 crisis made it clear, that the combination of digitalization and health must be a priority to the society. The stakeholders, IGA members and experts attended many fruitful meetings in the framework of Chain Reactions. Proposals were subsequently further communicated at a transnational workshop of PBN and RDA partners.

The proposed innovation actions are fully in line with current global trends as well as with national smart specialization strategies in the partner countries. Innovation actions will now be cultivated again on upcoming workshops at both national and international levels in order to specify those innovation agendas. Once again, national priorities for the advanced manufacturing sector will be taken into account, which pays attention to the constant development of artificial intelligence and cybernetics. As in many cases we try to develop international cooperation on scientific research projects, where the protection of intellectual and industrial property is also an integral part. The proposed activities generally aim not only to the strengthening of innovation potential of industrial companies, but also to start-ups support or their subsequent acceleration. All this in the context of current European challenges, such as climate protection (Green deal) and reduction of energy consumption.