

HARVESTING AGENDA ON CAMI4.0 FOR POLICY LEARNING LAB & STRATEGY BOOST/UPGRADE

D.T1.1.3 - A report and selection grid for best-in-class use of identified outputs and results in WPT1

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Document Control

Document Summary	
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Dissemination Level			
PU	Public		
PP	Restricted to other programme participants		
RE	Restricted to a group specified by the consortium		
СО	Confidential, only for members of the consortium	СО	

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30.6.2020	1.3	PRO	Final Version approved	





1. Executive Summary

1.1. Project Overview

CEUP 2030 aims to generate stable innovation networks which foster better understanding on \underline{C} entral Europe \underline{A} dvanced \underline{M} anufacturing and \underline{I} ndustry $\underline{4.0}$ (" $\underline{C}\underline{A}\underline{M}\underline{I4.0}$ ") topics, to generate improved knowledge resource exchange on these technologies leading to an upgraded framework for policy-making and implementation.

Ultimately CEUP 2030 creates and tests a common method to promote improved knowledge dissemination to policy-making stakeholders using a collaborative exchange framework based in physical and digital-methods. These methods and the technology show-cases disseminated within these method structures are harvested from existing, high-quality innovation know-how in the CE area.

The project focuses on:

- Identifying the highest-quality innovation know-how in the CE Area, on the CAMI4.0 Topics.
- Enhancing skills capabilities and knowledge of people in charge of local, regional, and (trans)national RTI Policies, associated to the CAMI4.0 Topics.
- Creating a sustainable structure for awareness-raising and shared-sustainable RTI knowledge resource use to enhance policy decision support.
- Anticipating and fast-tracking policy / strategy policy pilot actions to promote a joint RIS3 for CAMI4.0 Excellence in CE/EU.

1.2. Work Package and Activity Overview

The overall objective of WPT1 links to the project's specific objective of enhancing skills, capabilities and knowledge of people in charge of local, regional and (trans)national Research, Technology and Innovation policies within the triple-helix context.

The challenge manifests in two sub-objectives which are:

- (1) To train and empower people to work in the environment of new technologies (strategically and operatively) regarding policy-relevant decisions
- (2) To pool a critical mass of trained stakeholders to generate sufficient power for policy-making and appropriate selection, adaption and fine-tuning of already proven tools, instruments and methodologies.

The specific activity which is of relevance for this document is Activity A.T1.1, which is a common activity for all WPs and covers the preparation of the Harvesting activity which all PPs must participate in, to choose the outputs and results of exceptional CE and EU projects to create a "fast start" on the WP's Key Outputs (Policy Learning Labs and Strategy Upgrade)

Specifically, the practical activities which are supported in this document are:

- the appropriate selection, adaption and fine-tuning of proven tools, instruments and methodologies, aka "Harvesting" during A.T1.1
- The appropriate definition of the four technology topics for Central Europe Advanced Manufacturing & Industry 4.0 (CAMI4.0) during A.T1.1

Note: It is recommended that all PPs read the WPT1 Implementation Guide to gain further understanding about the connectivity of the WP Activity objectives. This can be found on the project's central repository - Alfresco





1.3. Scope of Document & Deliverable Summary

Deliverable D.T1.1.3 is defined in the Application as 1 Selection Grid for best-in-class exploitation on identified outputs/results for the PLL/Strategy Upgrade & Boost; Quick step-in modus for new PPs & further triple-helix stakeholders; IT visualised, further developed in T2 & T3.

This document contains the contributions from all PP regions on research, results & policy instruments from complementary initiatives. Each partner delivered 1 Methodology for Policy Learning Lab Development and 1 Methodologies for Strategy Boost and Upgrade which are the basic for further elaboration in T2 & T3

Name of Harvesting Aspect	Additional Comments	PP's Individual Obligation	CEUP 2030's Combined Obligation
Methodologies for Policy Learning Lab Development	Should help inspire interactive workshop methods on technology topics or policy maker engagement	1	10
Methodologies for Strategy Boost and Upgrade	Should help inspire the development of the strategic framework on the CAMI 4.0 topics; focus/strategic vision, active and relevant actions.	1	10
Total Number of Inputs		2	20

Figure 1 Harvesting Agenda, Overview of Inputs per Topic and per partner

1.4. Audience

This document is directed at all project partnership members, because all PPs will be asked to review their results portfolio and provide input to the CAMI4.0 Glossary and the CEUP 2030 WPT1 Harvesting Agenda. Additional to this it is a document for all shareholders and could be used as well for the PLL and also promoting the project with some adaptions (Only the Annexes).

The appropriate status of this deliverable is reflected in the "Dissemination Level" table, on the Document Control page of this Guidance Document.

1.5. Change Control Procedure & Structure

The Deliverable Responsible: PROFACTOR (PRO/PP2), created this guidance document and it is hosted on the Project's common repository in the appropriately named deliverable folder.

The document is under project deliverable change control protocols whereby Partners are requested to give feedback on the Draft Version within five working days. Feedback will be incorporated and Final Version will be issued by PRO. Thereafter the PPs have five additional working days for any final comments.

At any time, partners believe a project methodology should change, the request should be brought to the Deliverable Responsible (PRO/PP2) and the Work Package Leader (PTP/PP8) to consolidate feedback from other partners, and then further integrate and disseminate the final agreed changes. A new version of the document should be created, and recorded in the document's "Document History" table.





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2. Introduction

The purpose of the Harvesting Agenda ON CAMI4.0 FOR POLICY LEARNING LAB & STRATEGY BOOST/UPGRADE is to have a 1 Selection Grid for best-in-class exploitation on identified outputs/results for the PLL/Strategy Upgrade & Boost; Quick step-in modus for new PPs & further triple-helix stakeholders; IT visualised, further developed in T2 & T3. The Harvesting Agenda is Part two of the documents (Besides the Glossary D.T1.1.2) used for preparation of the CEUP 2030 Policy Learning Lab (Output O.T1.1) and the CEUP 2030 Strategy Upgrade & Boost (Output O.T1.2). The Glossary could be used as Handbook to show stakeholders Best practice Examples in Technology (TUC) and in Policy Instruments (PI)

3. Methodology

This section provides insight on an agreed methodology which partners followed to create Input for the Deliverable. The Methodology process is also described in D.T1.1.1

- Creation of a draft including table of content by PP2
- Preparation and sending of the templates for Methodologies for Policy Learning Lab Development and Methodologies for Strategy Boost and Upgrade
- Creation of one example each for Methodologies for Policy Learning Lab Development and Methodologies for Strategy Boost and Upgrade
- Creating a short instruction (in addition to D.T.1.1.1), sending out the templates and the example and requesting the examples
- Control of the received examples of the project partners by PP2, if necessary additional demand and integration of the examples into the Deliverable
- Evaluation, overview and completion of the deliverables
- Sending the DRAFT to the PP, collecting feedback (may and telephone), completing the deliverables
- Sending the deliverable for approval

1,1, Example One: Result Harvest from Fraunhofer IWU on Policy Learning Lab Methodology ONE Per Partner

Result Harvest for WPT1 Methodologies			
Name of the PP	IWU		
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab		
What is the name of the	3DCENTRAL		
harvested project (in English)?	In case of other, please clarify project name in English: Not Applicable		
What is the name of the	INTERREG CENTRAL EUROPE		
programme from where the result was harvested?	In case of other, please clarify programme name, in English: Not Applicable		
What is the name of the harvested result (aka the output/activity name from the project)?	Tech & inno Camp (TIC)		
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	Selected examples: On request we provide more info. https://www.smarthoch3.de/details/technologietransfer- zwischen-wissenschaft-und-industrie-smart3-als- worldcafe-tischpate/ http://blog.smarthoch3.de/strategisch-denken- sommertich-feiern/ https://www.smarthoch3.de/neuigkeiten/mertin/		

A short description of the result

Tech and Inno Camps (TIC) are events dedicated for mutual learning, experience exchange and enhancement of know-how on 11 knowledge axis on Advanced Manufacturing. For this reason triple-helix stakeholders are addressed to cover tech and business knowledge as well as the transfer to policy measures.

The TICs showcase a result-oriented training concept for new technologies which addresses and unites multifarious target groups, experts, stakeholders to (1) generate a common understanding and (2) gain excellent results about smart engineering technologies in CE.

Its goal consists in transferring practical know-how while on same time the most appropriate solutions for CE relevant topics are developed. The Camps cover a simulation of transnational CE relevant knowledge on Advanced Manufacturing in a concentrated work and in short time, in particular using demo examples and new digital media.

Figure 2 Harvesting Agenda ON CAMI4.0 FOR POLICY LEARNING LAB & STRATEGY BOOST/UPGRADE





4. Harvesting Agenda

The Harvesting Agenda has two input sets:

- ➤ Input 1 = Methodologies for Policy Learning Lab Development, or methods and experience which can create a fast start on Policy Learning Lab (PLL) design & implementation
- ➢ Input 2 = Methodologies for Strategy Boost and Upgrade, or methods and experience which can create a fast start on the Strategy Boost and Upgrade (SBU) of the Joint Strategy for CAMI4.0 Excellence and Action Plan for CAMI4.0 Excellence.

	1 KRAKOW		3 Association	4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.	5 Karlsruhe	6_Lombardy Intelligent Factory	7_SIIT S.c.p.a. Intelligent Integrated Systems	8 Pomurje	9_Pannon Business Network	10_Croatian Agency for SMEs,
	TECHNOLOGY	2 PROFACTOR	Industry 4.0	Fraunhofer	Institute of	Association	Technologies	Technology Park	Association	Investments
Topic:	PARK LTD (KPT)	GmbH (PRO)	Austria (PIA)	(IWU)	Technology (KIT)	(AFIL)	(SIIT)	(PTB)	(PBN)	(HAMAG)
Methodologies for Policy Learning Lab										
Development										
Policy Learning Lab Methodologies for Strategy Boost and Upgrade	Society in Innovation and Science through CODEsign	"Rent a Robot" Infrastructure sharing	Digitaler- Austausch	Tech & Inno Camp (TIC)	Synergy interactive workshops on design thinking and crown sourcing	SMART-SPACE – Interreg Alpine Space	New Trend	Alpine Space LiLab	Techno and InnoCamp – "Smart Services" Conference - Economic and social challenges of Industry 4.0	SMART FACTORY HUB Interreg CE
Strategy Boost and Upgrade	Roadmap including action plan for the support of regional technology development	upperVISION203 0 - Economic & Research Strategy Upper Austria	Austrian- Innovation-and- Technology- Platforms, PI	EIRoSens Network	Synergy profiling and synergic networking activities.	KACE Roadmap and Action Plan	CaxMan	Smart Factory Hub, Interreg Danube, Maping Tool	2014-2020 territorial plan of county Vas, Hungary	The Smart Specialisation Strategy (S3)

Figure 3 Overview Input of Harvesting Agenda

4.1. Policy Learning Labs

Definition: The Policy Learning Lab (PLL) is established training process which each PP will deliver within the framework of WPT1. The training process consists of two consecutive workshops which PPs hold within their region between May 2020 and February 2021. The workshop's training focus should be on empowering policy-relevant stakeholders with knowledge resources on the CAMI4.0 Topics through triple-helix-learning. The physical workshops manifest as interactive sessions where the participants can really "feel" the opportunities which the CAMI4.0 technologies could bring to the region. The interactive sessions should be formulated around informative technology use-cases which provide interesting, understandable insight on how technologies have helped different target groups. PPs must include 100 unique stakeholders in their training programme (10 Stakeholders / PP).

Policy Learning Lab		
1_KRAKOW TECHNOLOGY PARK LTD (KPT)	Society in Innovation and Science through CODEsign	
2_PROFACTOR GmbH (PRO)	"Rent a Robot" Infrastructure sharing	
3_Association Industry 4.0 Austria (PIA)	Digitaler-Austausch	





4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)			
5_Karlsruhe Institute of Technology (KIT)	Synergy interactive workshops on design thinking and crown sourcing		
6_Lombardy Intelligent Factory Association (AFIL)	SMART-SPACE - Interreg Alpine Space		
7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)	NewTrend		
8_Pomurje Technology Park (PTB)	Alpine Space LiLab		
9_Pannon Business Network Association (PBN)	Techno and InnoCamp - "Smart Services" Conference - Economic and social challenges of Industry 4.0		
10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)	SMART FACTORY HUB Interreg CE		

Figure 4 Overview Input of Policy Learning Lab

ALL COMPLETED TEMPLATES IN ANNEX

4.2. Strategy Upgrade & Boost

Definition: The Strategy Upgrade & Boost is the development of a Strategy and Action plan which sets the vision and working plans for the Trend and Innovation Networks ("TIN" in WPT2) for CAMI4.0. Ultimately it is the strategic operating framework which the PPs will use to guide their activities across the project, including providing insight on the target Policy Pilot Action Use Cases which PPs want to have "in-scope" for improving support for CAMI4.0 topics.

- ➤ The Strategy (D.T1.3.2) sets strategic vision statements from each PP on the CAMI4.0 Topics. The vision should emerge from harvested strategies which the PPs have worked on this programming period, plus the feedback and insight gained from stakeholders during the PLL implementation. The latter aspect the "feedback and insight" are what represents the "Upgrade & Boost" element of this output.
- ➤ The Action Plan (D.T1.3.3.) sets a structured working module for the 4 CAMI4.0 Topics. This Plan should identify the policy pilot actions, aka policy instruments in action for CAMI4.0 which PPs believe offer good support opportunities for CAMI4.0 stakeholders, that will be one part of the discussion base for the RIS3 Round Tables (WPT3).

Strategy Boost and Upgrade				
1_KRAKOW TECHNOLOGY PARK LTD (KPT)	Roadmap including action plan for the support of regional technology development			
2_PROFACTOR GmbH (PRO)	upperVISION2030 - Economic & Research Strategy Upper Austria			
3_Association Industry 4.0 Austria (PIA)	Austrian-Innovation-and-Technology- Platforms, PI			





4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)	
5_Karlsruhe Institute of Technology (KIT)	Synergy profiling and synergic networking activities.
6_Lombardy Intelligent Factory Association (AFIL)	KACE Roadmap and Action Plan
7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)	CaxMan
8_Pomurje Technology Park (PTP)	Smart Factory Hub, Interreg Danube, Maping Tool
9_Pannon Business Network Association (PBN)	2014-2020 territorial plan of county Vas, Hungary
10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)	The Smart Specialisation Strategy (S3)

Figure 5 Overview Input of Strategy Boost and Upgrade

ALL COMPLETED TEMPLATES IN ANNEX





5. Conclusions & Next Steps

The purpose of this document has been to provide a Selection Grid for best-in-class exploitation on identified outputs/results for the PLL/Strategy Upgrade & Boost. We have to provide Quick step-in modus for new PPs & further triple-helix stakeholders; IT visualised, further developed in T2 & T3.

The 20 examples/Best practices have been collected and are available for the next steps.

					Tai	get gro	oup	
Titel: Policy learning labs	Harvested result	Project (Type)	Description	Policy	R&I	Ind	Inter	Other
Society in Innovation and Science	Living lab		Its aim is to introduce methodology and tools, as design thinking and living lab methodology to the planning and responsible management of research and innovation. The project proves and builds the bridges between Public Engagement (PE) and Responsible Research and					
through CODEsign	methodology	H2020	Innovation (RRI). Result: Synergy Profiling Tool and a platform for	2	1	3	1	
"Rent a Robot" Infrastructure sharing	Infrastructure sharing	CE	Infrastructure sharing. The Platform facilitates the matchmaking between infrastructure providers and takers	3	1	1	2	
Digitaler-Austausch, Digital Exchange	Digital Exchange	Nat.	The Digitaler Austausch (DA) is an online conversation. In the conversation, policymakers and project managers of the Austrian federal states (NUTS 2 level) meet online	1	2	1	3	
Exchange	Tech & Inno	IVa t.	Tech and Inno Camps (TIC) are events dedicated for mutual learning, experience exchange and enhancement of know-how on 11 knowledge axis on Advanced Manufacturing. For this reason triple-helix stakeholders	1	2	1	3	
Tech & Inno Camp (TIC) 3DCENTRAL	Camp	CE	are addressed Relevant is a stakeholder-centered approach. Meaning it was necessary to consider and understand the needs of different stakeholder groups, namely scientists,	1	1	1	2	
Synergy interactive workshops on design thinking and crown sourcing	Interactive workshops	CE	industrialists, early stage researchers, students, business people etc. Pilot actions addressed to SMEs to strengthen their	3	1	1	2	
SMART-SPACE	Pilot Actions addressed to users	Interreg Alpine Space	innovation processes with industry 4.0 and smart technologies; ii) actions to strengthen the cooperation among Alpine policy makers and innovation stakeholders	1	2	1	2	
NewTREND	Training	H2020	The project consortium showcased the project results to relevant stakeholders throughout Europe. The technical partners joined forces with communication and exploitation partners to organize a set of training session with the tri-fold goal of facilitating the adoption of the software toolset developed in NewTREND	3	1	1	2	
Alpine Space LiLab	series of 3 stand-alone workshops of quadruple helix (trans-)national cooperation structures	Interreg Alpine Space	The LiLab is an eco-system of smart living excellence, where quadruple helix stakeholders share knowledge, cocreate, and innovate to overcome common challenges. The Labs generated transnational initiatives in content related smart "X" alliance topics.	1	1	1	2	
Techno and InnoCamp – "Smart Services" Conference - Economic and social challenges of Industry 4.0	"Smart Services" Conference	CE	Events like the above mentioned Techno and Innocamp could raise awareness in the project and could gain a deeper knowledge sharing between the participating regions. It also gives the possibility to learn more about the provided services between partners and boost further cooperation projects.	1	2	1	2	
SMART FACTORY HUB Interreg CE	Smart Factory: Digital Croatia	1	Digital Croatia event helped raise awareness of the public to the importance of Industry 4.0 and existing smart solutions in the industry. Also, to connect leading people in this area and to show that there is Croatian entrepreneurship which is advanced in this field	2	1	1		

Figure 6 Quick step in modus for Stakeholder for Policy learning labs and for pre-selection of PLL Best practice examples





The Quick Step in Mode shows that there are many results from Interreg projects (CE, Danube Region, Alpine Space and H2020), national projects are in the minority. According to a relevance for stakeholder policy (policy makers); R&I (research and development), Ind (industry) and Int (intermediaries) and the results in combination with the description a pre-selection can be made.

					Tar	get gro	up	
	Harvested	Project						
Titel: Strategy Boost/Upgrade	result	(Type)	Description	Policy	R&I	Ind	Inter	Other
			In order to effectively develop a transnational road map					
Bandana in alcudina and an alcudina	Do o doso o		for the support of 11 knowledge axis for Central Europe,					
Roadmap including action plan for	Roadmap including action		partners collected information from each national and					
the support of regional technology development	plan	CE	regional strategy into one comprehensive perspective for Central Europe.	1	2	2	2	
development	piun	C.	The Upper Austrian economic and research strategy					
			#upperVISION2030 was developed on the basis of and					
			supported by the experience gained from the strategic					
	Fit for Human-		economic and research programme Innovative OO 2020,					
upperVISION2030 - Economic &	Centered		coupled with a new approach to focus on a few topics of					
Research Strategy Upper Austria	Technology	Nat.	future importance.	1	1	1	2	
	Austrian		The ITP are self-organized and supported by the Austrian					
l	Technology		state. They represent different institutions and					
Austrian-Innovation-and-Technology	Platforms	no	stakeholders of their topic and are mostly organized in		,		2	
Platforms, Pl	Industry 4.0	program	associations. The ITP have the following main goals:	1	2	1		
			Is a network for elastic, robust and sensitive strain sensors. ElRoSens is funded by the the "Central					
			Innovation Program for Small and Medium-Sized					
			Enterprises (ZIM)" and aims to promote the innovative					
			strength and thus the competitiveness of medium-sized					
			companies, including the skilled trades and					
El RoSens Network	Network	Nat.	entrepreneurs.	3	1	1	2	
			IT tool for analysing project features to find aspects and					
Company of the second company	profiling and		competencies that can create synergies between					
Synergy profiling and synergic networking activities.	synergic networking	CE	different regional actors, defining common areas of interest	,		,	3	
networking activities.	Hetworking	CE	transnational roadmap which focuses on Knowledge	1	1	2	3	
	Roadmap and		Axes (KACE) contents and it was based on European and					
KACE Roadmap and Action Plan	Action Plan	CE	national strategies	1	2	2	1	
			-					
			One of the main objectives of CAxMan was to create a					
			foundation of the AM technologies in international					
			standards, predominantly ISO. Data interoperability is a					
	Futomolius		key enabler for several of the impacts of the project and					
	Extensive testing of the		were achieved by creating and standardizing a globally applicable terminology and data model for Additive					
	technological		Manufacturing. For this reason, an Innovation shop,					
CaxMen	demonstrators	H2020	showcasing the project exploitable results was created	2	1	1	3	
			The tool resulted from a planned process of Improving					
			RD and business policy conditions for transnational					
			cooperation in the manufacturing industry. Focus was					
			on Manufacturing industry which represents a generator					
Smart Factory Hub, Interreg Danube,	Maninatasi	Danube	of Research and Development, innovation, growth and	,		,	,	
Maping Tool	Maping tool	Region	employment. The aim of the strategic programme was to develop	2	1	2	2	
			specific aspects to promote quality change. In the					
			selected areas (7 integrated priority areas have					
			emerged: Business development, food production,					
			tourism, energy efficiency, healthy environment, human					
2014-2020 territorial plan of county			resources and transport development), key projects have					
Vas, Hungary	teritorial plan	Nat.	been formulated and implemented.	1	1	3	2	
			Assessment of Public Management Capacities sectors					
			and identifying instruments for fostering innovation. Identification of key foundations for innovation					
			(research capacity and human capital). Definition of the					
	Smart		monitoring framework and evaluation. Sectoral analysis					
The Smart Specialisation Strategy		Danube	of the five priority one's areas of economy and					
(S3)	Strategy	Region	assessment innovation potential	1	1	2	2	
Relevance:								
1Strong								
2Medium								
3not relevant (only for infomati	on)							

Figure 7 Quick step in modus for Stakeholder for Strategy Upgrade & Boost and for preselection of PLL Best practice examples





The Quick step in modus shows that there are results from Interreg projects and also national projects. According to a relevance for stakeholder policy (policy makers); R&I (research and development), Ind (industry) and Int (intermediaries) and the results in combination with the description a pre-selection can be made.

Next Steps: Feeding the Input from the Deliverable into Activity A.T1.2, Policy Learning Lab development & implementation for CAMI4.0 / PP2/PIA and the 3 related Deliverables D.T1.2.1, D.T1.2.2 and D.T1.2.3 Further Development in T2 & T3





6. Abbreviations

Explanation
Application Form
Associated Partner (i.e. Strategic Partner)
Central European Advance Manufacturing and Industry 4.0
Policy Instrument
Policy Learning Lab
Project Partner
Regional Innovation Strategy for Smart Specialisation
Smart Specialisation Strategy
Strategy Boost & Upgrade
Technology Good Practice
Trend & Innovation Networks





7. Annex

7.1. Partner Contributions on Policy Learning Lab Methodologies

7.1.1. 1 KRAKOW TECHNOLOGY PARK LTD (KPT)

Result Harvest for WPT1 Methodologies				
Name of the PP	KPT			
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab			
What is the name and programme of the harvested project (in English)?	SISCODE (H2020) Full title: Society in Innovation and Science through CODEsign			
What is the name of the harvested result (aka the output/activity name from the project)?	Living lab methodology			
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://siscodeproject.eu/			

A short description of the result:

Siscode project is a 3 years long on-going project (1 more year ahead). Its aim is to introduce methodology and tools, as design thinking and living lab methodology to the planning and responsible management of research and innovation. The project proves and builds the bridges between Public Engagement (PE) and Responsible Research and Innovation (RRI).

Project partners are deeply involved in planning, conducting, monitoring and disseminating high-impact experiments in real life contexts to investigate the potential of co-creation for the better implementation of RRI. The experimentations are conducted in 10 co-creation labs across Europe (Spain, Italy, Denmark, France, Germany, Greece, Ireland, Poland, Portugal and Serbia).

Living labs with wide involvement of stakeholder groups implement various concepts of co-creation and practical solutions answering specific challenges of local communities. The scope of experimentation covers different regional challenges: data property rights, circular economy, healthcare, social inclusion, air pollution, precision agriculture etc.

The aim is to support local, regional and national policymakers by providing innovative best solutions for local ecosystems. The Siscode project will result with creation a pan-European model of cooperation guaranteeing scalability and repeatability of methodology and tools in the scope of Responsible Research and Innovation (RRI) aligned with the EU policy. Such steps should make a positive impact on technology transfer between key subjects of innovation systems.

A short description how it worked:

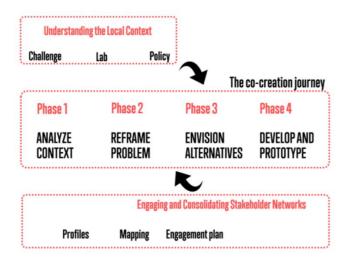




Design thinking workshops with policy makers as the key target group under living lab activity.

To achieve the goal of the experimentation the project partners agreed on following the same methodology, guidance and use joint toolbox to ensure common understanding and prioritization of the particularities within each context.

The co-creation journey is divided into 4 phases: phase (1) analyse the context; phase (2) reframe the problem; phase (3) envision alternatives; phase (4) develop and prototype. In parallel, two continuous activities have been identified and run to better support each journey: understanding, scanning and synergising with the local context, and engaging stakeholder networks.



A short description of the key lesson learnt:

1. Bottom up approach

Using design thinking and living lab methodology for bottom up creation of new policies, procedures and instruments brings measurable and scalable benefits for policy making processes and is much more effective when it comes to the policies implementation. The policies and procedures are better approved and implemented when are created with early involvement of relevant multiple group of stakeholders with public administration, private sector, universities and community interacting one with another.

2. From planning to practices

The SISCODE experimentation led to enhancing the co-creation capacity at both individual and organizational levels in the 10 labs through an intense immersion into practice and peer-learning processes. Main reflection are: adequate and tailored usage of design tools and the development of soft management skills, engagement of different ecosystems of stakeholders and communities, influence how future programming and creating policies and instruments for innovation should be carried out.

3. Co-creation know-how - capacity building

From individual to organization learning - the learnings about the co-creation process, techniques, tools and methods were done in a multidisciplinary way.





4. Peer-learning and management

The different methods were used to connect project partners and labs between each other and disseminate design tools and to establish a relevant workflow and stimulate the interaction between project partners and the support partners.

5. Tailored tools and co-design workshops

The co-creation process included a customization of tools and methods according to the local context, and took benefit from important diversity of practices.

Testing tools in the reality proved complexity of the process and in a few cases directed to some adjustments and modifications.

A short description of how the result can be "upgraded" for CEUP 2030 method:

The lesson learnt and results arising from Siscode can be used to stimulate and upgrade CEUP methods in a few ways:

- the design thinking and living lab methodology can be introduced to the Policy Learning Lab to create a joint understanding and vision at first, then for developing the relevant policy and financial instruments
- 2. by introducing Public Engagement (PE) and Responsible Research and Innovation (RRI) approach into discussion how to foster the development of policies, initiatives and instruments addressed to support CAMI4.0
- 3. the integration of co-creation in European STI policy and programmes, based on bottom up approach and discussion with SMEs will inspire policy makers for fostering aligned policies and strategies under CEUP2030 outputs
- understanding of co-creation among researchers and policy makers by organizing thematic roundtables, destroying sectarianized approach to STI policy making
- 5. introducing design methodologies and tools in Industry 4.0 related technology priority areas and TINS can inspire policy makers for developing perspective conditions for SMEs boost by proving scalability, replicability, data driven implementation.
- 6. emerging operationalization of CAMI4.0 introduction from vision to new policies and tailored instruments implementation in future EU finance programming.

7.1.2. 2_PROFACTOR GmbH (PRO)

Result Harvest for WPT1 Methodologies			
Name of the PP	PRO		
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab		
	SYNERGY (INTERREG CE)		
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:		
	[Free Text Response]		





What is the name of the harvested result (aka the output/activity name from the project)?	"Rent a Robot" Infrastructure sharing
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.interreg- central.eu/Content.Node/SYNERGY.html

A short description of the result:

The result was a Synergy Profiling Tool (https://synpro.e-science.pl/) and a platform for Infrastructure sharing (https://synpro.e-science.pl/infrastructures). This both platforms were part of the Synergic Crowd Innovation Platform (https://synergyplatform.pwr.edu.pl/) which was the overall platform result from the project.

The platform offers: Sharing information about your infrastructure gives you the opportunity to better use and commercialize your technology. For those looking for new technologies, machines and equipment, sharing your infrastructure gives you the opportunity to test your infrastructure cheaply, without having to invest in equipment. The SYNERGY Crowd Innovation Platform facilitates the matchmaking between infrastructure providers and takers from companies, research institutions and universities to create joint infrastructure projects & problem-solving solutions.

The platform was tested and improved by a pilot action "Rent a Robot"

A short description how it worked:

The <u>Synergic Crowd Innovation Platform</u> (SCIP) is an open innovation environment for industry and academia with different types of newly designed services enhancing crowd innovation initiatives. The platform is a place where industrial companies can define their needs and problems and researchers can deliver jointly developed solutions.

The Synergic Crowd Innovation Platform enables the following free online services:

- crowdfunding for small research projects,
- crowdsourcing challenges for innovation
- infrastructure sharing among Central European regions

The Infrastructure Sharing tool has been developed to make infrastructure available to companies, research institutions and universities. Stakeholder can use the new business model to help make the right investment decision in technology and increase infrastructure utilization rate.

<u>Infrastructure Sharing</u>offers the possibility to test infrastructure/technologies and gives the possibility to better utilize and commercialize technologies. The main benefits for research institutions, technology parks and companies which will utilize the developed solution of sharing infrastructure within Synergic Crowd Innovation Platform are i.a.:

- Promoting technology and competence in an international environment,
- Increasing the use of own infrastructure
- Lowering the costs by sharing infrastructure





- Increasing turnover thanks to easier investment decision for companies
- Acquiring new partners and customers
- Testing a new business model based on Sharing Economy

A short description of the key lesson learnt:

The general idea of a crowdfunding platform is good, the problem is the execution. It needs a more business driven approach. Of course, you cannot just copy crowdfunding sites which are dealing with end-consumer products, but certain criteria are to be considered:

- Who are you? What is this consortium vs. this platform? Who owns the rights, is dealing with the information of this platform etc.?
- Data protection?
- It is unclear who the target groups are?
- This site does not generate trust.
- Traffic: How are you going to generate traffic?
- Why is this site needed? There are already other platforms with high traffic.
- The Usability of the platform is not professional
- There is a problem of Trust into partners (even if there is a higher number of money transfer)

A short description of how the result can be "upgraded" for CEUP 2030 method:

The platform must be brought to life, information must be transported faster and more clearly. Important is the usability of such a platform which is currently not given. Furthermore, the design of the infrastructure sharing platform is antiquated. Trust must be created through the design and usability of the platform

7.1.3. 3_Association Industry 4.0 Austria (PIA)

Result Harvest for WPT1 Methodologies				
Name of the PP	PIA			
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab			
	OTHER (Please Clarify Below)			
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:			
the narvested project (iii Eligisii).	Project of the Austrian Digitalization Agency ("Digitialisierungsagentur", DIA)			
What is the name of the harvested result (aka the output/activity name from the project)?	Digital Exchange ("Digitaler Austausch")			
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	Public information not available			





A short description of the result:

The Digitaler Austausch (DA) is an online conversation taking place every month (every two weeks since the beginning of the Corona measurements). In the conversation, policymakers and project managers of the Austrian federal states (NUTS 2 level) meet online in order to discuss

- i) Common challenges regarding digitalization (e.g. 5G deployment)
- ii) Different approaches (good practices) on certain topics (e.g. increasing the number of STEM fields) and
- iii) Highlights and lessons learned of their regions.

The DA supports the collaboration among the Austrian federal states and their business agencies: Synergies should be harnessed and the conversation should result in common projects. The takeover of certain approaches in different regions is encouraged ("copy with pride") and should build on the learnings and mistakes generated in other areas of the country.

A short description how it worked:

The DA is a continuous, ongoing exchange. It is currently organized by the Austrian Research Promotion Agency (FFG). The participants include

- Representatives of Austrian federal states
- Representatives of the business agencies of Austrian federal states
- Representatives of the Austrian state

Apart from that, external people (e.g. private companies, associations...) are also invited regularly to join the exchange.

The DA was designed in a very open and transparent way, different people and representatives are participating regularly. The organizations are personally invited to take part in the DA.

The threshold for joining is kept low as the DA is digital by design (i.e. happening over Zoom) and takes only an hour for every conversation. A protocol summarizes the covered topics and references to activities and projects mentioned. It stores collaboration goals and contact information.

A short description of the key lesson learnt:

An open exchange like the DA relies on the adequate facilitation of the conversation. In order to deliver a high amount of information in a short time, it is necessary to keep presentations and project descriptions short and to discipline participants if they take too much time.

Also, it is necessary to create an atmosphere of trust, in which different people can participate and talk in an open way. Furthermore, participation needs to be voluntary in order to include the most interested opinions on different topics.

A short description of how the result can be "upgraded" for CEUP 2030 method:





The approach of the DA (short online meetings, low threshold, high information protocols...) could be used for CEUP 2030 in order to increase the collaboration and the knowledge of activities in the participating regions. This concept could be used in the Trend and Innovation Networks (TINs) for harvesting current developments and trends in the regions.

7.1.4. 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)

Result Harvest for WPT1 Methodologies		
Name of the PP	IWU	
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab	
What is the name of the	3DCENTRAL	
harvested project (in English)?	In case of other, please clarify project name in English: Not Applicable	
What is the name of the	INTERREG CENTRAL EUROPE	
programme from where the result was harvested?	In case of other, please clarify programme name, in English: Not Applicable	
What is the name of the harvested result (aka the output/activity name from the project)?	Tech & Inno Camp (TIC)	
Hyperlink to the result location (aka where more	Selected examples: On request we provide more info. https://www.smarthoch3.de/details/technologietransfer-	
information on the strategy or workshop methodology	zwischen-wissenschaft-und-industrie-smart3-als-	
	worldcafe-tischpate/	
can be found)	http://blog.smarthoch3.de/strategisch-denken- sommerlich-feiern/	
	https://www.smarthoch3.de/neuigkeiten/merlin/	

A short description of the result:

Tech and Inno Camps (TIC) are events dedicated for mutual learning, experience exchange and enhancement of know-how on 11 knowledge axis on Advanced Manufacturing. For this reason triple-helix stakeholders are addressed to cover tech and business knowledge as well as the transfer to policy measures.

The TICs showcase a result-oriented training concept for new technologies which addresses and unites multifarious target groups, experts, stakeholders to (1) generate a common understanding and (2) gain excellent results about smart engineering technologies in CE.

Its goal consists in transferring practical know-how while on same time the most appropriate solutions for CE relevant topics are developed. The Camps cover a simulation of transnational CE relevant knowledge on Advanced Manufacturing in a





concentrated work and in short time, in particular using demo examples and new digital media.

It starts in a traditional on-site manner (e.g. in companies and/or research labs) to train the stakeholder groups and will be managed later in a distributed remote version, too.

A short description how it worked:

TICs are generally used to communicate proactively new technologies and their already available solutions to stakeholders from Research/Education, Business and Policy/Administration. Facilitated by a human-centered design approach (inspiration, ideation, implementation) and using open innovation processes the participants should learn from each other in an operative and strategic context.

The use case, organised by Fraunhofer IWU, TIC on Smart & Functional Materials, Dresden, 09/2018, demonstrates how to involve companies, industry, research partners, interest groups and agencies from national ministries to an interactive session. The agenda in detail included:

- Introduction to make the topic clear and understandable (e.g. how to explain complex "piezoelectric materials" in short time and also for non-tech experts)
- After that, there was a 3 hours strategy workshop for how to use and how to implement smart materials in their own products, research and / or services of the participants.
- For that purpose a roadmap process was developed, started at the TIC and further developed with the stakeholders.
- The session was supported by easy-to-apply co-creation processes which were tested before inside the project group and the partner net.
- The official agenda ended with demonstrations of smart materials applications and solutions.

By organizing the TIC some complementary projects connected were to pool resources and gain a significant number of stakeholders and the right ones.

Same time this TIC was additionally supported by media (e.g. demo videos; Merlin, an annual Project Magazine) as well as presentation at conferences to keep and assure an intensive stakeholder dialogue.

A short description of the key lessons learnt:





The TIC work was based on more than 100 identified technology use cases (good practices) and some strategic projects from the PPs network (e.g. Smart³, Innovation Network for smart materials in production, living, health and mobility, Federal Ministry of Education and Research (*BMBF*), *EUR 45 Mio.*, 8 years).

TICs were implemented in a regional/national (e.g. smart & functional materials: 24 triple-helix stakeholders) and transnational manner (workshop in the frame of an international conference for Industry 4.0).

The main lessons learnt relates to a significant motivation of addressed stakeholders concerning understandable demos on new technologies, explaining complex tech solutions with digital support as AR/VR (Augmented & Virtual reality) and in the consistent triple-helix learning environment.

Furthermore, skills and services for managing innovation at the interfaces of cross-sectoral technology cooperation and transnational business performance were increased among project group members and inside involved stakeholder groups.

A short description of how the result can be "upgraded" for CEUP 2030:

- The missing link for a continuous, stable and sustainable policy support was touched and tested successfully but not implemented at full scale. Thus several stakeholder groups like companies (SME, industry), BSO (Business Support Organisations) and Research/Education were addressed and committed to cooperate ongoing. But the integration of relevant stakeholders from Policy/Administration (regional, national) could be elaborated in a more comprehensive, consistent and timewise consequent manner.
- The latent need to meet the intensive growth of new knowledge requires a flexible but transferable stakeholders' dialogue driven learning scheme (Policy Factory 4.0). This is now anchored on a regional base but still demands an upgrade for solid transnational policy alignment and cooperation.
- Beside showcasing new technologies the triple-helix context for policy making should be fostered in a more explicit manner leading to a permanent system of joint road-mapping for long-term strategic planning and implementation.

7.1.5. 5 Karlsruhe Institute of Technology (KIT)

Result Harvest for WPT1 Methodologies				
Name of the PP	KIT			
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab			
What is the name and programme of the harvested project (in English)?	SYNERGY (INTERREG CE)			
What is the name of the harvested result (aka the output/activity name from the project)?	Synergy interactive workshops on design thinking and crown sourcing			





Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) https://www.interregcentral.eu/Content.Node/SYNERGY.html

https://www.interreg-

central.eu/Content.Node/discover/Output-

Library.html

A short description of the result:

The Synergy project partners hosted 6 regional and 1 international SYNERGY Workshop on Design Thinking and Simulated Sharing in Karlsruhe, Germany. Representatives from industry, business support organisations and research and higher education from Central European countries came together to learn more about the CE Interreg Project SYNERGY (CE 1171) and provide input on the major goal of the project - a crowd-concept based open innovation platform. The SYNERGY Team at KIT was supported by Design Thinking and Crowd-Sourcing experts from Mindshift. One and the Karlsruhe Service Research Institute (KSRI).

43 representatives from six Central European countries Poland, Slovenia, Croatia, Italy, Austria and Germany with a high-tech background in Additive Manufacturing and Industry 4.0 travelled to Karlsruhe, Germany to connect with other European innovation actors, exchange ideas and create new collaboration opportunities. They gained practical knowledge on current crowdsourcing concepts and the Design Thinking approach for generating innovations.

A short description how it worked:

By means of sharing their needs and requirements for an innovation platform, they equipped the SYNERGY project team with a wide range of input from all stakeholder groups that will be used for the actual design of the platform and its functionalities taking place in the next phase of the project. The vast pool of idea concepts for the Synergy Innovation platform ranged from an "iBurrito" to an intelligent, virtual reality-based collaboration platform up to a multi-lingual intelligent and automated matchmaking tool for the high-tech sectors.

The interactive workshop format included Seminars, hands-on training, brainstorming sessions, group discussions, and was also supplemented by agile working methods such as design thinking and simulated sharing.

A short description of the key lesson learnt:

The main lesson learnt during the preparation phase of the workshops was the adoption of a stakeholder-centered approach. Meaning it was necessary to consider and understand the needs of different stakeholder groups, namely scientists, industrialists, early stage researchers, students, business people etc. This was further supported by the involvement of external experts, who were able to bring a wealth of knowledge and credibility into the workshops. This in turn increased the attractiveness of the workshop thereby allowing for greater enthusiasm for participation.

A short description of how the result can be "upgraded" for CEUP 2030 method:





One of the takeaway messages was that we identified that the flyers, brochures, online invitation material etc. should be enriched with details regarding the event, especially by addressing the particular benefits to the participants. Make sure to address a wide field of topics to attract people from a larger field of interest.

7.1.6. 6_Lombardy Intelligent Factory Association (AFIL)

Result Harvest for WPT1 Methodologies				
Name of the PP	AFIL			
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab			
	OTHER (Please Clarify Below)			
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:			
	SMART-SPACE - Interreg Alpine Space			
What is the name of the harvested result (aka the output/activity name from the project)?	Pilot Actions addressed to users			
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.alpine-space.eu/projects/smart-space/results/smart-space_3.2.1_final.pdf			

A short description of the result:

SMART-SPACE project partners implemented two types of Pilot Actions: i) actions addressed to SMEs to strengthen their innovation processes with industry 4.0 and smart technologies; ii) actions to strengthen the cooperation among Alpine policy makers and innovation stakeholders to set up the strategic partnership. While the pilot actions for SMEs focused on knowledge transfer and assistance, the pilot actions for policy makers were meant to educate them on which needs and expectations the target group has and how SMEs can be assisted in the best way possible.

Thanks to these actions partners were able to support SMEs with the expertise they need to engage in digitalization activities with the best possible outcome. The knowledge actions were also enriched by matching and/or pitching events with Digital SMEs.

Then thanks to the involvement of policy maker and innovation stakeholders it was possible to encourage their cooperation and collaboration for the future and to have a strong exchange of information based on the needs coming from the industrial actors involved in the other pilot action.

A short description how it worked:

Concretely each partner organised diverse workshops and events for SMEs targeting specific topics (i.e.Robotics, Big Data,...) discussing about opportunities for local and interregional collaboration presented to SMEs. These events were not only focused on the exchange of best practices, but it gave companies the opportunities of learning more





about financing opportunities that could support them in the development of specific technologies and solutions. Finally, the events were always followed by a networking session to promote the matchmaking among participants.

The policy actions for policy makers and intermediaries were conducted in the form of round table with face-to-face debates on current activities and available opportunities in the focus area, complemented with the participation of a restricted number of companies bringing the point of view of industrials to the table.

A short description of the key lesson learnt:

Building on the methodology proposed, at the end of the project AFIL decided to merge the two types of pilot actions in a unique workshop gathering at the same table representatives of Policy makers, intermediaries, SMEs and Large Enterprises. The focus of the workshop was to discuss the technologies state of the art and application in a specific sector as well as priorities for future development strategies.

Accordingly, the event was focused on the White Goods industry, a key strategic sector in Europe and Lombardy. Two of the most key players, Candy Haier Europe and Whirlpool EMEA, provide participants with their ongoing experiences and the main foreseen priorities for the future. Then, the discussion was open to participants which was representing various actors of the value chain, and several topics emerged as priorities directly transferred to policy makers at the table.

In this occasion, companies have also presented their experience through the results of project financed by the Region augmenting the main benefits and challenges encountered as well as future needs to be addressed with new instruments.

A Positive feedback was received also from the policy maker (Lombardy Region), that was glad to attend such an active workshop and collect some inputs useful for the definition of the next programming period strategy.

A short description of how the result can be "upgraded" for CEUP 2030 method:

- The schemes proposed for the two Policy Actions could be merged in a unique workshop targeting both Policy Makers and other stakeholders
- Clearly define the scope of the meetings in terms of targeted topics, which in CEUP2030 could be the CAMI4.0 networks
- Clearly define the expected outputs of the meetings that could be technological priorities identified by stakeholders and policy gaps to be covered in the upcoming programming period.
- Include a follow-up session which gathers all the results and inputs collected by different Policy Lab to start identifying interregional synergies to be capitalised in the following actions.





7.1.7. 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)

Result Harvest for WPT1 Methodologies -				
Name of the PP	SIIT			
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab			
What is the name of the harvested	OTHER (Please Clarify Below)			
project (in English)?	In case of other, please clarify project name in English: NewTREND			
What is the name of the programme	HORIZON 2020			
from where the result was harvested?	In case of other, please clarify programme name, in English: Not Applicable			
What is the name of the harvested result (aka the output/activity name from the project)?	Training to facilitate the adoption of the toolset developed in NewTREND,			
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	http://newtrend-project.eu/documents/			

A short description of the result:

The project consortium showcased the project results to relevant stakeholders throughout Europe. The technical partners joined forces with communication and exploitation partners to organize a set of training session with the tri-fold goal of facilitating the adoption of the software toolset developed in NewTREND, showcasing project results to potential Stakeholders, and collecting a direct feedback from users in three training sessions

On the project website it was created a space precisely for the contents of the training sessions, in order to make possible even for people that weren't able to attend to exploit the content.

A short description how it worked:

GOALS:

- To facilitate the adoption of the toolset developed in NewTREND
- Showcase project results to potential Stakeholders
- Collect a more direct feedback from users that will test the toolset on field

MATERIAL:

- Video contents
- Paper manual
- Presentation by projects partners
- Credentials to test the software

After the session a questionnaire will be distributed to participants to get their comments and suggestions.





A short description of the key lessons learnt:

The training session was attended by around 40 trainees in total (divided in three different sessions), giving it an extremely interactive twist.

The new paper-version of the User Manual for the NewTREND Collaborative Design Platform (CDP) was shared with them and participants had the possibility to see it first-hand and provide us useful tips on how to improve it.

The outputs were positive, underlining the importance of what the project has achieved until now. The training meetings have been very useful to collect feedback from the future potential users of the software and they have ensured the opportunity to improve the functions and the interface of the NewTREND's platform. The active participation of the stakeholders has guaranteed the success of the Local Advisory Teams and this involvement of users has allowed receiving important feedback about the positive and critical aspects of the tools.

Another key aspect which has allowed the success and the productivity of the meetings was the inclusion of stakeholders with different background, different perspectives on management strategies and potential improvements. The necessity to include different voices and perspectives from various stakeholders is important for understanding potential strategies for project management. The debate and the cooperation among stakeholders is fundamental because they share their views to each other and they facing the future application of the software.

A short description of how the result can be "upgraded" for CEUP 2030:

The missing link for a continuous, stable and sustainable policy support was touched and tested successfully but not implemented at full scale. The integration of relevant stakeholders from Policy/Administration (regional, national) could be elaborated in a more comprehensive, consistent and timewise consequent manner, from an early phase of the project.

7.1.8. 8 Pomurje Technology Park (PTB)

Result Harvest for WPT1 Methodologies				
Name of the PP	PTP			
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab			
What is the name and programme of the harvested project (in English)?	OTHER (Please Clarify Below) CARE4TECH, Interreg Apline Space			
What is the name of the harvested result (aka the output/activity name from the project)?	Alpine Space LiLab			
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.alpine- space.eu/projects/care4tech/en/project- results/deliverables/t2-lilab-			





A short description of the result:

The LiLab is an eco-system of smart living excellence, where quadruple helix stakeholders share knowledge, co-create, and innovate to overcome common challenges faced by the Alpine Space region. The Labs generated transnational initiatives in content related smart "X" alliance topics, using a common set of tools, knowledge, terminology, processes and plans. This common toolbox is known as the 'Alpine Campus'.

Partners of the Project took influences from the theories of Living Lab & Innovation Labs to create a Lab model that works for their organisations, country stakeholders, and the topics of Smart Living most important for their regions. The aim of the LiLab Ecosystem is twofold:

To create an innovation space where a menu of jointly agreed, common methods, can be tested.

To create an innovation space where partners and stakeholders can be brought together to identify and start implementation on tangible, joint-cooperation initiatives within each Alliance topic.

A short description how it worked:

The LiLab is a 3 stand-alone events for each LiLab established in the project. Each event has its specific goal and to that goal, the list of invitees should be accommodated. Overall, the events help towards: 1. Introducing the LiLab to the (general) public - this event is most in line with the definition of the Open Days. 2. Using the LiLab as a space in which stakeholders are encouraged to participate in discussions on Smart Living in the Alpine Space. 3. Establishing the LiLab as the reference point for innovators in Smart Living. 4. Solidifying LiLabs as relevant stakeholders when discussing policies for Smart Living in the Alpine Space region

The first event, once the LiLab is established is meant to introduce the lab to the public. At its core, this event can be directly understood as the "Open Days" and therefore include the possibility of presenting the lab to anyone who shows interest.

In summary, the event meant to present the LiLab include: 1. Invitation to the public to attend and learn about the LiLab. 2. Invitation to Alliance members, encouraging them to contribute to the event and disseminate the invitation. 3. Interactive activities through which attendees learn about the project and the lab. 4. A press release on the event, if possible.

The second event is more target-oriented at stakeholders, who have a say in the matter of Smart Living in the Alpine Space region. For example, such stakeholders are members of AS Alliances, regional SMEs and start-ups, policy makers and end-users of the technology, providing they are involved in the innovation process. Such an event needs more structure than the first one. Where freedom & improvisation were useful for the presentation event, structure & goals are necessary for the second event. The duration of the event depends on its format; a series of workshops and brainstorming sessions require a full day, while a panel with discussion can be done in a few hours. All depends on the profile of the attendees and their preferred format of the event, so each partner should tailor the event to its own needs.

The third and final event serves to attract policy makers to attend and start talks on real-life solutions. At this point, the LiLab's mission and focus should be evident and clearly identified. By having a second event, where problems were identified and ideally





solutions proposed, the following event would **encourage policy makers to take the necessary steps.**

All events have the following in common: 1. A list/document of identified problems and proposed solutions to present to policy makers. 2. A method required to discuss the problems & solutions, with key input from the policy maker as the invited speaker /guest. 3. LiLab recognized as a relevant stakeholder in future discussions on the matter

A short description of the key lesson learnt:

We can see, that the first event is meant to be **fun & interactive** for the public to get to know the LiLab and the project behind it, the second event will **identify regional problems and come up with solutions** and the final event wishes to **present these solutions to those with the ability to enact change** and consequently affect the Alpine Space region.

A short description of how the result can be "upgraded" for CEUP 2030 method:

If one refers to this methodology, we see 3 target groups separately addressed (clear focus and agendas content wise adapted), naturally supported by all communication tools (incl. social media), one could improve the impact by not implementing these activities solely related to project events but on bigger events in shape/form or roundtable participation, presentations or boots with roll-up or similar - that would represent an opportunity for x-fertilization and enables wider impact of messages project wants to spread/disseminate and does that within frame of similar projects or events, addressing same target groups for more impact and at lower cost. Danger however is that in case of too many various topics, public could lose "the red line" or purpose of this event. Maybe interactive part of workshops/panels or similar could bring better recognition and by that one could distinguish between projects/contents and still understand the big picture (general topic addressed by all organizers in joint event).

7.1.9. 9_Pannon Business Network Association (PBN)

Result Harvest for WPT1 Methodologies		
Name of the PP	PBN	
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab	
	3DCENTRAL (INTERREG CE)	
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:	
What is the name of the harvested result (aka the output/activity name from the project)?	Techno and InnoCamp – "Smart Services" Conference - Economic and social challenges of Industry 4.0	
Hyperlink to the result location (aka where more information on the strategy or workshop methodology		





can be found)	

A short description of the result:

The Techno and InnoCamp took place on 15th November 2017 in Szombathely hosted by the ELTE Savaria University Center under the coordination of Pannon Business Network Association.

The main focus of the conference was to highlight the challenges of Industry 4.0 and the economic, social and educational aspects of additive manufacturing, with a special attention on the topic smart services.

A short description how it worked:

Thanks to the international cooperation prestigious speakers like the honoured economist Professor Péter Ákos Bod and representatives of international success stories shared valuable know-how.

The complementary experiences were presented by Hungarian educational actors and innovative companies. Also the policy level was represented by Dr. Krisztina Bárdos, who presented the demonstration Factory project from IFKA Public Benefit Non-Profit Ltd. for the Development of Industry.

The heterogeneous composition of audience was ensured by the participation of several connecting international project partners.

The event was supported by 2 transnational cooperation 3DCentral and INKREASE.

Partners from 3DCentral project presented their industry 4.0 relevant good practices and also their understanding about the KACE topic smart services.

Furthermore, thanks to the Austrian Partner, evolaris next level GmbH, the Hololens Application was showed to the audience and it was possible to test the smart glasses technology, too.

65 participants were present at the event. The participants were invited from the 3DCentral project (Central Europe Programme) and Inkrease (Interreg Europe) project and also the local and regional stakeholders from Hungary attended the InnoCamp.

A short description of the key lesson learnt:

Based on the feedback from the participants, the Techno and Innocamp was a successful event. The audience got a deeper insight to the industry 4.0 examples from the Central European region. The good practices showed to the Hungarian stakeholders the possible way of the development, too.

Thanks to this event, concrete cooperation was established. Regarding the KACE topic Smart services, PBN not just gave input to the partners but also got information about the point of view of several partners.

A short description of how the result can be "upgraded" for CEUP 2030 method:

Events like the above mentioned Techno and Innocamp could raise awareness in the project and could gain a deeper knowledge sharing between the participating regions. It also gives the possibility to learn more about the provided services





between partners and boost further cooperation projects. If the event has a special topic it can be a good occasion to share more technological aspects with each other and involvement of higher education, R&D and policy level is also possible.

7.1.10. 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)

Result Harvest for WPT1 Methodologies		
Name of the PP	HAMAG-BICRO	
To which WPT1 methodology does the harvested result connect?	Policy Learning Lab	
What is the name and programme of the harvested project (in English)?	OTHER (Please Clarify Below)	
	In case of other, please clarify project & programme name, in English:	
	SMART FACTORY HUB Interreg CE	
What is the name of the harvested result (aka the output/activity name from the project)?	Smart Factory: Digital Croatia	
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	http://www.interreg- danube.eu/uploads/media/approved_project_public/0 001/21/6d61a9b0f711dc45bea8ac74212b170cbd74f3c6 .pdf	

A short description of the result:

Croatia is at the starting point of Industry 4.0 development. The Digital Croatia event helped raise awareness of the public to the importance of Industry 4.0 and existing smart solutions in the industry. Also, to connect leading people in this area and to show that there is Croatian entrepreneurship which is advanced in this field. The event offered great potential for networking and sharing of experiences.

A short description how it worked:

A short description of the Smart Factory Hub project was followed by a lecture on Industry 4.0 in Croatia from the founder and President of Lean management initiative and Head of the Croatian Industrialization Working Group. A panel discussion on the "Importance of Industry 4.0 for the Croatian economy and society "was presented by the key actor's from the triple-helix learning environment. The event ended with presentation of Smart factory solutions from Croatia: CADCAM DESIGN CENTAR Ltd., CODEL Ltd., EAG Center Technologies Ltd., HSTec Ltd., HT-EUREP Ltd., ININ informatički inženjering Ltd., IZIT Ltd., MICRO-LINK Ltd., PROTON EL Ltd., TOPOMATIKA Ltd., VANADO Ltd. and X-LOGIC Ltd.

A short description of the key lesson learnt:





Even though Croatia is at the starting point all relevant actors have recognised the importance of Industry 4,0 importance to increase productivity in manufacturing. The event was a starting point in connecting key actors for Industry 4.0 development in Croatia and one of the first events that presented existing Smart factory solutions from Croatia. The event was followed by several media ultimately helped define existing challenges and promote Industry 4.0.

A short description of how the result can be "upgraded" for CEUP 2030 method:

Panel discussion or similar knowledge exchanging events with actors from the triplehelix learning environment are necessary to help the dialogue between the actors and establish a common ground of understanding for strategic technology-oriented policy-making.





Partner Contributions on Strategy Upgrade & Boost

7.1.11. 1_KRAKOW TECHNOLOGY PARK LTD (KPT)

Result Harvest for WPT1 Methodologies		
Name of the PP	KPT	
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade	
What is the name and programme of the harvested project (in English)?	3DCENTRAL (INTERREG CE)	
What is the name of the harvested result (aka the output/activity name from the project)?	Roadmap including action plan for the support of regional technology development	
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.interreg- central.eu/Content.Node/3DCentral/3DCentral- roadmap-and-actionplan.pdf	

A short description of the result:

In order to effectively develop a transnational road map for the support of 11 knowledge axis for Central Europe, partners collected information from each national and regional strategy into one comprehensive perspective for Central Europe. The methodology for completing this activity is reliant on an effective synthesis of existing European-wide, national and regional roadmaps and other strategy documents, such as the RIS3 documentation from the S3 Platform.

The road mapping process was conducted in each country (Germany, Austria, Slovenia, Hungary, Poland) with wide involvement of stakeholders groups and resulted in a visualisation of the common strengths and in the definition of concrete subtopics to be developed in structured partnerships with complementary competences fitting to the regional strategies.

As a next step partners developed jointly with the involvement of key stakeholders' action plans for each of the 11 knowledge axis for Central Europe. The action plans included identified R&D actions, transfer and training actions as well as strategic actions planned for the next financing perspective.

A short description how it worked:

The work has been conducted in several phases:

PLANNING AND PREPARATION - partners determined the scope and boundaries of the technology topics, summarized the regional and national relevant information

VISION DEVELOPMENT - vision-workshop was organized to discuss the vision statement among partners

ROADMAP AND ACTION PLAN DEVELOPMENT - partners developed an initial draft of the roadmapping document, and associated action plans; Expert-level workshop(s) were held





to identify barriers, and to test the prioritisation that was used in the initial draft development; stakeholder-level engagement workshops were organised to further test the roadmap and associated action plans, and gain evaluation on relevance across Central Europe's regional and national ministries; The Road Map and Action Plans has been refined following the workshop feedback.

ROADMAP IMPLEMENTATION, MONITORING AND REVISION - Following the publication in May 2017, further Action Plan workshops took place for impact controlling and monitoring of roadmap's effectiveness.

A short description of the key lesson learnt:

In the 3DCentral project partners have identified 11 specialized topics which served as a base for a roadmapping process and the development of action plans. Action plans have built a solid ground for joint activities and projects. Roadmaps and action plans have been used further along the project for generating and planning capitalization activities as well as for transfer activities. Therefore the KACE action plans have been working instruments as "Plans under progress" and configured to be used as basis for further cooperation, independent of 3DCentral project extend. The competence and knowledge outputs identified jointly by project partners and key stakeholders (policy makers, universities and startups, SMEs and LEs) have inspired further cooperation and became foundations for CEUP2030. CEUP2030 being continuation of 6 joint projects is as an excellent contribution for the development of industry 4.0 with positive impacts on policy making and policy improving. In particular expected outputs and results of the 3DCentral project are seen as practicable, durable, useful and valuable for the innovation system in a regional, national and transnational context.

A short description of how the result can be "upgraded" for CEUP 2030 method:

The results can be further exploited through the revision of phase 4 - roadmap implementation, monitoring and revision. The CEUP 2030 project can help revise update and upgrade the roadmaps on regional, national and CE level. This can be achieved though such activities as expert workshops to reassess priorities, and new emerging trends, tracking changes in the industry 4.0 sector and monitor the exiting road mapping process.

7.1.12. 2_PROFACTOR GmbH (PRO)

Result Harvest for WPT1 Methodologies		
Name of the PP	PRO	
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade	
	OTHER (Please Clarify Below)	
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:	
	upperVISION2030 - Wirtschafts- &	





	Forschungsstrategie OÖ
What is the name of the harvested result (aka the output/activity name from the project)?	Fit for Human-Centered Technology
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.uppervision.at/en/

A short description of the result:

Overall Result: Artificial intelligence and robotics will be implemented in all areas of life in 2030 wherever they are needed. The underlying technologies have been made comprehensible to the general public leading to a high level of acceptance in daily use.

Objectives:

- Position Upper Austria as an international competence region for applications at the human/machine interface, especially in the fields of automation and robotics
- Transfer key Upper Austrian technologies and core competences from production to medical technology, especially in the areas of digital health and medical materials

Results for measuring systems and technologies for people in Upper Austria:

- Focussing our activities on the human/machine interface and create networked, semi-autonomous as well as autonomous systems that enable people to remain actively involved in familiar surroundings for longer.
- We increasingly think in terms of interdisciplinary and holistic approaches in order to benefit from existing competencies and technologies.

A short description how it worked:

The Upper Austrian economic and research strategy #upperVISION2030 was developed on the basis of and supported by the experience gained from the strategic economic and research programme Innovative OO 2020, coupled with a new approach to focus on a few topics of future importance. The internal view of the location partners on Upper Austria was enriched during the strategy development process through the integration of external experts.

This expert knowledge enabled current trends and drivers to be identified and integrated into the process. Corresponding strategies and the integration of the Upper Austrian economic and research landscape were also taken into account.

The strategy development of #upperVISION2030 was divided into the following process phases

- **Topic development/finding:** Economic, socio-political and technological trends were identified and prioritised together with the location partners according to their importance for Upper Austria.
- **Concretisation of goals and options for action:** The definition, co-ordination and focusing of concrete activities for the achievement of objectives





- **Process definition and decision:** In the final phase, the strategic orientation was defined by the key persons of the Upper Austrian government and by coordinating the measures and activities of the location partners.
- Implementation of the measures

A short description of the key lesson learnt:

The involvement of all relevant stakeholders and the involvement of external experts was carried out in an exemplary manner. The strategy was drawn up according to a structured plan which also clearly regulated and accompanied the implementation. This is very important for the success of the strategic implementation.

The involvement of stakeholders from the region, oo. Economic and research landscape, location partners (AKOO, Business Upper Austria, FH OO, IV OO, JKU, UAR, WKOO) made it possible to look beyond the boundaries of the area for which the strategy was drawn up (Upper Austria). The support of external experts (Trigon, Fraunhofer ISI) provided further technical input.

A short description of how the result can be "upgraded" for CEUP 2030 method:

More detailed definition of qualitative and quantitative results would be valuable. The strategy clearly defines the thematic areas, the milestones of implementation and the objectives. The relationship between the field of action, objectives, indicators, progress in implementation and indicators of impact orientation was defined. However, the strategy does not define measurable goals. What should be considered when upgrading, however, is how to design the results without being too restrictive during implementation

7.1.13. 3_Association Industry 4.0 Austria (PIA)

Result Harvest for WPT1 Methodologies	
Name of the PP	PIA
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
	OTHER (Please Clarify Below)
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:
	No specific programme connected to the result
What is the name of the harvested result (aka the output/activity name from the project)?	Austrian Innovation and Technology Platforms and the Association Industry 4.0 Austria
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://iktderzukunft.at/resources/pdf/im-land-der-schluesseltechnologien-2019.pdf and http://plattformindustrie40.at/

A short description of the result:

Austria's economic success and international competitiveness strongly depend on products and services that are high technology and knowledge-intensive. Especially for the Austrian industry, key technologies are crucial, for example in the areas of ICT and production. Therefore, the former Federal Ministry for Transport, Innovation and





Technology, that is now the "Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology" (abbreviation: BMK), has decided to found and fund different platforms that connect and nurture the communities around important technologies. Those Innovation and Technology Platforms (ITP) serve as a platform for enabling scientific and economic success in Austria.

The ITP are self-organized and supported by the Austrian state. They represent different institutions and stakeholders of their topic and are mostly organized in associations. The ITP have the following main goals:

- Information management
- Community building
- Strategic development
- · Consulting and innovation management

The ITP focus on different Key Enabling Technologies (KET). The KET are:

- Advanced Materials and Nanotechnology
- Photonics and Micro- and Nano- Electronics
- Life Science Technologies
- Advanced Manufacturing and Processing
- Artificial Intelligence and Digital Security and Connectivity

Ten platforms have been established connected to this strategy, one of which is PIA, project partner in CEUP 2030.

The "Association Industry 4.0 Austria - The Platform for Smart Production" (PIA) was established to foster collaboration among all stakeholders and facilitate new technological developments and innovations in the context of digitization ('Industry 4.0') and thereby to find sustainable solutions to challenges faced by companies, research institutions and society as a whole.

PIA facilitates the implementation of digital transformation in Austria and unifies the Industry 4.0 community. It aims to secure and create highly innovative industrial production and to boost quality employment, thus strengthening Austria's future competitiveness.

PIA considers Industry 4.0 a societal challenge that

- can only be addressed by collaboration of industry, science, regional and national policy makers, associations, trade unions and NGOs
- is driven by technological innovation, new business models, knowledge transfer and its widespread socially acceptable deployment and implementation

Currently there are 7 working groups operative with the aim to develop strategies and set initiatives in the respective fields. Working Groups consist of interested members of the association and top tier experts (e.g. Ministries, funding agencies, standards organisations, Public Employment Service etc.) and meet regularly.

The platform is a community of interests that acts as a voice for policy makers & administration and other scientific institutions operating in a trusting and professional





manner. An important role is also to bring information from policy makers to members.

A short description how it worked:

The BMK has approached and gathered the different communities around the KET.

In order to foster the goals mentioned above, the BMK is providing the different platforms with a basic financial support. Apart from that, the platforms should be service organizations for their members who contribute to the success of the platforms through a membership fee and through their knowledge and networks.

The ITP are independent organizations and its activities are not regulated by the BMK. Therefore, the ITP can operate in a way that supports their target group sustainably. Different organizations (including the BMK) can use the specific knowledge and expertise of the ITP for projects and different ways of support.

For instance, PIA is a membership-based non-profit association founded in 2015. Among its founding members were the BMK, different industry associations as well as organizations representing workers and employees, including a trade union. Therefore, the platform represents stakeholder groups with very different interests providing them a neutral environment in which honest and critical conversations can take place. The core task of PIA is to facilitate the implementation of Industry 4.0 and to promote cooperation between those relevant stakeholders.

The cooperation and exchange in the expert groups, the participation in workshops, and the sharing of expertise contribute to gaining new perspectives and broadening horizons. The concretization of the topics and the neutral access enable the promotion of important topics of digitalization and the support for the best possible interactions between technology and people.

The composition of the association and the diversity of the platform, consisting of employers' and employees' representatives, public research organisations, universities and universities of applied sciences, as well as leading Industry 4.0 companies enable an extraordinary interdisciplinary approach. The openness in the discussion, respect and mutual trust are unique and lead to a results-oriented exchange. The association succeeds as an "honest broker" acting neutrally and pursuing no interests.

A short description of the key lesson learnt:

The ITP do not operate in a standardized way but are managed independently. While this leads to very different approaches, it also increases the probability of long-term establishment.

Not all ITP can achieve the same level of attention and success. Some are small while others are backed by many members and have built a strong network. The ITP have not grown artificially but have built their networks organically which supports their reputation and sustainable success.

The BMK connects the ITP among each other through several meetings throughout the year. Cooperation among the ITP can be very helpful, as could be observed e.g. when reacting to COVID-19: In April 2020 the Austrian state created a funding scheme for production companies adapting their products to COVID-19. The ITP helped to





mobilize the different industrial communities of Austria and created the foundation for cooperation throughout different industries.

PIA was one of the involved ITP. Involving different stakeholders and including their diverse perspectives in a respectful and constructive way is a major part of PIA's success. Active stakeholder management and the constant building of trust are important activities in PIA's daily business. A neutral and balanced approach through PIA's management and board is highly important.

The focus on specific topics also helps PIA to successfully facilitate dialogue. The working groups focus on areas that are of interest to its members and can be adapted according to new developments and trends in the industrial space. The working groups are chaired by representatives of PIA's members and actively supported through the PIA team, enabling progress in and alignment of the different activities.

With businesses, employer & employee representatives, research institutions and federal entities being on board, PIA has the ability to involve all Industry 4.0 stakeholders in the working groups making sure that outcomes and discussions are not one-sided but multilateral.

Multi-stakeholder dialogue is a process that takes time. However, it has been PIA's experience that this approach is suitable and necessary for long-lasting and sustainable progress.

A short description of how the result can be "upgraded" for CEUP 2030 method:

PIA is a project partner in CEUP 2030 and one of the ITP keeping good connections to the other nine platforms. The ITP could be involved as part of the Trend and Innovation Networks (TINs) and can be consulted for the CAMI4.0 topics. The international cooperation on CAMI4.0 topics could be connected to the ITP in order to accelerate the development of pilot projects that also fulfil the needs of the different communities.

Furthermore, PIA's experience and lessons learned can be used and applied for the Policy Learning Labs, the composition of the Trend and Innovation Networks as well as for the Roundtables. Pilot Actions that build on the commitment of different stakeholders will be more successful in the long-term.

PIA's activities will also be influenced by CEUP 2030. CEUP 2030 and the collaboration within Central Europe can expand PIA's very own scope and could increase not only the collaboration on Industry 4.0 within Austria but between different countries in the EU

7.1.14. 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)

Result Harvest for WPT1 Methodologies	
Name of the PP	IWU
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
What is the name and programme of the harvested project (in	Choose Good Practice Project Name





English)?	S3HubsinCE
What is the name of the harvested result (aka the output/activity name from the project)?	ElRoSens Network
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.zim.de/ZIM/Navigation/DE/ Foerderangebote/Netzwerke/GefoerderteNetzwerke/ gefoerderte- netzwerke.html?cms_gtp=830766_list%253D7

A short description of the result:

ElRoSens

Is a network for elastic, robust and sensitive strain sensors. ElRoSens is funded by the "Central Innovation Program for Small and Medium-Sized Enterprises (ZIM)" and aims to promote the innovative strength and thus the competitiveness of medium-sized companies, including the skilled trades and entrepreneurs. It is intended to contribute to economic growth, particularly through tapping value creation potential and raising the level of application-related knowledge with research and development (R&D). Its aim is:

- to stimulate medium-sized companies to make more efforts for market-oriented research, development and technological innovations,
- Strengthen cooperation between companies and research institutions and expand knowledge and technology transfer, increase engagement for R&D cooperation and synergies and others

to develop positive effects through interaction in innovation networks,

- quickly convert R&D results into market-effective innovations,
- improve innovation, cooperation and network management in medium-sized companies,
- to support the internationalization of innovation activities of medium-sized companies

A short description how it worked:

In ElRoSens, the network has set itself the goal of using the development of high-strength strain sensors based on shape memory alloys (SMA) to lead sensors with the sought-after properties for industrial applications into commercial use. The focus is on overcoming the research character of previously developed sensors and systems.

To gain this ElRoSens teamed researchers with companies and policy makers thus applying a triple helix approach.

A short description of the key lesson learnt:

The basis of the cooperation in ElRoSens is a common idea for the development and utilization of innovative products, processes and technical services in a technologically or regionally oriented network or along a value chain.





ElRoSens was based on technology use cases (good practices) and some strategic projects from the PPs network (e.g. Smart3, Innovation Network for smart materials in production, living, health and mobility, Federal Ministry of Education and Research (BMBF), EUR 45 Mio., 8 years).

The network is implemented at a regional/national manner focusing on one CAMI 4.0 topic line; smart & functional materials.

Skills and services for managing innovation at the interfaces of cross-sectoral technology cooperation and transnational business performance were increased among project group members and inside involved stakeholder groups

A short description of how the result can be "upgraded" for CEUP 2030 method:

The missing link for a continuous, stable and sustainable policy support was touched and tested successfully but not implemented at full scale. Thus several stakeholder groups like companies (SME, industry), BSO (Business Support Organisations) and Research/Education were addressed and committed to cooperate ongoing. But the integration of relevant stakeholders from Policy/Administration (regional, national) could be elaborated in a more comprehensive, consistent and timewise consequent manner.

- The latent need to meet the intensive growth of new knowledge requires a flexible but transferable stakeholders' dialogue driven learning scheme (Policy Factory 4.0). This is now anchored on a regional base but still demands an upgrade for solid transnational policy alignment and cooperation.
- Beside showcasing new technologies the triple-helix context for policy making should be fostered in a more explicit manner leading to a permanent system of joint road-mapping for long-term strategic planning and implementation.

7.1.15. 5_Karlsruhe Institute of Technology (KIT)

Result Harvest for WPT1 Methodologies	
Name of the PP	KIT
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
What is the name and programme of the harvested project (in English)?	SYNERGY (INTERREG CE)
What is the name of the harvested result (aka the output/activity name from the project)?	Synergy profiling and synergic networking activities.
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://synpro.e-science.pl
A chart description of the results	

A short description of the result:





An IT tool for analysing project features to find aspects and competencies that can create synergies between different regional actors, defining common areas of interest (Key Project Areas).

SYNERGY PROFILING TOOL is a software tool that analyses multiple project features and organizations competences in order to create synergy effect between entities:

- looking for new contacts,
- wanting to establish wider, international cooperation,
- which are interested in finding a partner in the fields of additive manufacturing, micro- and nanotechnologies and industry 4.0.

A short description how it worked:

The tool is divided into three main sections: PROJECTS, ORGANIZATIONS and MAP. Additionally the tool delivers functionality to build and maintain matchmaking.

The Section PROJECTS is a living database of finalized and running projects located mainly in Central Europe. The projects are assigned to one (or more than one) of the three Key Project's Areas KPA:

- · additive manufacturing and 3D printing,
- · micro- and nanotechnology-related processes and materials,
- · industry 4.0.

The competence map containing profiled and clustered regional innovation actors based on project key factors including researchers, companies and other involved organizations according to various features developed within WP1- Synergic Profiling were communicated to the Higher education and research, Business support organisation, SMEs as well as to local, regional and national public authorities by storytelling within social media to raise awareness and increase knowledge.

This tool was then used for the creation of the synergic networks related to the field of Additive manufacturing, industry 4.0 as well as micro/nano technologies.

The innovative synergy networks aimed to create transnational innovation SNs (Synergic Networks) within KPAs (Key Project's Areas) to establish linkages among regional actors. 3 SNs (appx 6 members per SN) out of Synergic Consortia were created to enhance cooperation between PP (Project Partner) regions and support common activities and joint projects. This approach brings together located in CE regions R&D organizations and companies focused on similar technologies that have no knowledge of each other.

To overcome this and to set bonds within SNs members, Development of Synergic Networks was performed.

A short description of the key lesson learnt:

There were three main lessons that became clear as a direct result of this activity. They are

1. That it is a good approach to firstly do an internal profiling study/mapping, whereby identifying all the relevant and irrelevant stakeholders that will need be part of the network. Invite them through targeted invitations/advertising then involve these stakeholders through and





interactive activities.

- 2. Common objectives/goals need to be identified between the PP and the stakeholder, in order to create mutual cooperation, collaboration opportunities.
- 3. A regular maintenance of contact databases and targeted communication are very necessary, while dissemination via multiplier networks proved successful.

A short description of how the result can be "upgraded" for CEUP 2030 method:

The synergy network already consists of a large number of involved stakeholders in the field of additive manufacturing, Industry 4.0 etc. The CEUP project could use this freely available tool in the initial stages of network building, thereby building upon previous Interreg projects instead of having to start from scratch.

7.1.16. 6_Lombardy Intelligent Factory Association (AFIL)

Result Harvest for WPT1 Methodologies	
Name of the PP	AFIL
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
	3DCENTRAL (INTERREG CE)
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:
What is the name of the harvested result (aka the output/activity name from the project)?	KACE Roadmap and Action Plan
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://www.interreg- central.eu/Content.Node/3DCentral/3DCentral- roadmap-and-actionplan.pdf

A short description of the result:

3D Central partners defined one transnational roadmap which focuses on Knowledge Axes (KACE¹) contents and it was based on European and national strategies.

Accordingly, for each KACE topic a clearer perspective on the market opportunities (and associated market challenges) have been outlined highlighting specific objectives and activities programmed by each organisation to further develop and boost the targeted areas.

Each KACE topic is divided into subtopics by partners of the project, after which

¹ Additive Manufacturing-3D Design/Engineering/Scanning-Smart an functional materials-Digital life-Technologies for sustainable manufacturing-Virtual an augmented reality-Value added virtual supply chains-Smart services-Robotics-Mechatronics-CE brainbase





different cooperation actions were identified in order to help partners prepare for further activities of the project, while also helping Associated partners and external stakeholders to identify opportunities in the future. Cooperation actions were including R&D projects, trainings and strategic actions, which are planned by partners within the timeline of the project or beyond its implementation.

Action plans also represented the solid ground for activities for the two following thematic work packages where R&D projects presented the basis for capitalization, trainings presented the content for Moodle platform, while strategic actions were thematic objectives for workshops with stakeholders.

A short description how it worked:

The roadmap for 11 selected CE relevant knowledge axes were designed to:

- Investigating and summarizing the regional and national relevant information and summarising the European and regional position that currently exists related to the KACE topic where they are KACE Leader.
- Setting organisation's perspective about the current status of knowledge in the area, and the future outlook.
- Detailing the plan of actions in terms of R&D activities, training and strategic actions to be implemented to achieve higher competences and knowledge in the region on a specific topic
- Identifying potential interregional collaboration on synergic interest and actions

A short description of the key lesson learnt:

- Having a common approach for all partners contributed to create a common understanding of the development status in the different regions and to share a preliminary idea on the actions to be implemented at interregional level
- This approach allowed also to visualise potential synergies and start identifying the targets and the cooperation actions to be implemented

A short description of how the result can be "upgraded" for CEUP 2030 method:

This document can be defined by each partner for each CAMI4.0 area, providing an overview of the status quo of technologies and knowledge in the targeted areas and outlining a clear strategy to be followed by each partner to boost and upgrade their competences in each CAMI4.0 area.

The strategy could be strongly aligned and coherent with the actions to be implemented within the project in WP2 and WP3, keeping in mind that they should contribute to the growth of the regional innovation community (aka TIN) and prepare stakeholders to the definition of priorities and needs to be outlined in transnational policy strategies in WP3.





7.1.17. 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)

Result Harvest for WPT1 Methodologies -	
Name of the PP	SIIT
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
What is the name of the harvested	OTHER (Please Clarify Below)
project (in English)?	In case of other, please clarify project name in English: CaxMan
What is the name of the programme	HORIZON 2020
from where the result was harvested?	In case of other, please clarify programme name, in English: Not Applicable
What is the name of the harvested result (aka the output/activity name from the project)?	Extensive testing of the technological demonstrators developed in CAxMan
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	Selected examples: On request we provide more info. https://www.caxman.eu/en/use-cases/success- stories/ https://caxman.boc-group.eu/innovation-shop

A short description of the result:

Outreach was an important part of the CAxMan project. As the project progresses, the main results and open publications were included on the website with references and links to locate the required information.

Due to the far-reaching potential of CAxMan, a broader dissemination and communication action were used to the public at large.

One of the main objectives of CAxMan was to create a foundation of the AM technologies in international standards, predominantly ISO. Data interoperability is a key enabler for several of the impacts of the project and were achieved by creating and standardizing a globally applicable terminology and data model for Additive Manufacturing. For this reason, an Innovation shop, showcasing the project exploitable results was created.

A short description how it worked:

The technological demonstrators developed in CAxMan were subjected to an extensive testing and evaluating analyses. A comparison between the conventional components and the demonstrators was made. A comparison between the real technological demonstrators and the simulations on data/virtual models was performed, in order to update the model developed during the first part of the project. The consortium worked in close collaboration with other industrial partners to collect and elaborate appropriate technical documentation that highlighted the benefits and replicability potential of the CAxMan technologies, thus supporting exploitation activities.

A short description of the key lessons learnt:

The overall goal was to address the future uptake and sustainability of project outcomes by analysing the market outlook, providing requirements according to existing needs and developing a strategy and business model for exploiting those results. This was done since very early in the project and applied through its whole duration and in its afterlife, surviving in the Innovation shop, showcasing the project exploitable results was created.





A short description of how the result can be "upgraded" for CEUP 2030:

As much as the development of the exploitation route through the whole duration of the project, having multiple workshops, training and working sessions, and on-line meetings, was in the end a success, it created confusion among the partners, causing a waste of effort and over-complicating the work. The lessons that we learnt is, especially in the development phase, to narrow down the aim of the project to few and meaningful objectives and target them specifically.

7.1.18. 8_Pomurje Technology Park (PTB)

Result Harvest for WPT1 Methodologies	
Name of the PP	PTP
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
	OTHER (Please Clarify Below)
What is the name and programme of the harvested project (in English)?	In case of other, please clarify project & programme name, in English:
	Smart Factory Hub, Interreg Danube
What is the name of the harvested result (aka the output/activity name from the project)?	Mapping Tool
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	http://www.p-tech.si/sfh-mapping/ http://www.interreg-danube.eu/approved- projects/smart-factory-hub

A short description of the result:

The tool resulted from a planned process of Improving RD and business policy conditions for transnational cooperation in the manufacturing industry. Focus was on Manufacturing industry which represents a generator of Research and Development, innovation, growth and employment. Based upon increasing pressure on manufacturers (increased production capacity in low-cost economies and increased level of sophistication of supply chains in high-cost economies), the manufacturers need to embrace novel technologies, principles and approaches.

In other words, manufacturers need to digitize their production, while taking into consideration also improvement in processes and human resource management.

The main objective of the Smart Factory HUB project is to improve framework conditions for innovation in the area of "smart factory".

Therefore, the project's goal was to develop R&D and business policy conditions for transnational cooperation in the manufacturing industry.

Result is improved cooperation between R&D and business where based on RIS3 (Research and Innovation Smart Specialization Strategy) centered model, quadruple helix partners will be oriented to find novel solutions in the following three domains: applying novel technologies, applying effective production process and applying





effective human resource management system.

A short description how it worked:

Main activity was a creation of common transnational Research and Innovation Smart Specialization Strategy. (RIS3 centered Smart Factory Model with Action plan). Elaboration of two testing schemes - pilot implementation of innovative supply-driven (TransferLab) and demand-driven (PolicyLab)actions based on knowledge platform, cooperation profile matrix and learning hub for technology alliances. An extensive survey was performed by the partnership. The main conclusions show lack of SMEs involvement in the national strategies, lack of knowledge and financial resources for digitalization of the production-oriented SMEs. The top-down view on the manufacturing sector and its challenges in its transformation to become "smart" is depicted in 10 Regional mapping reports, covering Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Romania, Serbia, Slovakia and Slovenia. The e-learning platform with the training curriculum will be comprising all materials from the training academy and some additional material provided by project partners on different thematic of Industry 4.0. The platform is available here: https://elp.iao.fraunhofer.de/moodle/10 smart factory solutions have been presented at the Learning demonstration workshops to local audience, and it was possible to follow these workshops over live streaming. Facilitators are able to share and exchange knowledge on regional smart factory solutions; and in the regional roadshows partners are be able to present smart factory solutions, project platform and voucher scheme.

A short description of the key lesson learnt:

The Smart Factory Cooperation Platform (SFCP), represents a solid way to support SMEs by providing a geographic overview and give some information about actors, good practices, projects and facilitators and, thus, foster the match between the demand (production/manufacturing organizations) and supply (solution providers) tendencies and so enables access to required knowledge and skills and with regional facilitators it helps to find funding opportunities for matched business cases. Definitely policy stakeholder needed to be aware about the initiative and tool, so the communication and dissemination was very important element, where a huge event at the end managed to attract not only Slovene but also other representatives of partnering regions, with a purpose to see the results of implementation of concrete use-cases (good practices), also based on their inputs (interactively), where new policy recommendations were made and presented.

A short description of how the result can be "upgraded" for CEUP 2030 method:

The mapping tool represents the sustainable part of the project idea, achievements, basically incorporated in this "independent tool" that is free on internet, and represents a good base for further developments and upgrades within follow-up projects, adding new technologies, new strategies, services for SMEs, and opportunities to exchange other projects experiences and this one of SFH, and to stay in communication with policy stakeholders (met in conferences, meetings, workshops).





7.1.19. 9_Pannon Business Network Association (PBN)

Result Harvest for WPT1 Methodologies	
Name of the PP	PBN
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
What is the name and programme of the harvested project (in English)?	OTHER (Please Clarify Below)
	In case of other, please clarify project & programme name, in English:
	2014-2020 territorial plan of county Vas, Hungary
	Financed by national structural fund called TOP (Territorial Operative Programme)
What is the name of the harvested result (aka the output/activity name from the project)?	2014-2020 territorial plan of county Vas - Smart Specialization Strategy
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	-

A short description of the result:

The aim of the strategic programme was to develop specific aspects to promote quality change. In the selected areas (7 integrated priority areas have emerged: Business development, food production, tourism, energy efficiency, healthy environment, human resources and transport development), key projects have been formulated and implemented.

The aim was to improve the entire area of the county. Programme elements have been developed to provide opportunities for regions with different levels of development and to move forward. The strategic programme was based on a broad professional basis.

A short description how it worked:

PBN was responsible for the elaboration of the 2014-2020 territorial plan of county Vas. It included involvement of over 100 stakeholders of the region, from academia through business sector to policy makers. The series of workshops started with an international event in Vienna, where 10 experts from 10 different countries were invited, and also the county management, to exchange views on how to orient the regional economy in the coming decade. Following that local workshops and thematic events were organized, in the framework of which the advanced manufacturing was identified as one of the top priorities of the coming years.

Based on analytical materials, professional work was started, with 70 experts joined in the first step. There have been more than 40 group consultations - not counting a number of discussions, sharing written ideas and interviews. These meetings were attended by government officials, executives and public figures. Personal consultations were made with local government leaders, heads of institutions, and representatives of





offices and representatives of local professional organisations.

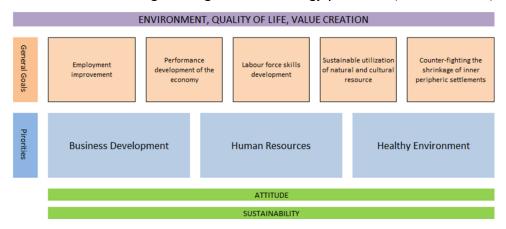
Based on the consensus reached, 7 integrated priority areas have emerged: Business development, food production, tourism, energy efficiency, healthy environment, human resources and transport development.

A short description of the key lesson learnt:

Key objective of the Strategy was to combine local, sustainable resources with the global economic trends, which leads to an added value. Furthermore, the method, how we created the strategy helped the awareness raising of different stakeholders how took part in the process.

In order to reach the objective, the programme identified and followed the following structure:

Search connection between general goals and strategy priorities (see the chart)



With establishing Business, Human-Resources and Environment-Related Actions the strategy makers ensured the realistic synthesis of the Strategy which can help the implementation.

A short description of how the result can be "upgraded" for CEUP 2030 method:

The level and method of the cooperation in this project was unique and we have the experience that it was extremely effective. The involvement of policy level and creation of working groups also with the cooperation of thematic experts ensured that all interest-group can express their opinion and a consensus was reached. Basically what we advise is to use this method for any kind of decision making on strategy building progress.

7.1.20. 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)

Result Harvest for WPT1 Methodologies	
Name of the PP	HAMAG-BICRO
To which WPT1 methodology does the harvested result connect?	Strategy Boost & Upgrade
What is the name and programme of	OTHER (Please Clarify Below)





the harvested project (in English)?	In case of other, please clarify project & programme name, in English:
	SMART FACTORY HUB Interreg CE
What is the name of the harvested result (aka the output/activity name from the project)?	The Smart Specialisation Strategy (S3)
Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)	https://hamagbicro.hr/wp- content/uploads/2019/03/Analiza-Strategije- pametne-specijalizacije-S3-instrumenata-u- Hrvatskoj-dr-sc-Zoran-Aralica-EIZ.pdf

A short description of the result:

Assessment of Public Management Capacities sectors and identifying instruments for fostering innovation. Identification of key foundations for innovation (research capacity and human capital). Definition of the monitoring framework and evaluation. Sectoral analysis of the five priority one's areas of economy and assessment innovation potential.

Synergy and long-term perspective of all relevant elements from different sectoral strategies as a basis for smart growth.

A short description how it worked:

SPECIALIZATION KNOWLEDGE

• ex-ante conditions required the identification of knowledge that best match the country's potential for innovation

ENTREPRENEURIAL DISCOVERY

• companies, research centres and universities collaborated on identifying the most promising areas of specialization, but also the weaknesses that hinder innovation in these areas

STRATEGY

• Adopted the Smart Specialization Strategy of the Republic of Croatia (S3), outlining proposed activities and planned public and private investment including structural one's research, technological development and innovation funds

A short description of the key lesson learnt:

- Internationalisation of S3 activities among all groups of stakeholders is important; Participation in various international business consortia (e.g. COSME programme); Strengthening various forms of science-industry linkages for representatives from Science and Research sectors
- The reduction of the internal barrier and silo mentality among different stakeholders in the innovation policy system; e.g. evaluation has a different meaning for different stakeholders: (A) Program efficiency and the achievement of policy objectives - science sector; (B) Financial and technical expertise about the project for firms' representatives; (C) Evaluation of program impact for policy bodies
- Better functioning of S3 governance;





• Strengthening of Innovation policy demand instruments

A short description of how the result can be "upgraded" for CEUP 2030 method:

Introduction of a regional approach, more bottom-up approaches and initiatives, and introduction of various policy instruments on a regional level (searching for regional leaders);

- Better alignment with EC initiatives in the field of Smart Specialisation Strategy
- Avoiding the policy practice which could be coined as 'eternal capacity building'
- Looking for opportunities for various forms of transformations on a regional level