INTERIM IMPACT ASSESSMENT REPORT ON POLICY LEARNING LAB AND STRATEGY UPGRADE & BOOST

D.T1.4.2- Interim Impact Assessment Report on Policy Learning Lab and Strategy Upgrade & Boost

Version 1

1 2021

Author:
Sarah Hedden – MIND CONSULT & RESEARCH, external contractor

Borut Zrim - Pomurje Technology Park
Jožek Špilak – Pomurje Technology Park

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Document Control

Document Summary	
Project Number	CE1662
Project Title	CEUP 2030
Work Package/Activity	A.T1.4 – WPT1 Impact Controlling for a practicable and sustainable Strategy & Policy Relevance
Deliverable	D.T1.4.2 – Interim Impact Assessment Report on Policy Learning Lab and Strategy Upgrade & Boost
Deliverable Responsible (if applicable)	PP8 / PTP
Deliverable Reviewer (If applicable)	-
Deliverable Due Date	January 2021

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

Document History			
Date	Version	Issuer	Description of Changes
15.12.2020	0.1	PTP, MC	First draft
25.1.2021	0.5	PTP, MC	corrected draft version
27.1.2021	0.6	PTP, MC	Final draft version
1.2.2021	1.0	PTP, MC	Final version

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

1. EXECUTIVE SUMMARY

1.1. PROJECT OVERVIEW

CEUP 2030 aims to generate stable innovation networks which foster better understanding on Central Europe Advanced Manufacturing and Industry 4.0 ("CAMI4.0") 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. MAIN PROJECT RESULTS

The main results of the projects are the 6 outputs contributing to the result indicator by setting up a stable network for trend monitoring on CAMI4.0 topics as well as the RIS3 Round Tables both fostering innovation in a regional and transnational context. For immediate cooperative innovation learning, the Policy Learning Labs & the Tech Radars/PID fit to the indictor. For a mid-term and long-term anchoring, the Strategy & Boost and the Policy Framework for 2021-2027 also contributes. The expected change at the territorial level will be noticeable by aligning structures & processes for a stable, future robust tech & innovation policy implementation scheme lasting far beyond project's end & by integrating consequently stakeholders across Europe for strengthening CE. CEUP 2030 improves the situation of target groups through a deep-dive integration in both working group structure (TIN, RIS RT) & in the cooperative learning of the PLLs. In general, the project assures sustainability of outputs/results during project duration by the number of involved top level stakeholders & proven quality of PPs and their ASPs. After project´s end there will

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

be an agreed capitalization agenda & a long-term validity stated in the Policy Framework 2021-2027 (political) and the subsequent action plan (financial). PLLs, TINs & RIS3 RTs will stay as network organizations from the triple-helix stakeholders (institutional). The outputs/results of CEUP 2030 can & will be transferred to additional target audiences/territories during project lifetime anyway (e.g. TIN/PID/PLL on 5 conferences, using 3 EU Presidencies, working groups from DGs, Vanguard, EFFRA, etc.). Also, beyond CEUP 2030 it is planned and will be agreed to foster a strong transfer scheme (Policy Framework 2021-2027)

1.3. WORK PACKAGE 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.

This leads to some very practical activities:

- 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
- The generation of a structure (the Policy Learning Lab) where stakeholders get acquainted with new technologies and their applications, so as to give them better context for future decisions– during A.T1.2
- The implementation of the PLL where complex technologies are explained in a practicable, understandable and time-optimized way – this should be mutual, triple-helix learning (policy, research and business) with on-site demonstration, i.e. live demos inside factories; learning connected with virtual & augmented reality, etc. - during A.T1.2
- The generation of a common strategy, based on previous work of Partners, to set a vision for the four CAMI4.0 topics – during A.T1.3
- The generation of a common Action Plan, based on the previous work of Partners & PLL engagement, to set a critical path for the four CAMI4.0 topics – during A.T1.3
- The generation & implementation of a framework to gain 360-degree feedback from stakeholders on the methodology of collective exchange during PLL aka "Impact Controlling" – during A.T1.4

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

1.4. IMPACT CONTROLLING SYSTEM OVERVIEW

Impact Controlling System is a cross cutting activity where partners work together to determine a methodology and associated tools to monitor and measure the impact that the project has made on meeting its objectives. The developed methodology is a combination of qualitative and quantitative attributes which will be assessed across the lifecycle of the project.

Qualitative attributes are a series of questions that can be asked to a chosen group of Peer Reviewers, across the project's development; whilst **quantitative attributes** are based on project numerical indicators that are associated to connecting with Target Groups generally and meeting content-relevant deliverables on a work package by work package basis.

The methodology is accompanied by an in IT based tool, in the form of a group-accessible Excel sheet, which can be used to track and update information from Partners and their Peer Reviewers about the impact of the project on reaching its desired goals.

1.5. IMPACT CONTROLLING RESULTS & DISCUSSION OVERVIEW

The qualitative and quantitative review of the activities in Work Package One have shown that impact on the participants in the first PLL has been made and has the potential to generate connections of potential cooperation between Central Europe triple-helix actors.

A qualitative review indicated that it might be good to involve more people from business and companies to concrete practical use cases for different sectors (like implementation/usage of CAMI4.0 topics in automotive, health…). This could also be addressed by visual representations of solutions in Industry 4.0. PLL participants also expressed a desire to gain insight into what was happening on the remaining PLLs and it would be valuable to meet other policy stakeholders. As a consequence of unpredicted COVID-19 disease situation (e.g. spread and effects), not all PPs were able to organize physical meetings with policymakers, so some PLLs were conducted through virtual workshops. It was important that the online PLLs were implemented upon criteria in the documents:

- WPT1 Guidelines
- DT.1.2.1 Guidance on Policy Learning Lab ecosystem for CE/EU cooperation on CAMI4.0
- DT.1.4.1 Coaching guidance on impact controlling for the involved CAMI4.0 stakeholders
- D.C.1.1 Communication Strategy & Plan Overall,

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

2. Table of content

1. EXECUTIVE SUMMARY 4
1.1. PROJECT OVERVIEW 4
1.2. MAIN PROJECT RESULTS 4
1.3. WORK PACKAGE OVERVIEW 5
1.4. IMPACT CONTROLLING SYSTEM OVERVIEW 6
1.5. IMPACT CONTROLLING RESULTS & DISCUSSION OVERVIEW 6
2. Table of content 8
3. Introduction 11
3.1. Background and Aims 11
3.2. Project Aim 11
3.3. Deliverables in WPT1 Impact Controlling 12
3.4. Impact Controlling System Overview 13
3.5. Definitions 14
3.5.1. What is impact controlling? 14
3.5.2. What is a Peer Reviewer? 14
3.5.3. What is Policy Learning Lab 15
3.5.4. Impact of the PLL 16
4. Methodological Approach to Impact Controlling 16
4.1. Timeline for Development of the Assessment Report on Policy Learning Lab and Strategy Upgrade 17
4.2. Peer Review Group 18
4.3. Qualitative Measurements 19
4.4. Quantitative Measurements 21
4.4.1. Target Group Indicators 22
4.4.2. Output Indicators for WPT1 23
4.5. Monitoring Impact Assessment Tool 24
5. Results 27
5.1. Peer ReviewGroup 27
5.1.1. Peer Reviewers Identified by Partner: 27
5.1.2. By CAMI4.0 Topic 28
5.1.3. By Target Group 28

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

5.2. Qualitative Impact 29
5.2.1. Methodology 29
Responsible partner for deliverable 1.4. (PTP) prepared a questionnaire for an interview with a peer reviewer. The questions were related to: 29
5.2.2. Interview Themes 30
5.2.3. Results of interviews 31
5.2.3.1. Question 1: When hearing the objectives of CEUP 2030, generally, what opportunities do you expect this project to bring to your Organization? Your region? Central Europe? 31
5.2.3.2. Question 2: If you know Interreg Central Europe (https://www.interreg-central.eu/): How relevant do you guess CEUP2030 for Interreg Central Europe is? 31
5.2.3.3. Question 3: How relevant and effective is the Policy Learning Lab (OT1.1.) in reaching the project's wider aims & objectives? What would you change? 32
5.2.3.4. Question 4: Could the content in PLL be quickly felt and understood? What would you change? 33
5.2.3.5. Question 5: How can the Policy Learning Lab (OT1.1.) create value for your region's key stakeholders 34
5.2.3.6. Question 6: How can the Policy Learning Lab (OT1.1.) create value for your region's key stakeholders? 35
5.2.3.7. Question 7: How can Strategy with Action Plan (OT.1.2) create added value for your region's key stakeholders 36
5.2.3.8. Question 8 What are the strengths, weaknesses, and where do you see the opportunities and potential challenges in Industry 4.0 in your region and country?? 37
5.2.3.9. Question 9: How can the PLL results be used to support creation/upgrade of RIS3? Or Other Initiative(s)? 38
5.2.3.10. Question 10 Where do you want to see your region, country, related to CAMI 4.0? 39
5.2.3.11. Question 11: What other comments or recommendations do you have about CEUP 2030 and its goals & visions, which have not been mentioned/asked yet? 40
5.3. Quantitative Indicators 41
6. Discussion 44
6.1. Quantitative 44
6.2. Qualitative 45
6.2.1. Central Europe as a Whole 45
6.2.2. CEUP2030 as a Whole 46
6.2.3. Policy Learning Lab 46
6.2.4. Strategy with an Action Plan 47
7. Conclusions & Next Steps 48
7.1. Next Steps: 49
8. Abbreviations 50
9. Annexes 51

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

9.1. Distributed Monitoring Impact Controlling Tool 51
9.1.1. External 1st Peer Review Template for WPT1 OUTPUTS 51
9.1.2. EVALUATION TEMPLATE FOR 1ST PLL 54

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

3. Introduction

The purpose of this report is to provide a specific feedback from a select Peer Reviewer (1 interview/PP), on an analysis and update recommendations for second PLL in practice and first insights on the strategic vision for CAMI4.0 Excellence. The report was made on the basis of One contribution from each PP (1 Sub-Report/PP) based on PP's qualitative and quantitative data from first stakeholder interview and draws common conclusions.

In this report, one can find an overview of the methodology and partner contributions which have occurred to complete the work of Deliverable D.T1.4.2. The deliverable is part of activity A.T1.4 "WPT1 Impact Controlling for Practicable and Sustainable Strategy & Policy Relevance" ss T1 deliverables and perform impact controlling" which ran from 2020.06 to 2020.11

The Report provides a complete summary of the first Peer Review interview & stakeholder feedback, to deliver improvement recommendations for the second round of PLL workshops.

3.1. Background and Aims

Impact controlling is an essential part of project development, because it provides a series of gateways (timely review periods), where Partners and the stakeholder network who were targets of the project, can assess whether the project has or is successfully meeting its intended goals. This means that the methodology is inherently tied to the overarching project's aims, and the intended goals of the project's core outputs.

3.2. Project Aim

CEUP 2030 aims to generate stable innovation networks which foster better understanding on Central Europe Advanced Manufacturing and Industry 4.0 ("CAMI4.0") 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.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

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.

3.3. Deliverables in WPT1 Impact Controlling

In WPT 1 Impact Controlling (AT1.4) there are deliverables:

Deliverables: WPT1 Impact Controlling (02.2020)	
1. Coaching Guidance on Impact Controlling for the Involved CAMI4.0 Stakeholders (PTP) [04.2020]	Design of WPT1 impact controlling system, linked to global impact controlling scheme
	Includes guidance on engaging Peer Reviewers (3/PP), process and timeline for engagement in WPT1, qualitative and quantitative indicators which will be compared.
	1 IT-based handbook on all the above points, including interview consolidation templates.
2. Interim Impact Assessment Report on Policy Learning Lab and Strategy Upgrade & Boost (PTP) [09.2020]	Specific feedback from a select Peer Reviewer (1 interview/PP), on an analysis and update recommendations for second PLL in practice and first insights on the strategic vision for CAMI4.0 Excellence.
	One contribution from each PP (1 Sub-Report/PP) based on PP's qualitative and quantitative data from first stakeholder interview.
	1 consolidated report, which brings all PP reports together, and draws common conclusions.
3. Final Impact Assessment	Interviews (2 interviews/PP – with different 2 Peer Reviewers), on the impact of WP1 (PLL specifically) at enhancing skills, capabilities and knowledge of people in

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Report on Policy Learning Lab and Strategy Upgrade & Boost (PTP) [02.2021]	charge of local, regional & transnational RTI policies, in a triple-helix context.
	One contribution from each PP (1 Sub-Report/PP) based on PPs qualitative and quantitative date from second and third stakeholder interview.
	1 consolidated report, which brings all PPs report together, and draws common conclusion over the success of the engagement model presented in WPT1.

3.4. Impact Controlling System Overview

Impact Controlling System is a cross cutting activity where partners work together to determine a methodology and associated tools to monitor and measure the impact that the project has made on meeting its objectives. The developed methodology is a combination of qualitative and quantitative attributes which will be assessed across the lifecycle of the project.

Qualitative attributes are a series of questions that can be asked to a chosen group of Peer Reviewers, across the project's development; whilst **quantitative attributes** are based on project numerical indicators that are associated to connecting with Target Groups generally and meeting content-relevant deliverables on a work package by work package basis.

The methodology is accompanied by an in IT based tool, in the form of a group-accessible Excel sheet, which can be used to track and update information from Partners and their Peer Reviewers about the impact of the project on reaching its desired goals.

The questions were asked in a way that touched on the project outputs of WPT1 within a wider contextual discussion:

"Does CEUP 2030 generate stable innovation networks, foster a better understanding & generates improved knowledge & exchange on new technologies relevant for Central Europe Advanced Manufacturing & Industry 4.0 (CAMI4.0)? Does it foster the exploitation & upstreaming of available outputs/results, leading to an upgraded framework for policy-making & implementation?"

"Have the skills, abilities and knowledge of the people responsible for policies improved within the triple helix?"

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

1st Peer Reviews have focus on specific analysis & updates for second PLL "in practice" (D.T1.2.3), plus insight into early strategic vision for CAMI4.0 Excellence. For preparation of D1.4.2, we need the following answers to the questions:

- How relevant and effective is the Policy Learning Lab (OT1.1.) to reach the project's wider aims & objective? What would you change?
- Could the content be quickly felt and understood? What would you change? What would you change?
- What topics of CAMI 4.0 is appropriate for our region and what are its limitations?
- Was the learning process have been designed so that he can be quickly felt and understood? What would you change?
- What are the strengths, weaknesses, and where do you see the opportunities and potential challenges in Industry 4.0 in your region and country?
- Where do you want to see your region, country, related to CAMI 4.0?
- How can the Policy Learning Lab (OT1.1.) create value for our region's key stakeholders?
- How can Strategy (OT.1.2) and the development of dedicated actions to promote policy-instrument development to support these CAMI4.0 Topics, create value for our region's key stakeholders?

3.5. Definitions

3.5.1. What is impact controlling?

Impact controlling, or more commonly known as impact monitoring, is a system and or a set of procedures which can be used to measure whether a project or task has reached its intended goal, or is on track to reaching its goal. It can be succinctly defined as a continuous process of collecting data on specified indicators.[1]

3.5.2. What is a Peer Reviewer?

Peer Review is defined as "a process of subjecting an author's scholarly work, research or ideas to the scrutiny of others who are experts in the same field"[2]

[1] "What is Impact?" in the Danish Demining Group's "An introduction to Impact Monitoring" available at: http://danishdemininggroup.dk/media/1220258/im_manual_2012_web.pdf

[2] What Is Peer Review?" (2014). Int J Comput Appl. Web. Retrieved July 02, 2014, from http://www.iicaon-line.org/peer-review [Google Scholar] [Ref list]

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

A Peer Reviewer is a term which has emerged from academic/scientific writing, which refers to an individual or organization whose goal is to assess the validity, quality and often the originality of an article (or a concept in an article). This term can be similarly assessed in the project world, where an individual or organization will be assessing the validity and quality of the project's goals and provide qualitative feedback on the group's ability to achieve the goals with the project's outputs.

3.5.3. What is Policy Learning Lab

The PLL are a **two-part training program for policy-makers**. Their **goal** is to enhance the capacities (skills, knowledge, capabilities…) of CAMI4.0 stakeholders and to enable adequate mind-sets for improving innovation and mutual learning within CEUP 2030. Participating stakeholders should get acquainted with new technologies and their applications in order to have a better context for future decisions.

Complex technologies are explained in a practicable, understandable and time-optimized way during the PLL – this should be mutual, triple-helix learning (policy, research and business) with on-site demonstration, e.g. through live demos inside factories, learning connected with virtual & augmented reality, etc.

The PLL are established to train and empower people to work on policies & strategies for CAMI4.0 technologies (mutual Triple-Helix Learning). The PLL foster & anchor a policy training scheme where comprehensive learning processes are designed to be felt and understood quickly. Complex systems and technologies are made clear and understandable to target groups. The PLL are used for sharing information and are a platform for knowledge exchange regarding current developments and approaches towards challenges regarding the CAMI4.0 technologies. The involved stakeholders set the base for strong CE/EU policy making in WPT2 & WPT3.

The workshop's 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.
There are essentially **three different types of PLL** through the different stages of CEUP 2030:

- **First round of PLL**: The first round of PLL establishes the connection of policy makers and stakeholders of CEUP 2030. Trust levels are low and there is little knowledge of the project among them. Therefore, the goal of the first round of PLL is to build trust and knowledge. Stakeholders should also get acquainted with a common nomenclature, feedback the workshop structure and recommend other stakeholders to be involved in the regional Trend and Innovation Networks (TINs). Furthermore, technology use cases should provide

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

interesting, understandable insight on the potential of CAMI 4.0 technologies for the region of the PP.

- **Second round of PLL (regional)**: The second round of PLL should build on the first round, create a dialogue on regional or national policy support (RIS3 alignment) and discuss the dissemination of technology good practices.
- **Second round of PLL (transnational)**: The transnational PLL are part of the second round and should create a dialogue on transnational policy support across Central Europe. It should focus on the benefits of international collaboration and include a discussion on the dissemination of technology good practices as well.

3.5.4. Impact of the PLL

The PLL are a key methodology of CEUP 2030 and increase the sustainable impact of the project significantly as they **strengthen the competence base and capacities of the involved stakeholders** – within and beyond the project.

4. Methodological Approach to Impact Controlling

The CEUP2030 Impact Controlling System in WPT1 was developed with four distinct parts, as visualized in Figure 3. Its core elements are qualitative and quantitative measurement aspects, which are backed up and supported by a useful toolkit of the Peer Review Group and the Monitoring Impact assessment tool.

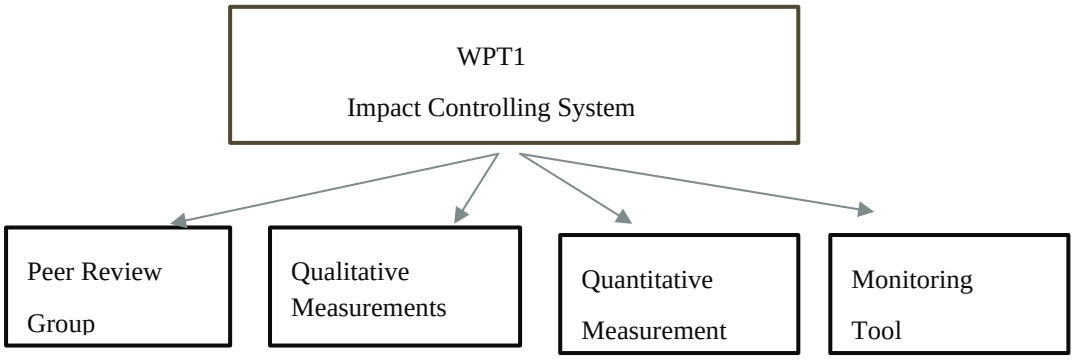
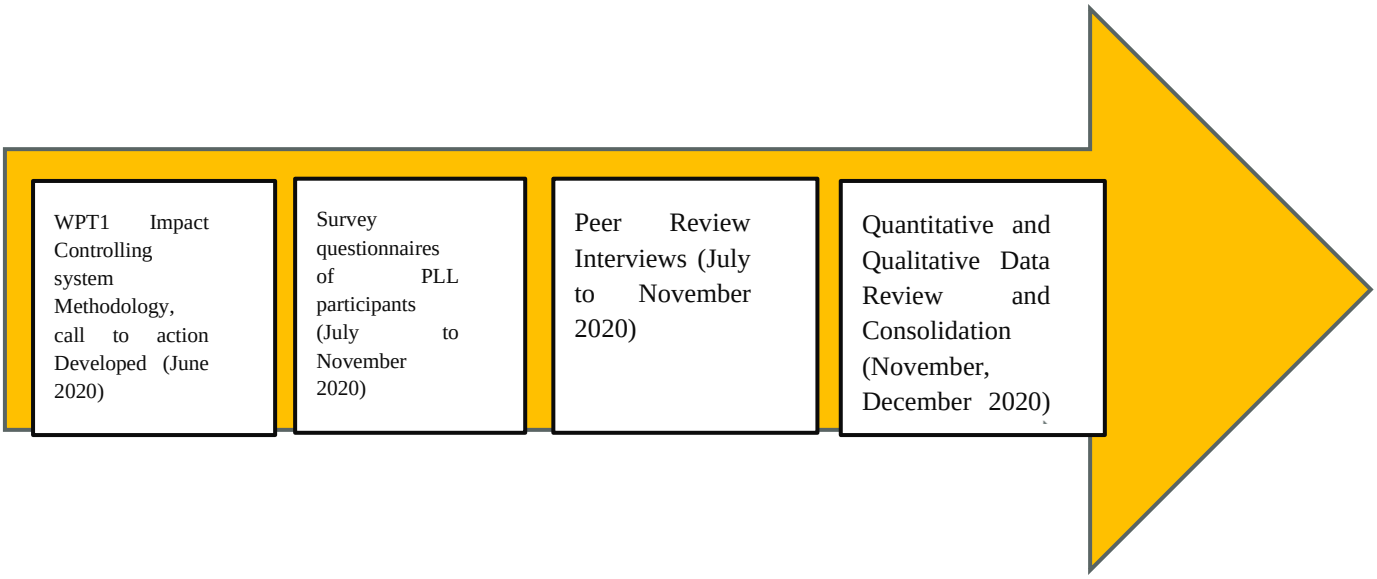


Figure 1 Impact Controlling System Overview

The system's methodological development emerged through detailed discussion between the deliverable responsible and WPT1 Lead partner, Partner, Pomurje Technology Park ("PTP) and the Lead Partner, Krakow Technology Park ("KTP"), with support from external support of Mind Consult & Research GmbH ("MCR"). The methodology aimed to capture requirements of the project application form, but kept the project's goal at the heart of the development, to ensure processes were not overly onerous. This methodology was electronically presented to Partners in June, when Partners were first asked to provide contributions on Peer Review and quantitative indicator assessment.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

4.1. Timeline for Development of the Assessment Report on Policy Learning Lab and Strategy Upgrade



This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

4.2. Peer Review Group

As defined in 3.5.2 , a Peer Reviewer is an individual with the remit of assessing the validity and quality of project results. The Peer Review Group is a number of individuals, identified by each Partner, with the appropriate skill set of assessing validity and quality of project results. The Peer Review group is distributed across the Central Europe area, and across Alliance competencies, and not an entity that will be brought together in one place regularly – it is better described as "providing individual feedback to their trusted Partner contact", about the results of the project

To have a better insights into policy makers and experts in the field of CAMI 4.0 topics, a group of peer viewers has being formed. It was important for a quality interviews that PPs have identified potential interviewees before the PLL workshops.

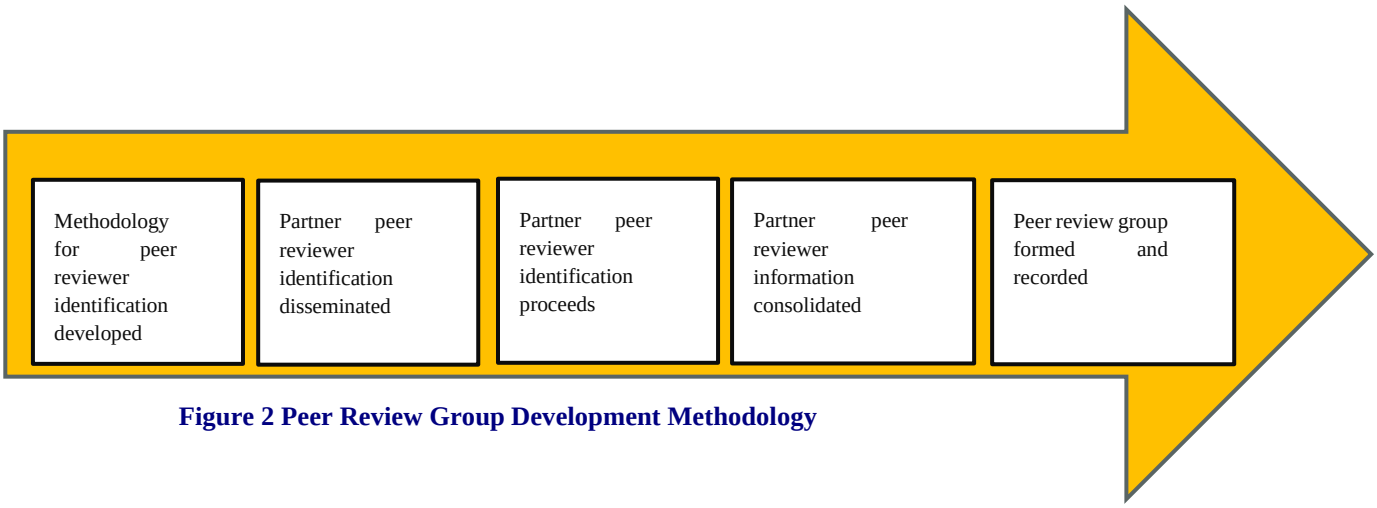


Figure 2 Peer Review Group Development Methodology

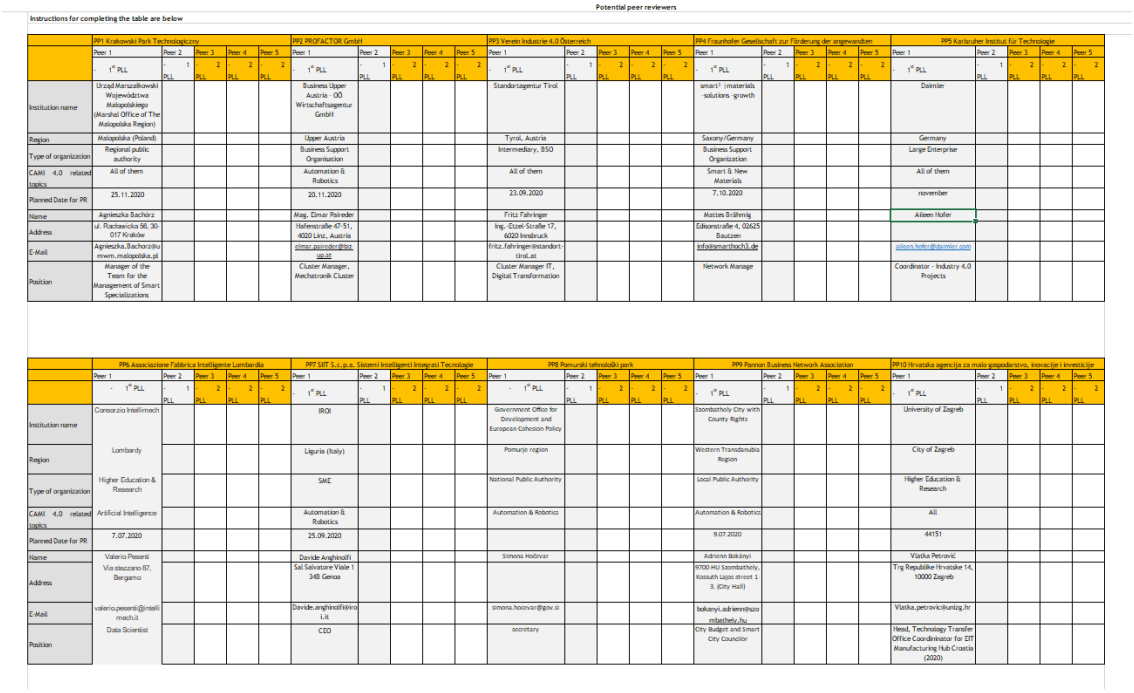
As presented in Figure, the Peer Review group development methodology had five distinct parts, to move from the initial concept to a full group of balanced Peer Reviewers

Partners were asked to generate a list of appropriate Peer Reviewers, who were balanced regarding their representation of project target groups (quadruple-helix representation) and project topics. It was also requested that the partners consider the expertise of the Peer Reviewer, their background, and their interest in the project goals, as core attributes around which certain Peer Reviewers should be chosen.

The Peer Reviewers can take on an important double-role: ensuring the Partner's think outward whilst also supporting the Partners in disseminating project results outward.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

The results of this was the generation of a table, with 1 to 2 Peer Reviewers per Partner, identifying at least, the name of the contact person, the type of organization, and the areas of CAMI4.0 topics the Peer Reviewer has a specific expertise.



Potential peer reviewers

Instructions for completing the table are below

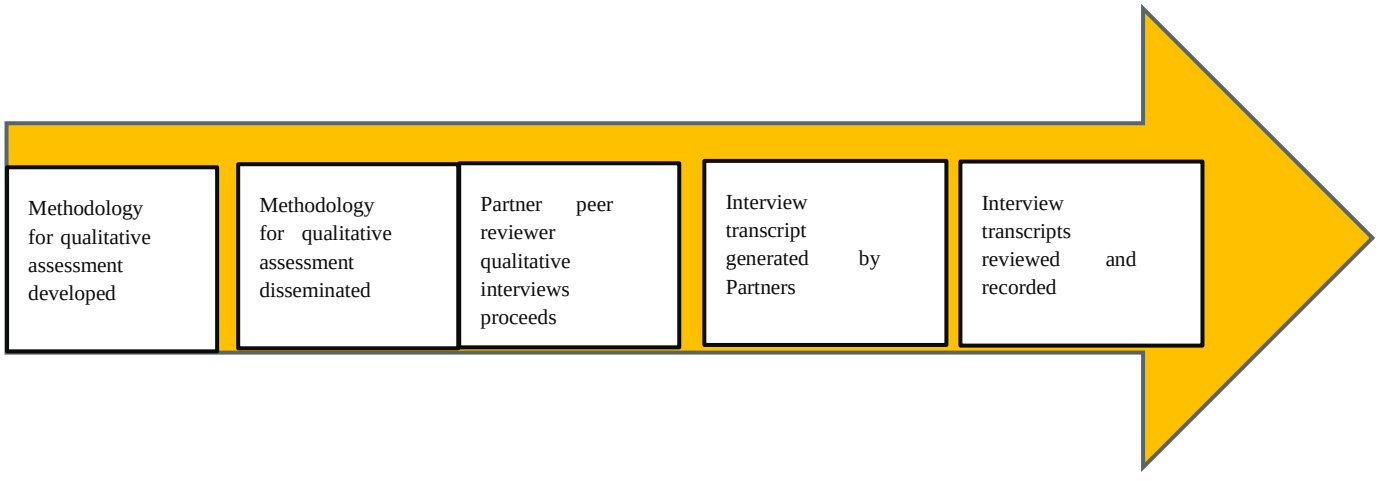
	PP1 Krakowski Park Technologiczny					PP2 PROFACTOR GmbH					PP3 Verein Industrie 4.0 Österreich					PP4 Fraunhofer Gesellschaft zur Förderung der angewandten					PP5 Karlsruher Institut für Technologie				
	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5
	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL
Institution name	Urząd Marszałkowski Województwa Małopolskiego (Marshal Office of The Malopolska Region)					Business Upper Austria - OÖ Wirtschaftsagentur GmbH					Standortagentur Tirol					smart? (materials solutions growth					Daimler				
Region	Malopolska (Poland)					Upper Austria					Tyrol, Austria					Saxony/Germany					Germany				
Type of organization	Regional public authority					Business Support Organisation					Intermediary, BSO					Business Support Organization					Large Enterprise				
CAMI 4.0 related topics	All of them					Automation & Robotics					All of them					Smart & New Materials					All of them				
Planned Date for PR	25.11.2020					20.11.2020					23.09.2020					7.10.2020					november				
Name	Agnieszka Bachórz					Mag. Elmar Pairede					Fritz Fahringer					Matteo Brühmig					Aileen Hofer				
Address	ul. Racławicka 56, 30-017 Kraków					Hafenstraße 47-51, 4020 Linz, Austria					Ing.-Etzel-Straße 17, 6020 Innsbruck					Edisonstraße 4, 02625 Bautzen									
E-Mail	Agnieszka.Bachorz@umwm.malopolska.pl					elmar.pairede@bic-ua.at					fritz.fahringer@standort-tirol.at					info@smarthoch3.de					aileen.hofer@daimler.com				
Position	Manager of the Team for the Management of Smart Specializations					Cluster Manager, Mechatronik Cluster					Cluster Manager IT, Digital Transformation					Network Manage					Coordinator - Industry 4.0 Projects				

	PP6 Associazione Fabbrica Intelligente Lombardia					PP7 SIIT S.c.p.a. Sistemi Intelligenti Integrati Tecnologie					PP8 Pomurski tehnološki park					PP9 Pannon Business Network Association					PP10 Hrvatska agencija za malo gospodarstvo, inovacije i investicije				
	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5
	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL	- 1° PLL	- 1 PLL	- 2 PLL	- 2 PLL	- 2 PLL
Institution name	Consorzio Intellimech					IROI					Government Office for Development and European Cohesion Policy					Szombathely City with County Rights					University of Zagreb				
Region	Lombardy					Liguria (Italy)					Pomurje region					Western Transdanubia Region					City of Zagreb				
Type of organization	Higher Education & Research					SME					National Public Authority					Local Public Authority					Higher Education & Research				
CAMI 4.0 related topics	Artificial Intelligence					Automation & Robotics					Automation & Robotics					Automation & Robotics					All				
Planned Date for PR	7.07.2020					25.09.2020										9.07.2020					44151				
Name	Valerio Pesenti					Davide Anghinolfi					Simona Hozvar					Adrienn Bokányi					Vlatka Petrović				
Address	Via stezzano 87, Bergamo					Sal Salvatore Viale 1 348 Genoa										9700 HU Szombathely, Kossuth Lajos street 1 3. (City Hall)					Trg Republike Hrvatske 14, 10000 Zagreb				
E-Mail	valerio.pesenti@intellimech.it					Davide.anghinolfi@iroi.it					simona.hozvar@gov.si					bokanyi.adrienn@szombathely.hu					Vlatka.petrovic@unizg.hr				
Position	Data Scientist					CDO					secretary					City Budget and Smart City Councilor					Head, Technology Transfer Office Coordinator for EIT Manufacturing Hub Croatia (2020)				

Figure 3 Consolidation Table of Peer Review

The results section of this report will describe the breakdown of organizations and expertise areas which were identified in the Peer Review Group.

4.3. Qualitative Measurements



This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Figure 4 Qualitative Measurement Methodology Development

The qualitative measurement aspect, the second part of the Impact Controlling

Methodology, describes a process that looks to gain information or patterns from non-numerical data. During the early stages of the project, the methodology was developed through detailed discussions which determined that interviews and personal discussions (specifically with the Peer Review group), would be a strong method of gaining the data. An overview of this methodology is described in Table 1, below

Table 1 Qualitative Measurement Methodology Overview

Measurement approach:	Interviews / personal discussions - 1 interview that ask for their impact expectations of project CEUP 2030
Result documentation	Brief report, or interview transcripts
Responsible:	Every partner of CEUP 2030
Interviewer:	Every partner
Interviewee:	Peer Reviewers

Partners were asked to conduct an interview with selected participants after the first Policy learning labs.

Partners were asked, in June 2020, to contact the Peer Reviewer who will also participate in the first Policy learning lab. This interview, as described in the Table above, is used to gather Peer Reviewer 'impact expectations', which will be used as the basis for assessment across the total project. At this point, Partners had appropriate information about the project, primarily a common narrative on its goals and projected plan, and could describe the project in detail to the Peer Reviewers.

Furthermore, it was important to have the interviews at this stage, because the second output (Joint Strategy), was in development – partners providing information from policymaker stakeholder. Partners could use this information, and the associated narrative about information coming together to create a common knowledge base, to inspire their Peer Reviewers about the project's ultimate impact.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

In the Appendix of this document, you can find an imbedded file which shows the most up-to-date version of the interview transcript which was used to generate a common structure to the returned qualitative data. The goal of the questions was to provide open questions surrounding the goals of the project as a whole, and Work Package output; asking about the Peer Reviewer's institutional views about the usefulness and benefit (value) of the outputs from WPT1.

4.4. Quantitative Measurements

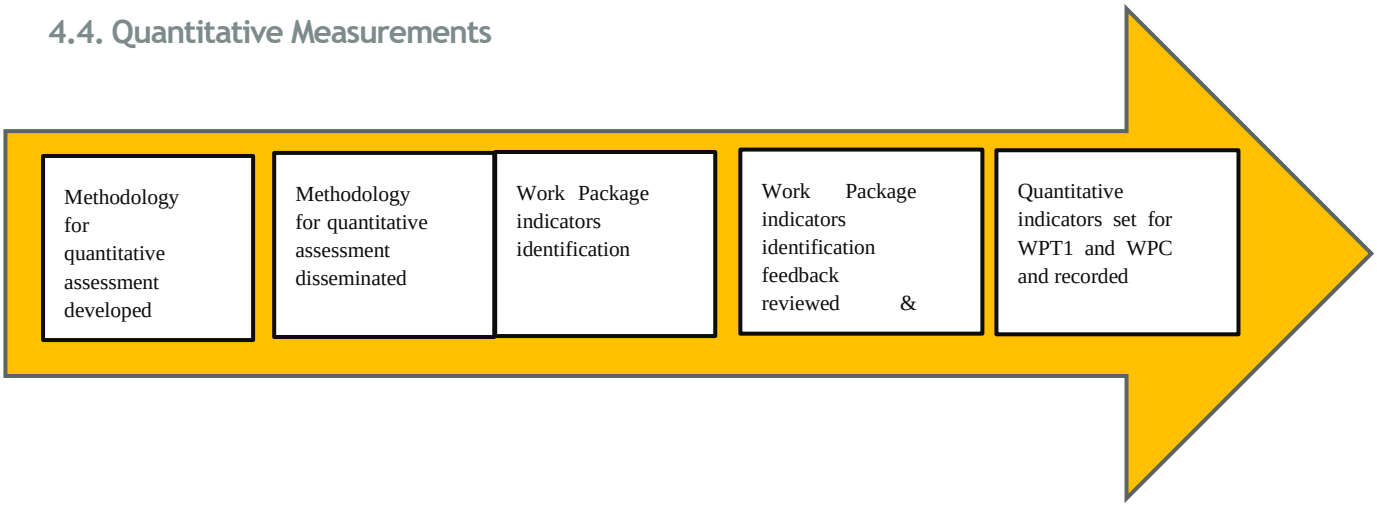


Figure 5 Quantitative Measurement Methodology Development

The third aspect of the Impact Controlling methodology, quantitative measurement, looks to gather information on impact from numerical data, or indicators. These indicators will be used to weight the relative impact of the indicator on meeting the project's objectives.

There are two broad categories of quantitative indicators which emerged in the project:

1) Target Group Indicators: which represent a numerical value of organizations which are brought into the CEUP2030 project in relation to a certain category of organization type.

2) Output (or Work Package) Indicators: which represent a numerical value of outputs associated with essential deliverables within each Work Package. Often these numbers represent the number of specific activities a Partner had to complete in relation to a specific output.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

4.4.1. Target Group Indicators

Target Group Indicators represent a numerical value of organizations which are brought into the CEUP2030 project in relation to a certain category of organization type. Within ceup2030, these indicators were set during the Application Form ("AF") submission process, such as:

Target groups	*Please further specify the target groups - see examples in annex 4 of the application manual (classification of target groups)*	*Target value Please indicate the size of the target group the project aims to actively involve.*
Local public authority	Local & municipal authorities associated to innovation & technology support initiatives will be engaged in the project 10 from PPs area and a further 10 from complementary areas (e.g. Graz, Salzburg, Bratislava, Brno, Jena)	20,00
Regional public authority	Regional ministries of economy, technology, innovation & industry will be engaged from 10 PP regions + 10 further regions which provide critical synergy to promote the CEUP 2030 Framework of Excellence vision (e.g. Styria, Thuringia, South Tyrol, etc.)	20,00
National public authority	National ministries or delegated & policy-relevant agencies will be involved from PPs associated country. Focus will be on incorporating National S3 coordinating ministries, leveraging off of engaged Associated Partners.	7,00
Interest groups including NGOs	Via Members, Owners & founders of PPs Interest Groups will be brought into the partners (approximately 1/PP). Interest groups engagement deepen understanding about impact on industry/labour/technology innovation generally.	10,00
Higher education and research	Through HE&R, innovation to promote the PID & TINs become more future foresight orientated. Critical connections with this Target Group is key, therefore each PP engages 3 from their networks to enhance thematic discussions within project life cycle.	30,00
Education/training centre and school	Each PP will identify one E/TC&S to support transferability & sustainability of PID tool use, focusing on an integrative approach which connects to training centres to promote interdisciplinary teaching methods for the four topics.	10,00
Large enterprises	LEs will be involved, especially through use-case development & to showcase practical relevancy industrial impact from these target technologies (Each PP engages 2 LEs, gaining a collaboration pool in Robotics, Materials, Big Data/Sensors & AI).	20,00
SME	SMEs, especially those within PP networks, will be included to showcase practical relevancy of targeted growth support mechanisms associated to the technology areas (Each PP engages 8, approx. 2 with a business model/ tech area.)	80,00
Business support organisation	PPs & networks engage regularly with BSOs (technology parks, clusters), these multiplying organisations will be involved in TIN discussion & further in RIS3 Roundtables. PPs each bring 2 BSOs into the CEUP 2030 activities.	20,00

During the implementation of WPT1, the partners had to think carefully about how to identify and involve them in order to add value to each project activity.

The selected institutions, organizations, companies should contribute with a high impact to the project implementation and their capitalization, strategic anchoring as well as to a high-quality communication of gained project results.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Target groups can be involved in the work of the project content (for example, PLL participants or involved in the strategic Action Planning process) as expert reviewers and as general participants in strategic coordination workshops and activities. An individual is counted by institutions (each institution is counted once - not from person to person!)

Thematic Result Indicators are relevant for the full project. However, there are contributions to these indicators through the thematic work in the project's work packages. The following thematic result indicators should be monitored whilst implementing WPT1:

Number of trained persons	Persons	100,00	Through the Policy Learning Labs (WPT1), collaborative learning techniques will be used to upgrade and upstream technology focused results to policy-relevant users (10/PP – 100 total); these users will be engaged again once tools are further developed & upgraded (WPT2), and policy-relevant stakeholders are brought into the RIS3 Round tables to determine implementation alignment steps for the Framework for CAMI4.0 Policy Excellence.

4.4.2. Output Indicators for WPT1

Indicator description	Unit	Target
Target Group Indicators		
Local public authority	Number of institutions	20
Regional public authority	Number of institutions	20
National public authority	Number of institutions	7
Interest Groups, including NGOs	Number of institutions	10
Higher education and research	Number of institutions	30
Education/training center and school	Number of institutions	10
Large enterprises	Number of institutions	20
SME	Number of institutions	80

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Business support organizations	Number of institutions	20
Total Project Impact Indicators		
# of institutions adopting new and/or improved strategies and Action Plan	Number of institutions	40
# of trained persons	Persons	100
WPT1 Impact Indicators		
Trained persons at the involved stakeholder institutions	Persons	100
Satisfaction of participants with Policy learning lab	% of participants	90
Number of quality proposals for the PLL workshop	Interviews	30
An adopting new and/or improved strategies and Action Plan	Number of institutions	40

4.5. Monitoring Impact Assessment Tool

The final aspect of the Impact Controlling Methodology is the distributed Monitoring Impact Assessment Tool.

This Tool allows the partnership to monitor:

- 'State of the art',
- Identified potential Alliances (with tracking and update capability); and
- Visualization and sharing the impact, produced by merging experiences (feedback)

Overall, it supports distributed impact monitoring of the Partnership related to the goals and outcomes of CEUP2030.

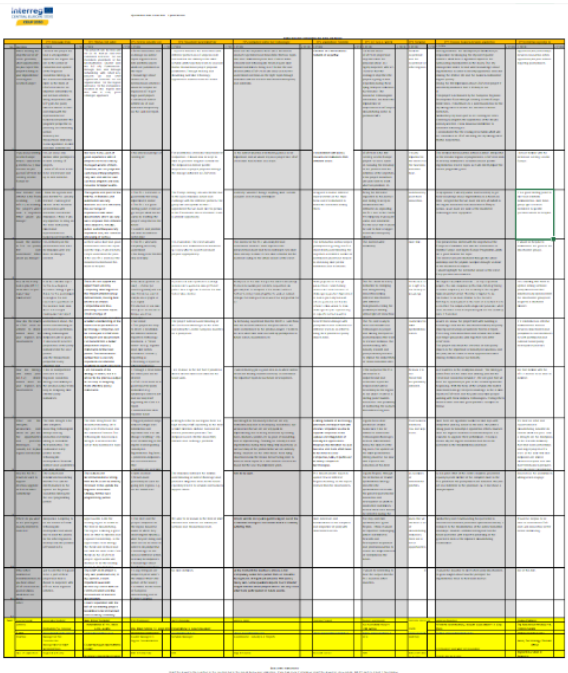
The cooperation tool is an IT-based Microsoft Excel currently hosted by Alfresco, and is not publicly available. However, in the images below, one can find a

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

number of sheets available to the Partners to map, record, track and update information that were received from Partners and Peer Reviewers about the project's quantitative and qualitative impact.

Monitoring Impact Assessment Tool is prepared in form Excel sheet. The Purpose of this Excel sheet is just to provide a single, comprehensive location for all actions related to Impact Controlling in the CEUP 2030 WP T1. The tool has been substantially updated to ensure that a clear indicator gathering process is achieved by the partnership.

Figure 6 Image of the Introduction Sheet of the Monitoring Impact Assessment Tool



Qualitative Indicator Interview Summary Tracker provides an overview of all the contact details and information of the Peer Reviewers which have been identified by the Partners. It also provides an interpretation of WP T1 topics where the individual or organization carries competency to provide impact controlling feedback.

Figure 7 Qualitative Indicator Interview Summary Tracker

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

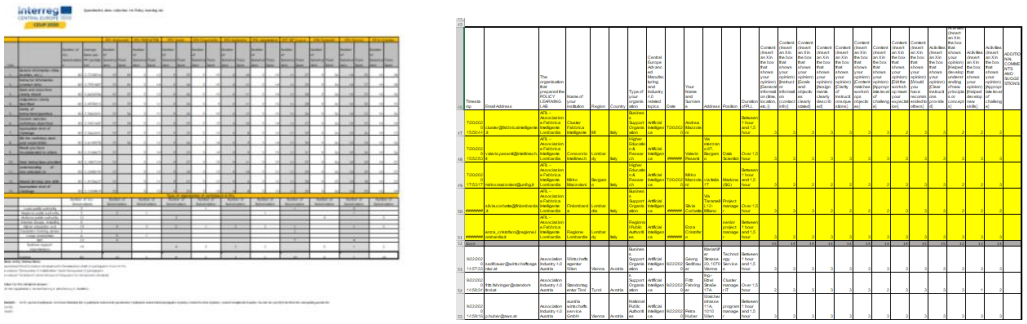


Figure 8 Quantitative Indicator Summary Tracker

Quantitative Indicator Summary Tracker provides a single location where all the quantitative indicators from WPT1 will be stored, and recorded in one place. In the column "link location", add the web link where you posted report about the workshop- **The data is entered by each Partner!**

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

5. Results

As inferred in the section of this report which lays out the Impact Controlling methodology, the following section provides an overview of the results which have emerged from the collective work of the partnership. The results are broadly broken down into three sections, providing an overview of interim numbers related to the Peer Review Group, the outcomes of the interviews with the Peer Reviewers (as summarized through the Impact Controlling Tool), and the interim values of quantitative indicators from Policy learning labs, which have been achieved so far.

5.1. Peer ReviewGroup

Amongst target groups and stakeholders of each of the project partners, we have identified and created a Peer Reviewers' group, which would represent the triple-helix actors. It was important for these Peer Reviewers also to represent a specific interest in either of the CAMI4.0 Topics. Overall, there were 10 organizations identified as Peer Reviewers.

5.1.1. Peer Reviewers Identified by Partner:

Partner Name	PP No.	No. of PR Identified	No. of Peer Reviewers Interviewed
Krakowski Park Technologiczny	LP1	1	1
PROFACTOR GmbH	PP2	1	1
Verein Industrie 4.0 Österreich	PP3	1	1
Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. für das Fraunhofer Institut für Werkzeugmaschinen und Umformtechnik	PP4	1	1
Karlsruher Institut für Technologie	PP5	1	1
Associazione Fabbrica Intelligente Lombardia	PP6	1	1
S.c.p.a. Sistemi Intelligenti Integrati Tecnologie	PP7	1	1
Pomurski tehnološki park	PP8	1	1

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Pannon Business Network Association	PP9	1	1
Hrvatska agencija za malo gospodarstvo, inovacije i investicije	PP10	1	1
Total Peer Reviewers - after 1st PLL		**10**	**10**

In total, 10 Peer Review interviews took place between August 2020 and December 2020. In Table below you can see the total number after 1st PLLs.

That means all Peer Reviewers were interviewed for the qualitative analysis. Interviews took from 30 minutes up to two hours, depending on the project partner's approach to discussion and in how much detail the interviewees wanted to go.

5.1.2. By CAMI4.0 Topic

Interviews with Peer Reviewers were carried out on the basis of 4 main topics of CAMI4.0: **Intelligent Production Systems, Automation & Robotics, Smart Materials and Artificial Intelligence**. These topics have been selected in the framework of CEUP2030 project, since they have been recognized as the most strategic topics to be developed in the Central Europe area to maintain the competitiveness of Advanced Manufacturing stakeholders and to develop further their knowledge and competences. More precise, each CAMI4.0 topic has also been specified in term of sub-topics to clearly identify the contents to be discussed and developed within the network. Some interviews with Peer Reviewers covered several topics.

CAMI 4.0 Topics	Total Peer Reviewers
Intelligent Production Systems	4
Automation & Robotics	8
Smart Materials	5
Artificial Intelligence	5

5.1.3. By Target Group

Target Group	Total Peer Reviewers
Local public authority	1
Regional public authority	1

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

National public authority	1
Interest Groups, including NGOs	
Higher education and research	2
Education/training center and school	
Large enterprises	1
SME	1
Business support organizations	3
Total	**10**

5.2. Qualitative Impact

In order to ensure the anonymity of individuals, a joint / cumulative overview of the responses of Peer Reviewers will be provided.

5.2.1. Methodology

Responsible partner for deliverable 1.4. (PTP) prepared a questionnaire for an interview with a peer reviewer. The questions were related to:

- **General (**basic questions related to the project CEUP 2030)
- **Relevance & Effectiveness** (referring to the relevance of the project work to the objective and aim of the project, and effectiveness at building a sustainable transnational support structure & enhancing regional innovation capacity)
- **Value- Creation** (referring specifically to the project's future activities using WPT1 outputs, to showcase how value can be created with transnational support structures - for instance: access to knowledge, personal networking, concrete cooperation)
- **Sustainability/Transferability** (referring specifically to the ability of the work package outputs to be utilized for other RIS3 aims & integrated into other initiatives to sustain and transfer results)
- **Closing Remarks**

Each partner's organization conducted an interview with peer reviewers after the PLL workshop ended.

PTP prepared a summary of the answers. This has been done in two ways:

1. **By using word cloud[4]:**

[4]. https://wordart.com/

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

A word cloud (also known as a tag cloud or word art) is a simple visualization of data, in which words are shown in varying sizes depending on how often they appear in data.

2. **By summarizing similar answers**

Since quite many answers were in terms of content similar, we were able summarized these easily. The answers that were specific and did not match other answers were left in form. A table was made containing the information about the answer and how many times the answer appeared.

5.2.2. Interview Themes

In order to anonymously present the results of the qualitative interviews, the interviews have been summarized into thematic areas highlighted in relation to each question that was asked.

The image presented in Figure 9 shows briefly summary of the types of common words that were used frequently by Peer Reviewers while discussing activities in WP1 and the project as a whole.

Figure 9 Wordcloud Summary of Qualitative Interviews

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

5.2.3. Results of interviews

The following sections provide an overview of the major themes which emerged throughout the interviews.

5.2.3.1. *Question 1: When hearing the objectives of CEUP 2030, generally, what opportunities do you expect this project to bring to your Organization? Your region? Central Europe?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
Impact on the region	4
Impact on the organization	5
Awareness, new knowledge	4
New collaborations, opportunities	5

Table 1 Thematic Breakdown by number of Interviews, Question 1

Figure 10 Highlighted words for Question 1

5.2.3.2. *Question 2: If you know Interreg Central Europe (https://www.interreg-central.eu/): How relevant do you guess CEUP2030 for Interreg Central Europe is?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Relevant	8
Not relevant	0
Familiar with the program	5
Not familiar with the program	5

Table 2 Thematic Breakdown by number of Interviews, Question 2

Figure 11 Highlighted words for Question 2

5.2.3.3. *Question 3: How relevant and effective is the Policy Learning Lab (OT1.1.) in reaching the project's wider aims & objectives? What would you change?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
Relevant	9
Not relevant	0
Effective	9
To involve more people from business and companies	1
Concrete and practical use cases for different sectors (like implementation/usage of CAMI 4.0 topics in automotive, health…) with companies & experts (people that can be contacted) from companies would be good	1

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Table 3 Thematic Breakdown by number of Interviews, Question 3

Figure 12 Highlighted words for Question 3

5.2.3.4. *Question 4: Could the content in PLL be quickly felt and understood? What would you change?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
Understandable	9
Incomprehensible	0
A restricted number of participants would have helped in obtaining more precise indications and feedbacks.	1
It would be helpful to communicate the goals to the stakeholder groups.	1
visual aspects of the presentations could have been increased even more than already, to make	1

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

it even more attractive for the audience owing to the virtual nature of the event	
A restricted number of participants would have helped in obtaining more precise indications and feedbacks.	1

Table 4 Thematic Breakdown by number of Interviews, Question 4

Figure 13 Highlighted words for Question 4

5.2.3.5. *Question 5: How can the Policy Learning Lab (OT1.1.) create value for your region's key stakeholders*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
Provide a valuable input for the new Regional Innovation Strategy	2
To give a chance for the policy makers to recognize the real needs and expectations of the business,	6
By comparing other regions, Exchange of experience	3
With personal networking, concrete cooperation	3
To learn more about technological development and adjust better the policy instruments	4

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Table 5 Thematic Breakdown by number of Interviews, Question 5

Figure 14 Highlighted words for Question 5

5.2.3.6. *Question 6: How can the Policy Learning Lab (OT1.1.) create value for your region's key stakeholders?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
With better understanding of needs and expectations among technological companies	6
With transnational perspective	3
By participatory and evidence-based policy development processes	5
To create a benchmark for different sectors	3
Networking	1
To establishes an effective communication channel between stakeholders and policymakers	1

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Table 6 Thematic Breakdown by number of Interviews, Question 6

Figure 15 Highlighted words for Question 6

5.2.3.7. *Question 7: How can Strategy with Action Plan (OT.1.2) create added value for your region's key stakeholders*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
It can be incorporated and used in new Regional Innovation Strategy	2
It can help in designing more effective policy instruments	6
Should be a model and vision for the future work	7

Table 7 Thematic Breakdown by number of Interviews, Question 7

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Figure 16 Highlighted words for Question 7

5.2.3.8. *Question 8 What are the strengths, weaknesses, and where do you see the opportunities and potential challenges in Industry 4.0 in your region and country??*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
The wide ecosystem	6
A strong network of technology providers and researchers	3
Subsidies	1
Coordination of the topic	6

Table 8 Thematic Breakdown by number of Interviews, Question 8

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Figure 17 Highlighted words for Question 8

5.2.3.9. *Question 9: How can the PLL results be used to support creation/upgrade of RIS3? Or Other Initiative(s)?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
Can update the Regional Innovation Strategy for the next programming period	7
Can be mitigation ideas for the future, especially related to network and business support efforts.	4

Table 9 Thematic Breakdown by number of Interviews, Question 9

Figure 18 Highlighted words for Question 9

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

5.2.3.10. *Question 10 Where do you want to see your region, country, related to CAMI 4.0?*

Total number of Peer Review Responses: 10

Theme	Number of Interviews Highlighting theme
To remain EU transnational driving force in Industry 4.0	2
To remain the regional driving force in Industry 4.0 in the country	2
To become the driving force in the country in at least one of the thematic areas of Industry 4.0	3
Becoming a driving force in Industry 4.0 in Europe	1
Improve the situation in at least one of the thematic areas of Industry 4.0	7

Table 10 Thematic Breakdown by number of Interviews, Question 10

Figure 19 Highlighted words for Question 10

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

5.2.3.11. *Question 11: What other comments or recommendations do you have about CEUP 2030 and its goals & visions, which have not been mentioned/asked yet?*

Total number of Peer Review Responses: 7

Theme	Number of Interviews Highlighting theme
A mission for the future of European manufacturing and of Europe's position regarding the specific CAMI 4.0 technologies would be useful	1
The feeling needs to get across, so that people/organizations can relate to that future, needs to go beyond reports and text	1
The feedback process is not completely suited for a person from an industrial background	1
It would be interesting to have the outputs from the PLL rounds in other countries	1
It would be valuable to meet other policy stakeholders, to gain insights about how they interpret the digitalization trend to their local context	1

Table 11 Thematic Breakdown by number of Interviews, Question 11

Figure 20 Highlighted words for Question 11

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

5.3. Quantitative Indicators

Provides an overview about quantitative measurements about 1st PLL workshops conducted (number of participants, satisfaction with the workshops, etc.). This chapter quantifies the impact of the workshops on each Policy learning lab visitor. Currently the term "TBC[5]" is used as a holding place for any numerical indicator which has not been reported as achieved yet.

Indicator description	Unit	Target	Participants who completed the questionnaire [6]	Total participants
Target Group Indicators				
Local public authority	Number of institutions	20	5	41[7]
Regional public authority	Number of institutions	20	5	
National public authority	Number of institutions	7	12	
Interest Groups, including NGOs	Number of institutions	10	0	
Higher education and research	Number of institutions	30	19	54
Education/training center and school	Number of institutions	10	2	
Large enterprises	Number of institutions	20	6	5
SME	Number of institutions	80	15	43
Business support organizations	Number of institutions	20	19	3
Total Project Impact Indicators				

[5] TBC - to be conducted

[6] Participants that have fill out evaluation questionnaire

[7] grouped into one line because the participants did not define themselves in detail

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

# of institutions adopting new and/or improved strategies and Action Plan	Number of institutions	40		TBC
# of institutions applying new and/or improved tools and services	Number of institutions	40		TBC
Amount of funds leveraged based on project achievements	Amount of found	2 million €	TBC	
# of jobs created (FTE) based on project achievements	Persons	10	TBC	
# of trained persons	Persons	100	TBC	146
WPT1 Impact Indicators				
Trained persons at the involved stakeholder institutions	Persons	100	TBC	146
Satisfaction of participants with Policy learning lab	% of participants	90	More than 90 %	
Number of quality proposals for the PLL workshop	Interviews	30	10	
An adopting new and/or improved strategies and Action Plan	Number of institutions	40	TBC	

The indicators were based on the impact of the workshop on the individual participant. In the evaluation questionnaire, the participants assessed their satisfaction with individual parts of the workshop. They had 4 options available,

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Excellent, satisfied, Unsatisfied, Not Applicable. To make it easier to quantify individual parts of the workshops, we evaluated each answer with a number.

0-Not Applicable; **1**- Unsatisfied; **2**- satisfied; **3**- Excellent

Line		Number of ALL Participants[8]	Average Score[9] per participant
1.	**General information (time, location, etc.)**	83	2,72
2.	**Instructor information (contact info)**	83	2,80
3.	**Goals and objectives clearly stated**	83	2,66
4.	**Assignments clearly described**	83	2,46
5.	**Clarity of instructions/questions**	83	2,57
6.	**Content matches workshops objectives**	83	2,54
7.	**Appropriate level of challenge**	83	2,57
8.	**Did the workshop meet your expectation**	83	2,61
9.	**Would you have recommended to others**	68	2,71
10.	**Clear instructions provided**	68	2,66
11.	**Helped develop understanding of new principles or concepts**	68	2,69
12.	**Helped develop new skills**	68	2,34
13.	**Appropriate level of challenge**	68	2,59

Table 12 impact of the workshop on the individual participant

To summarize it, the participants were more than satisfied with the workshops. It was most noticeable that the participants have expected more from "development of new skills" related to CAMI4.0 topics. It will also be necessary to consider how to clearly describe assignments in the PLL.

[8] Participants who completed the questionnaire

[9] 0-Not Applicable; 1- Unsatisfied; 2- satisfied; 3- Excellent

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

6. Discussion

As this is an interim report (D.1.4.2), not all indicators in this work package have been achieved yet, but there is indication on what decision-makers and stakeholders involved in the activities in WPT1 and the CEUP2030 project expect. The goal of this report is to give recommendations for second PLL in practice and first insights on the strategic vision for CAMI4.0 Excellence and to draws common conclusions.

The activities within WPT1 have focused on the appropriate selection, adaption and finetuning of proven tools, instruments and methodologies, aka “Harvesting” – during A.T1.1 where we defined the four technology topics for Central Europe Advanced Manufacturing & Industry 4.0 (CAMI4.0). After The generation of a structure (the Policy Learning Lab), first stakeholders where acquainted with new technologies and their applications, so as to give them better context for future decisions.

In the second semester we worked on the generation of a common strategy, based on previous work of Partners, setting a vision for the four CAMI4.0 topics –that happened during A.T1.3. Unfortunately, due to the emergency situation (COVID-19), the Joint Strategy was not completed before the first PLL workshop and therefore did not provide insight for the first participants of PLLs and Peer Reviewers.

This work package also envisages the creation of a Joint Action Plan based on the previous part of the Partners & PLL program, to identify a critical path for the four CAMI4.0 themes - in activity A.T1.3. For the 2nd PLL, it is envisaged that the Joint Strategy will be presented and that the ideas of the Action Plan will be checked and tested.

So the impact controlling should give 360-degree feedback from stakeholders on the collective exchange methodology during first PLL aka “Impact Controlling”.

6.1. Quantitative

We can say that the impact on the ecosystem and everyone involved in the CEUP 2030 project, as far as WPT1 is concerned, was in line with expectations. If we look at those actors included in the 1st PLL (at least those who completed the evaluation questionnaire), we see that most of them came from the BSO, SME, and the higher education sphere**. It would be important for the second PLL to**

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

have more policy-makers involved, mainly those from the area of Regional Decision-Makers and Local Decision-Makers.

CEUP 2030 high impact has occurred through meetings, especially during:

- Peer Review Interviews; and
- Training Activities;

The 1st PLL showed that participants were generally satisfied with the workshops. According to survey, they received good information related to the CEUP2030 project, the information was well presented with all project objectives. The vast majority of participants expressed that the 1st PLL has met expectations and would recommend a similar workshop in the future. Unfortunately, it can also be observed that the 1st PLL did not fully meet the expectations regarding the development of new skills. Thus, in the 2nd PLL, **it would make a sense to consider more the development of new skills of participants in 2nd PLL in connection with the topic of CAMI4.0**.

These activities in WPT1 built connections between quadruple helix actors, with a primary delivery focus on Academia, Enterprises and Government and a bit less towards Civil Society. This bias is understood at this point of the project e.g. due to the early stages of project's development. As time will go by also last group will be more connected and involved.

Once all the quantitative indicators are received, at the end of the reporting period, further conclusions regarding quantitative data will be made, as well as output impact which will be perceived from the indicators reached.

6.2. Qualitative

This section will discuss those results which are relevant to the research question, about how WPT1, and the project as a whole is seen to generate new connections and potential cooperation amongst Central Europe triple-helix actors.

After the 1st PLL, the partners conducted a peer review, where we wanted to check and get quality answers regarding the project itself, regarding the PLL workshop and regarding the activities that are or will take place in the WPT1.

10 Peer Reviewers were from different types of organizations, many were from Business support organizations.

6.2.1. Central Europe as a Whole

The main strength of the area of the project is the wide ecosystem as far we consider the number of regions involved, where the CEUP 2030 partner organizations are coming from, where some have highly developed CAMI 4.0 topics ecosystem, some want to break through with it and some are just following and starting to gain ground in CAMI4.0 topics.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

The main weakness is still not enough coordination of the topic. The companies need effective support/measures for connecting and exchange (platforms?). Problem is a large amount of high-level information and superficial talk ("AI will change everything" etc.), a lot of marketing in the digital realm regarding Industry 4.0, Digitalization, Big Data…

Regions or smaller units (municipalities…) are necessary to spread CAMI4.0 topics and make them mainstream, use cases (as mentioned above) need to be stories that especially SMEs can relate to in order to start their digital transformation.

Also, there are not to be expected rapid implementation actions due to being held back by existing rules, structures, policies etc.

As for the vision, it is similar, we have regions that have a clear vision in individual areas and want to be at the forefront, then we have regions that want to get closer to these regions (following same or similar mindset), and finally we have regions that are barely aware of the benefits of CAMI4.0 topics.

6.2.2. CEUP2030 as a Whole

Peer Reviewers estimated that the CEUP2030 project could have a very significant impact for the region of Central Europe. The results and discussion made in the frame of CEUP2030 can be an important amendment that gives the policy makers a chance to meet and discuss with the representatives of business sector and provides the pragmatic perspective in planning the next financing period. CEUP 2030 can offer extended services which might offer significant benefits for organizations, for the region and also for the companies interested in the project. Most of those involved in the Peer Review are familiar with the Interreg Central Europe program, and from this point of view suitable for peer review.

CEUP2030 can create added value for region with the better understanding of needs and expectations among technological companies that can benefit in better preparation of the policy instruments for the next period. Also, the transnational perspective is very important and interesting. It gives a possibility of getting insights to latest technologies and to learn or hear about best practices etc.

6.2.3. Policy Learning Lab

From the point of Peer Reviewers, the 1st PLL was very relevant. In their view, the 1st PLL was a great mixture of the theoretic presentations with interactive and creative discussions. They thought it was very important to bring to the table both policy makers and representatives of business and researchers what resulted in interesting discussions. In order to achieve even greater impact, **it would be**

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

good to involve more people from business and companies to concrete practical use cases from different sectors (like implementation / usage of CAMI4.0 topics in automotive, health…). Also, those, who had PLL online meetings said, that also online implementation was an appropriate format to do it (considering covid-19 circumstances). However, there is a perception that **visual aspects of the presentations** could have been increased even more (than already), in a way to make it even more attractive for the audience with more **precise indications and feedbacks** (the virtual nature of the event enables that).

The Policy Learning Lab was effective due to the open discussion culture and exchange with the different partners. The group size was optimal for that. Some appreciated that could meet in person (in the Fraunhofer IWU in Chemnitz, or Pomurje Technology Park for example). In those times/circumstances it was actually a welcome opportunity.

PLL can be a valuable input for the new regionals strategies by comparing other regions in the implementation phase defined there, making best practice examples comparable and thus providing valuable inputs. It gives a chance for the policy makers to recognize the real needs and expectations of the business, learn more about technological development and adjust better the policy instruments. It was noticed that there is a need to evaluate and discuss the CAMI4.0 topics with different company partners.

Sharing experience through presentations, brainstorming sessions and final discussion of challenges supported by stakeholders, learning mutually from each other's experiences and has also offered a table where to share challenges they are experiencing in a specific context as well as priorities to be developed.

6.2.4. Strategy with an Action Plan

The Strategy with Action Plan should not be theoretical but **practically oriented**. With the **help of the networks the invited stakeholders** can get **deeper knowledge in the 4 main topics of CEUP2030** and they will meet more people working with these complex technologies. It will bring them closer to larger number of good practices and examples they can follow. It can be **incorporated and used in new Regionals Strategies**, and similarly to PLL, it can help in designing more effective policy instruments.

The value is also in the fact that it provides a shared mindset, a model and **vision for the future work**. It will definitely give a good idea towards where current trends are flowing and help us understand the important topics for our future developments.

If the outputs of the PLL will result in a comprehensive and exhaustive report the lessons learnt will be beneficiary for the regions in two ways:

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

- it will be a starting point towards future innovation
- it will give the possibility to confront the outputs from different regions.

7. Conclusions & Next Steps

The Report provides a complete summary of the first Peer Review interview & stakeholder feedback, to deliver improvement recommendations for the 2nd round of PLL workshops. The Impact Controlling System and the distributed Monitoring Impact Assessment Tool have two parts. The first part is to generate a consistent communication with stakeholders outside of the direct project group about the success of the project activities; and the second part is to understand the project's progress in meeting and its indicators, which are our measure of making the most widespread and effective impact that we can achieve within limits of the project.

The qualitative and quantitative review of the activities in Work Package One (WP1) has shown that impact on the participants in the first PLL has been made and has the potential to generate connections of potential cooperation between Central Europe triple-helix actors.

A qualitative review indicated that it might be good to involve more people from business and companies with concrete practical use cases for different sectors (like implementation/usage of CAMI4.0 topics in automotive, health…). This could also be addressed by visual representations of solutions in Industry 4.0. PLL participants also expressed a desire to gain insight into what was happening on the remaining PLLs and it would be valuable to meet other policy stakeholders.

Overall, Peer Reviewers contacted during these first two Periods of the project, see the benefit of CEUP2030 and Policy Learning Labs and its objectives.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

7.1. Next Steps:

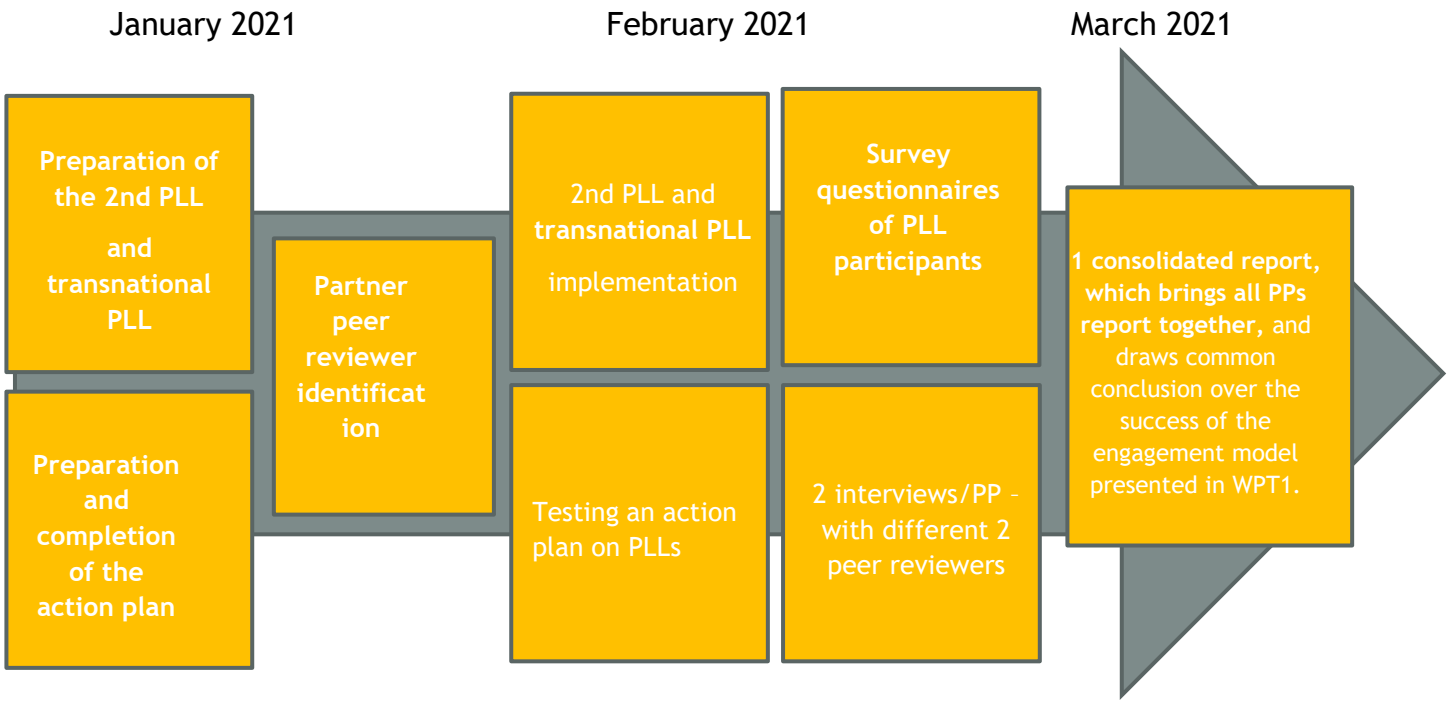


Table 13 Timeline for Future Impact Controlling

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

8. Abbreviations

Abbreviation	Explanation
AF	Application Form
CE	Central Europe
CEUP 2030	Central Europe Upstreaming for Policy Excellence in Advanced Manufacturing & Industry 4.0 towards 2030
EU	European Union
KPT, HAMAG, PRO, PBN, PIA, PTP, IWU, SIIT, KIT, AFIL	Acronyms for project partners in CEUP 2030
NGO	Non-Governmental Organization
PLL	Policy Learning Lab
PP	Project Partner
RIS3	Regional Innovation Strategy for Smart Specialisation
S3	Smart Specialisation Strategy
SBU	Strategy Boost & Upgrade
TGP	Technology Good Practice
TIN	Trend & Innovation Networks

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

9. Annexes

9.1. Distributed Monitoring Impact Controlling Tool

Link to the Tool's Location:

https://doc.kpt.krakow.pl/share/s/fB4pjEpsSq6h5dykF8GbRQ

9.1.1. *External 1st Peer Review Template for WPT1 OUTPUTS*

EXTERNAL 1ST PEER REVIEW TEMPLATE FOR WPT1 OUTPUTS	
Partner Name	Choose an item.
Institution name	**Free Text**
Region	**Free Text**
Type of organization	Choose an item.
CAMI 4.0 related topics	Choose an item.
Date	Click here to enter a date.
Duration	
Name	**Free Text**
Address	**Free Text**
E-Mail	**Free Text**
Position	**Free Text**

Introduction Text for Interviewer:
(It is recommended that a short project overview is given by the PP to the Interviewee, which includes insight into the plans the PP is working on to deliver value and innovation capacity building in your region)

You are selected as external peer review individual from your regional CEUP 2030 project, due to your expertise, competence, experience and relevance to our quality monitoring programme.

Thank you very much for your time and support.

This interview is part of the impact controlling for the project; your answers will be summarized, so that no conclusion to individuals will be possible.

The objective of the interview is:

- to learn what impact you expect from CEUP 2030
- to receive a first opinion on how the current outputs, work can reach these goals.

There will be next opportunity to meet and exchange again information, presumably in Spring 2021

Overall Objective of CEUP 2030

The main objective is to set up stable innovation network with better understanding & improved knowledge, exchange of new technologies, relevant for Central Europe Advanced Manufacturing & Industry 4.0 (CAMI4.0), fostering the exploitation of available outputs/results that will lead to an upgraded policy-making & implementation.

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Specific Objective of CEUP2030:

- S01_Enhance skills, capabilities and knowledge of people in charge of local, regional and (trans)national Research, Technology and Innovation policies within the triple-helix context
- S02_Ensure awareness and shared sustainable responsibility on using the Research, Technology and Innovation knowledge resources in CE/EU for enhancing policy decision support
- S03_Anticipate and fast-track policy strategies focused on the CE/EU sustainable and continuous development, necessary to promote an aligned joint S3/RIS3 for CAMI4.0 excellence

"Research Question in 1st peer review": focus on specific analysis & updates for second PLL "in practice" (D.T1.2.3), plus insight into early strategic vision for CAMI4.0 Excellence.

WPT1 Objective:

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:

(3) To train and empower people to work in the environment of new technologies (strategically and operatively) regarding policy-relevant decisions

(4) 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.

WPT1 has two main outputs:
OUTPUT1 - CEUP 2030 Policy Learning Lab

This output describes the physical structure which will be created and deployed by each partner to train and empower policy-relevant stakeholders on the CAMI4.0 Topics, to generate sufficient knowledge exchange to support policy-making. This output has a number of parts which must be achieved for it to be considered "complete". It consists of three major parts.

OUTPUT 2: CEUP 2030 Strategy Upgrade & Boost

This output describes the development of a Strategy & Action Plan which sets the vision and working plan for the Trend and Innovation Networks ("TIN") for CAMI4.0.

Category & Question	Answer
A. General	
– When hearing the objectives of CEUP 2030, generally, what opportunities do you expect this project to bring to your Organization? Your region? Central Europe?	**Free Text Response**
– If you know Interreg Central Europe (https://www.interreg-central.eu/): How relevant do you guess CEUP2030 for Interreg Central Europe is?	**Free Text Response**

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

B. Relevance & Effectiveness *(referring to the relevance of the project work to the objective and aim of the project, and effectiveness at building a sustainable transnational support structure with sustainable linkages & enhancing regional innovation capacity*	
– How relevant and effective is the Policy Learning Lab (OT1.1.) in reaching the project's wider aims & objectives? What would you change?	**Free Text Response**
– Could the content in PLL be quickly felt and understood? What would you change?	**Free Text Response**
C. Value- Creation *(referring specifically to the project's future activities using WPT1 outputs, to showcase how value can be created with transnational support structures - for instance: access to knowledge, personal networking, concrete cooperation)*	
– How can the Policy Learning Lab (OT1.1.) create value for your region's key stakeholders?	**Free Text Response**
– How can the results of CEUP 2030 be utilized to create added value for your region's key stakeholders?	**Free Text Response**
– How can Strategy with action plan (OT.1.2) create added value for your region's key stakeholders?	**Free Text Response**
D. Sustainability/Transferability *(referring specifically to the ability of the work package outputs to be utilized for other RIS3 aims & integrated into other initiatives to sustain and transfer results)*	
– What are the strengths, weaknesses, and where do you see the opportunities and potential challenges in Industry 4.0 in your region and country?	**Free Text Response**

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

– How can the PLL results be used to support creation/upgrade of RIS3? Or Other Initiative(s)?	**Free Text Response**
– Where do you want to see your region, country, related to CAMI 4.0?	**Free Text Response**
E. Closing Remarks	
– What other comments or recommendations do you have about CEUP 2030 and its goals & visions, which have not been mentioned/asked yet?	**Free Text Response**

9.1.2. *EVALUATION TEMPLATE FOR 1ST PLL*

1ST POLICY LEARNIG LAB EVALUATION FORM				
Partner Name	Choose an item.			
Institution name	**Free Text**			
Region	**Free Text**			
Type of organization	Choose an item.			
CAMI 4.0 related topics	Choose an item.			
Date	Click here to enter a date.			
Duration				
Name	**Free Text**			
Address	**Free Text**			
E-Mail	**Free Text**			
Position	**Free Text**			
Content (Insert an X in the box that shows your opinion)				
	Excellent	**Satisfactory**	**Unsatisfactory**	**Not Applicable**
General information (time, location, etc.)				
Instructor information (contact info)				
Goals and objectives clearly stated				
Assignments clearly described				
Clarity of instructions/questions				
Content matches workshops objectives				
Appropriate level of challenge				

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.

Did the workshop meet your expectation				
Would you have recommended to others				
Activities (Insert an X in the box that shows your opinion)				
	Excellent	Satisfactory	Unsatisfactory	Not Applicable
Clear instructions provided				
Helped develop understanding of new principles or concepts				
Helped develop new skills				
Appropriate level of challenge				

ADDITIONAL COMMENTS AND SUGGESTIONS:

_____

_____

This project is co-financed by the European Regional Development Fund through Interreg Central Europe.