Interreg CENTRAL EUROPE
European Union
European Regional Development Fund
CEUP 2030

POLICY INTELLIGENCE DASHBOARD (PID) DESIGN & ELABORATE TECHNOLOGY RADAR TO IMPROVE CE/EU

D.T1.3.1 – A manual to establish the IT-Based Policy Intelligence Dashboard, with CAMI4.0 Tech Radars and Industry Risk Heat Maps on Technology Trends

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Document Control

Document Summary	
Project Number	CE1662
Project Title	CEUP 2030
Work Package/Activity	A.T2.3 – Establish PID to Translate TINs Work into Future Robust Policy & Strategy Building
Deliverable	D.T2.3.1 – PID Design & Elaborate Technology Radars to Improve CE-EU Policy Making
Deliverable Responsible (if applicable)	PP1 / KPT
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Dissemination Level		
PU	Public	
PP	Restricted to other programme participants	
RE	Restricted to a group specified by the consortium	
CO	Confidential, only for members of the consortium	CO

Document History			
Date	Version	Issuer	Description of Changes
09.12.2020	1.00.00	MCR	Working draft, for review

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

Executive Summary

Project Overview

CEUP 2030 aims to generate stable innovation networks which foster better understanding on **C**entral Europe **A**dvanced **M**anufacturing and **I**ndustry **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 use-cases disseminated within the project, 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.

Work Package and Activity Overview

The overall objective of WPT2 links to the project's specific objective of ensuring awareness and shared sustainable responsibility on using research, technology and innovation knowledge resources in CE/EU for enhancing policy decision support.

The challenge manifests in two sub-objectives which are:

- To coordinate technology experts across the CE/EU regions for solution-oriented trend monitoring (the Trend and Innovation Networks)
- To streamline, process and manage the knowledge for improved policy decision making, in a practicable and sustainable manner (Policy Intelligence Dashboard).

The specific activity which is of relevance for this document is Activity A.T2.3, which is a common activity for all WPs and covers the development of the project's Policy Intelligence Dashboard, which should translate the Trend & Innovation Network knowledge into future robust policy and strategy building.

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

- Establishing links to key good – practice tools which can power the policy intelligence dashboard;
- Explain the process for the key requirements of the Policy Intelligence Dashboard;
- Establish the working processes to develop these key requirements into a wireframe/base operating framework;
- Establish the working processes to develop the tech radar and risk heat maps on technology trends;
- Develop a link to the use-cases the Partners will develop on policy-instruments.

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Project-Relevant Reference Material & Reading Prerequisites

(1) **CE1662 CEUP 2030 Application Form** (Version 1, 07/2019): The application form regarding CEUP 2030 for Interreg Central Europe

(2) **Guidance on Harvesting Agenda** (D.T2.1.1; Version final, 04/2020): A guidance document for A.T2.1 on harvested methodologies for the Trend & Innovation Networks and Policy Intelligence Dashboard.

(3) **Harvesting Agenda on CAMI 4.0 for Trend & Innovation Networks and Policy Intelligence Dashboard** (D.T2.1.2; version 2.0, 11/2020): A report and selection grid for best-in-class use of identified outputs and results in WPT2

All documents can be found on the project's central repository - Alfresco

Scope of Document & Deliverable Summary

Deliverable D.T2.3.1 is defined in the Application Form as a manual which provides the guidance required to establish an IT-based Policy Intelligence Dashboard which evidences CAMI4.0 Technology Radars and Risk Heat Maps on Technology Trends.

This document contains the guiding principles which will lead to the steps that PPs must take to deliver their contributions for the reporting deliverables: D.T2.3.2 to D.T2.3.6. These deliverables represent the "Policy Intelligence Dashboard in Practice", which highlight technology trends for the four CAMI4.0 topics. The Document provides background insight necessary to deliver the Dashboards along with implementation procedures and testing procedures.

Audience

This document is directed at all project partnership members, because all PPs are asked to participate in the development of the Policy Intelligence Dashboard. The appropriate status of this deliverable is reflected in the "Dissemination Level" table, on the Document Control page of this Guidance Document.

Change Control Procedure & Structure

The Deliverable Responsible: **Krakow Technology Park (PP01)** 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 KPT. 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 (KPT/PP1) and the Work Package Leader (AFIL/PP6) 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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Contents

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1. Introduction

The purpose of the **Policy Intelligence Dashboard ("PID") Design Manual (T2.3.1)** is to provide the Partners the information which is required to create the Policy Intelligence Dashboard, the key output of WPT2.

It provides the guidance on how to capitalize input from Partner's experiences over the past programming period, to optimize a system of information gathering and dissemination to support policy-decision making.

The document contains three key sets of information:

(1) Background Information on the Policy Intelligence Dashboard– connectivity & key insight on harvesting and project;
(2) Policy Intelligence Dashboard Requirements;
(3) Policy Intelligence Dashboard Implementation; and
(4) Policy Intelligence Dashboard Testing

The remaining text within this section covers point one, providing background information, connectivity and key insights to set context for the PID.

1.1. Output O.T2.2

As mentioned previously the PID is a key project output of WPT2. The PID should monitor, fine tune and streamline policy-relevant data on technology trends for a fast-track assessment based on solid data gathering and evaluation. It should be tested in a transnational environment and anchored in a network of stakeholders who have the expertise to provide insights and relevant foresight on the CAMI4.0 Topics. This ultimately references the second output of WPT2, the Trend & Innovation Networks. These two outputs are inherently intertwined.

Furthermore, this output should provide the base information, foresight and key impulses which connects to the key use-cases which set the common planning initiative the Partners will develop by the end of the project in the Policy Implementation Framework.

Output O.T2.2	CEUP 2030 Policy Intelligence Dashboard – Refocusing technology trend insights for policy makers	The Policy Intelligence Dashboard monitors, fine-tunes and streamlines policy relevant data on technology trends for a fast-track assessment based on a solid data gathering and evaluation (Tech Radars, A.T2.3). The PID will be tested in a common transnational manner, established and anchored in the activated stakeholder scheme (PLLs, TINs). The PID methodology sets the base for the joint policy exploitation with pilots as well as a future planning for 2021-2027 in T3 and beyond project´s end.	S.O.1.1 - Number of tools and services developed and/or implemented for strengthening linkages within the innovation systems	1,00	11.2021

1.2. Description and Goal of the Policy Intelligence Dashboard

CEUP 2030 Policy Intelligence Dashboard

"Refocusing Technology Trend Insights for Policy Makers"

The PID is built around a core project principle, that policy-makers can directly benefit, and create onward benefits for the entire innovation eco-system, when they have practical and streamlined knowledge and insight on technology trends and potential industry impact.

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Ultimately, CEUP 2030's Policy Intelligence Dashboard activity involves the development and implementation of a practicable and efficient policy tool. This tool should be the medium by which select, decision-relevant information is siphoned from the "daily big-data cloud", assessed and provided in an understandable way to key actors. These stakeholders should benefit from updates and insight on technology trend monitoring, future foresight, and technology and actor scouting, in the form of compact and high-quality technology radars and risk heat maps for Central Europe industry.

The knowledge embedded in the PID should be of high quality and relevance to the policy-making stakeholders. Therefore, the tool should be embedded in a cross-skilled pool of experts who can provide the appropriate insight and interpretation of key technology trends on industry. The knowledge in the PID should be benchmarked and connected to EU and Global Trends, but also provide insights relevant specifically for Central Europe.

It should also be thoroughly tested to ensure relevance is maintained across territorial areas. At least 40 (4/PP) institutions are involved in applying and testing the Policy Intelligence Dashboard, and will be particularly incorporated into the Trend & Innovation Network dialogue sessions, along with the RIS3 Roundtables, to prioritize the brainstorming and upstreaming of the insight into policy-implementation action. This review should be with stakeholders at regional, national and transnational level. It is expected that the PID will be presented to and receive feedback from key RIS3 partners and the DGs (CONNECT, GRO, RTD, REGIO).

The Partnership will, in total, create four "PID in Practice", one for each CAMI4.0 topic of CEUP 2030. These are indicated by the following deliverables:

- D.T2.3.2 PID in practice 1: Policy implementation relevant Tech Radar on IPS, PP10/HAMAG, due in November 2020 (**delayed**)
- D.T2.3.3 PID in practice 2: Policy implementation relevant Tech Radar on Automation & Robotics /PP3/PIA, due in February 2021 (**due soon**)
- D.T2.3.4 PID in practice 3: Policy implementation relevant Tech Radar on New Materials / PP8/PTP, due in May 2021 (**on time**)
- D.T2.3.5 PID in practice 4: Policy implementation relevant Tech Radar on Artificial Intelligence / PP9/PBN, due in November 2021 (**on time**)

Each PID in Practice should represent a tech Radars (TR) including a risk heat map (RHM), where policy-relevant data sources (use cases, organisations, actors, instruments) are identified and classified with a goal to transfer and interpret to policy-decisions. Key use cases (10 per topic) should be presented in an easy-to Within each CAMI4.0 Topic, the partners will be expected to create an aligned demonstration PID, to provide a model for how this information could be provided in an ongoing way to key stakeholders to ensure sustainable data provision.

1.3. Activity Timeline

The output must be delivered and tested in full by November 2021, with each PID in Practice building subsequently on each other. With the shift in TIN management, it is also recommended that the PID in Practice system is simultaneously developed, implemented and tested, with a final delivery for all PIDs in keeping with the November 2021 deadline. This will require coordination between PID in Practice responsible PPs.

However, this shift should be agreed with the JS & PID in Practice PPs.

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1.4. Embedment in CEUP 2030

As stated in the previous section, within WPT2 and between work packages, the Policy Intelligence Dashboard is highly embedded within the other work of CEUP 2030. This is primarily because the PID is the partnership lasting model of how to deliver insight (beyond workshops) in an ongoing and sustainable way to key policy-making stakeholders (and also other stakeholders) who are interested in the four CAMI4.0 topics specifically or Industry 4.0 and Advanced Manufacturing in Central Europe, more generally.

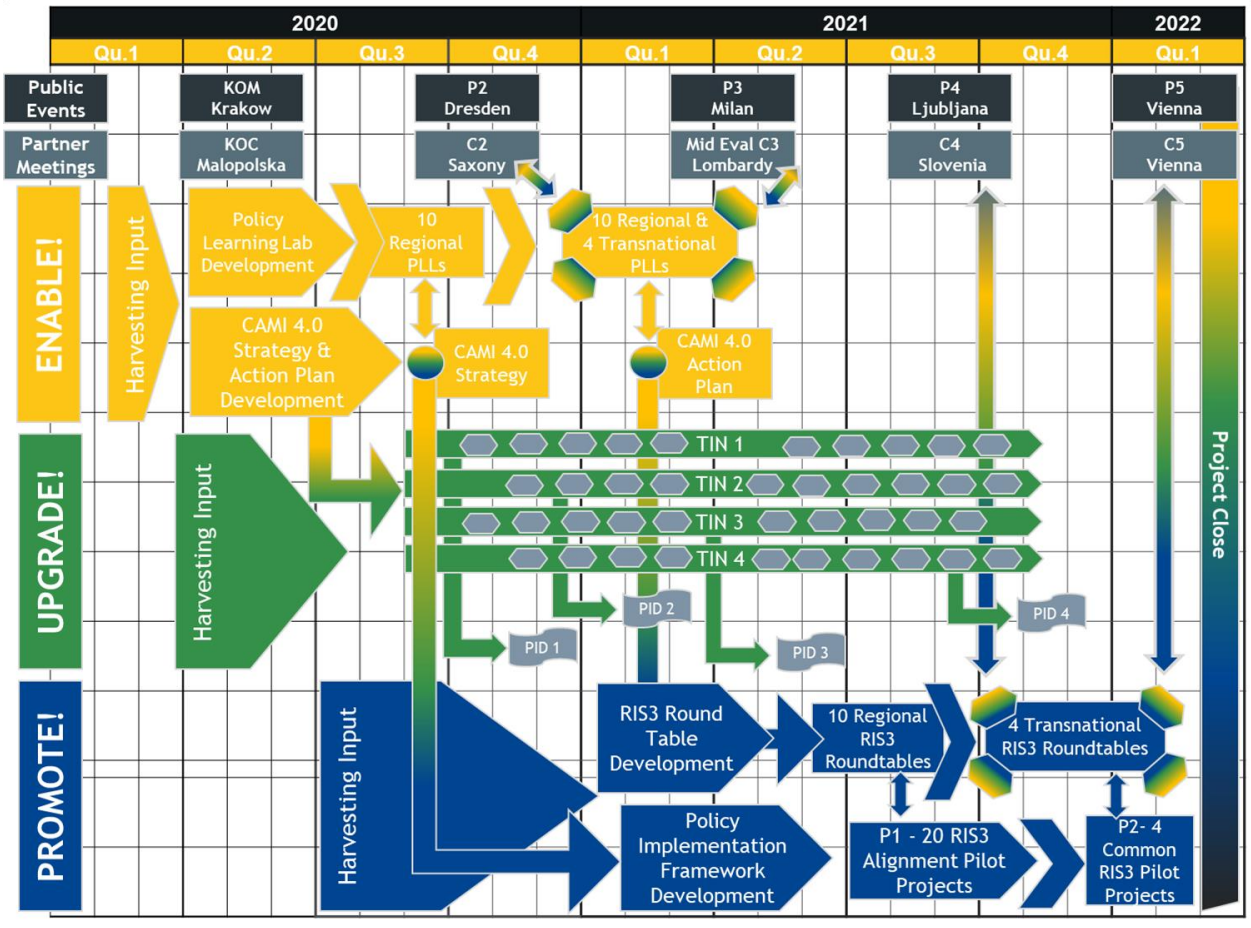

Figure 1 CEUP 2030 Plan on a Page (Source: Author Generated)

Some explicit connections made shown in the image above, are highlighted below:

1.4.1. Connection to the Trend & Innovation Networks (AT2.2)

The strongest connection exists between the PID and the Trend & Innovation Networks (TINs). This is because it is the insights, and input from the TIN Dialogue Sessions, which should be used to fill and validate the PID in Practice. The TINs, which emerge gradually across the next year, are the "playground" where key foresight discussions should take place. These discussion points, technology foresight and development interpretations should be recorded within the PID in Practice. Furthermore, the TIN is the first testing ground for the Trend Radars (and should set impulses within the Trend Radar).

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1.4.2. Connection to the Policy Learning Labs (AT1.2) and RIS3 Round Tables (AT3.2)

The PLLs and the RIS3 Roundtables (the consortia's workshop series with policy-influencing stakeholders, and the lasting policy-making stakeholder engagement forum), are key areas where the Partnership should gain insight on the PID in Practice key Target Group. It is via exchange and presentation of concepts within these forums that the Policy Intelligence Dashboard will gain its purpose & its relevance. It is recommended that Partners develop dialogue with policy-making stakeholders over the PID as a concept in the PLL discussions to gain input on critical elements which would be useful for such stakeholders. The Partners are then recommended to extend the testing ground for the Trend Radar, by presenting the results and insights during the RIS3 Round Table sessions.

1.4.3. Connection to the Policy Implementation Framework (AT3.3)

The Policy Intelligence Dashboard is connected to the Policy Implementation Framework (PIF) and the Strategy Implementation Blueprint (WPT1). The Partners should be working to align the information provided in the PID, particularly success stories, to those recommendations which are provided in the use-cases delivered in the final phase of the project. The insights provided in the PID should lead stakeholders reviewing the document, to a logical understanding about what is presented in the Policy Implementation Framework. For instance, by trying to capitalise on a specific good practice or by trying to align for specific support for an emerging technology area.

This also means that Partners should be using all conversations associated to the development of the draft use-cases for the Strategy Implementation Blueprint, to be considering what would be effective use cases to present in the Policy Intelligence Dashboard.

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1.5. Harvested Results Input for the Policy Intelligence Dashboard

In keeping with the principle of CEUP 2030, the Partners have harvested their knowledge and insight on key tools which have "Policy Intelligence Dashboard"-features or key principles into the project consortium. This exercise showcased a number of things – the fact that there have been a significant number of databases or online forms created over the last programming period to showcase key results, key projects, key products and key actors operating around the topics of Advanced Manufacturing, and to some extent Industry 4.0.

It also demonstrated that there are other tools, like Open Innovation Platforms, Infrastructure Sharing, and B2B market places which bring further opportunities for RTOs and Enterprises operating around Advanced Manufacturing and Industry 4.0 Topics. The Partners believe that benefits to these target groups can be enhanced, and expanded through the upgrading of some of these tool elements towards policy-making stakeholders. A full list of the harvested results can be found in Table 1.

Table 1 Policy Intelligence Dashboard Experience Input Summary (Source: Project Generated)

Partner	Tool	Method Type & Scope	Geographic Scope
1 - KPT	DIHnet.eu platform; Learning Platform (3DCentral)	Forums for Knowledge Dissemination	Europe (Transnational) Central Europe (Transnational)
2 - PRO	EFFRA – European Factories of the Future Research Association, Innovation Portal	Forum for Project Result Dissemination	Europe (Transnational)
3 - PIA	Green Tech Radar	Publication for Foresight on Key Green Technology Topics	Styrian (Regional) with Global Outlook.
4 - IWU	Technologieplattform (technology platform)	Support platform to publicize technology and research results.	Germany (National)
5 - KIT	Synergy Profiling Tool	Open Innovation Platform and electronic database for projects and actors and infrastructure	Central Europe (Transnational)
6 - AFIL	3DC-HyperTree	Hypertree to connect data on projects and actors by theme and country.	Central Europe (Transnational)
7 - SIIT	Cloudifacturing marketplace for digital engineering	A community marketplace for digital engineering tool access	Europe (Transnational)
8 - PTP	Smart Factory Hub Mapping Tool P-tech; 3D Central Hypertree, RAMP (DIH2)	Electronic databases for result sharing and actor connections, and Robotics and Automation Marketplace (B2B)	Danube (Transnational) Cenral Europe (Transnational) Europe (Transnational)
9 - PBN	CRM System – 4STEPS project	Customer relationship management tool to promote company dialogue (questionnaire management)	Central Europe (Transnational)
10 - HAMAG	Smart Factory Hub Mapping Tool	Electronic database for projects, products, funding schemes and facilities	Croatia (National)

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2. PID Requirements Development

Clarifying the PID requirements, from an application form point of view but also from a Partner Consortia, is a critical first step to realising the output. This section will clarify the steps and outcomes of the requirements development process which the Partnership has completed in time proceeding the delivery of this guidance. The Partnership followed a simple two-stage process. The first stage: the inspiration phase, was characterised by open-innovation oriented brainstorming, building on the experiences of each Partner leading to joint ideas on goals and objectives. The second stage: the ideation phase, was characterised by wireframing, connecting the good ideas from brainstorming into simple design which could deliver on the ideas and goals identified. These stages will be further described:

2.1. Stage One – Inspiration and Brainstorming

2.1.1. Adapted Six-Hat Model

To enhance the Partnership's vision associated to the PID Output, the partnership completed an open inspiration session on the electronic tool "MIRO". The Partnership's chosen method during the brainstorming session was a modified "Six-Hats" method, where the Partners role played the key expectations of three key stakeholder groups: Their Policy-Influencing Stakeholders (primary target), Enterprises (on whose behalf many work); and their own Organisation. Associated to these three stakeholder groups, each organisation was asked to complete a 30-minute idea generation associated to three key areas: (1) the Goal of the PID, (2) the Structure of the PID and (3) the intended usage of the PID. With these criteria defined, the Partners used a matrix structure to fill out their vision on how these stakeholder groups would envisage the component area of the tool.

An outcome of this process is visualised in Figure 2.

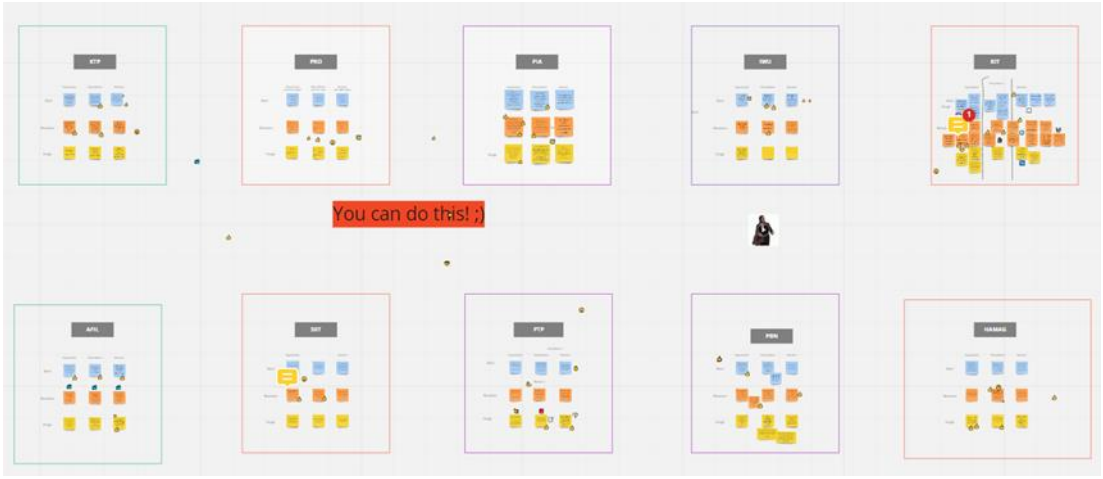

Figure 2 Outcomes of the Inspiration Session on the Policy Intelligence Dashboard (Source: Consortium Generated)

Following the 30-minute inspiration session, each Partner presented their board. After the presentation, Partners were able to complete a "soft-voting" process, and were able to up-vote specific ideas which they liked from other PPs boards. In doing this, the Partnership was able to learn from key experiences and build from each other.

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2.1.2. Inspiration Consolidation

The Lead Partner then took the ideas which were interesting to the Partners, and laid them out on a four-box matrix ideation framework, comparing impact to feasibility. This framework was used to help clarify which ideas would have a large impact and also are effective to implement within the CEUP 2030 PID model, and those which would have a large impact but are more difficult to implement. It was also important to determine what ideas where in keeping with the goals of CEUP 2030 & the PID concept, and what were ideas were not in keeping with the project and out of scope. A visualisation of this matrix exercise is show in Figure 3.

Figure 3 Ideation Four-Box Matrix (Source: Consortium Generated)

Through this iterative discussion, key notes were made on features which would be important within the PID model's delivery, from content to structure. During this session, the requirements originally laid out in the Application Form were laid out and aligned to the PP commentary. For instance, the following key AF requirements included in the discussion:

1. Technology Radar;
2. Industry Risk Heat Maps
3. Complementary Use-Cases (technology & policy-based)
4. Policy-Relevant Data Sources;
5. Key Stakeholder & network connections established

The Lead Partner then reflected on these areas and started mapping out a structural concept, in relation to the PP recommendations, with key words such as "easy-to-use" and "one-stop-shop", "web-based", "online", "combining data and functionality from multiple sources", forming the basis for this distillation of the brainstorming activity.

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2.2. Stage Two –Wireframing and Ideation

2.2.1. Wireframing

The key requirements from the brainstorming phase were taken away and built into a simple website wireframe. The purpose of this exercise was to essentially prototype a concept which met the requirements of the partnership, building on past experiences, and delivering on the key principles of CEUP 2030's PID – **"Refocusing Technology Trend Insights for Policy Makers".** Figure 4 provides an overview of the subsequent wireframing. The functions are described further.

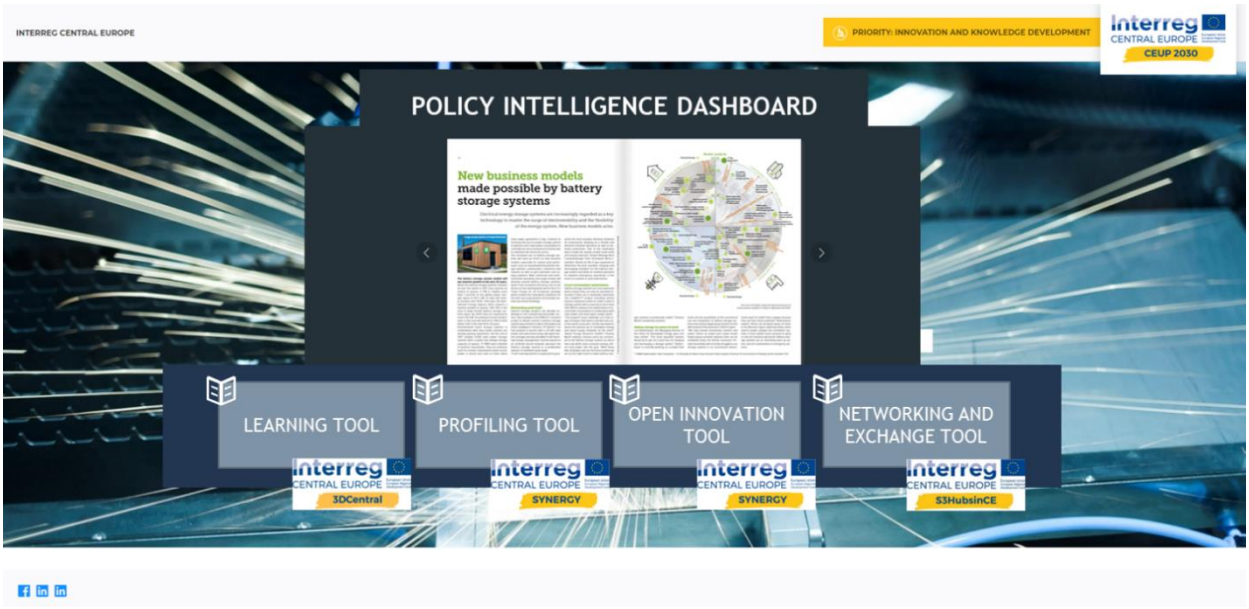

Figure 4 Simple Wireframing of the Policy Intelligence Dashboard (Source: Author Generated)

2.2.1.1. Website & Landing Platform

The wireframe idea focuses on a simple and easy to use, one-stop-shop webpage, which provides a central platform to act as a knowledge hub for multiple tools which were generated across the Programming Period. These tools provide important content insight on key projects, players, products and services available to support Central Europe's advanced manufacturing future. It was determined that the sustainable promotion of these tools, with an appropriate and re-focused user guides for Policy Makers, would provide significant onward benefits for this target group. It also ensures that key insights delivered from partnership across Central Europe would be further developed.

Some other important aspects of this landing platform are as follows:

(1) Clear hyperlink to the Interreg Central Europe Website;

(2) Links to the Project's social media channels;

(3) A Unique URL, hosted within the server domain of a Partner in the project consortia;

(4) Appropriate branding, in keeping with the project's communication obligations;

(5) Branded links to key project network tools;

(6) User Instructions for each linked tool, on how to re-focus for Policy Building in Central Europe

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2.2.1.2. E-Brochure on CAMI4.0 Policy Intelligence in Practice

In addition to this landing platform, there would be an embedded E-Brochure on CAMI4.0 Policy Inteligence in Practice. This concept allows the Partnership to build a unique focus on the four topics of the project (Intelligent Production Systems, Automation & Robotics, Smart Materials and Artificial Intelligence). The E-Brochure would be an interactive publication where the key content, ideated during the Partner's brainstorming session, could be captured. Some of the key elements of these e-brochures are as follows:

(1) Attractive cover and branding clarifying the CAMI4.0 Spotlight Topic Focus;

(2) Market-oriented future foresight articles with a consortium generated technology trend radar for each publication (global in scope, local in its interpretation by experts);

(3) Central European Industry Risk and Opportunities analysis, to promote the "local" interpretation of the technology trend radar.

(4) Technology-oriented use cases to highlight CE good practice of policy instrument use;

(5) Profiles on new research and new enterprises innovating in the technology/challenge sphere;

(6) Profiles on new policy instruments which are emerging as opportunities for Central Europe's organisations, along with key contact from managers of these key, profiled policy instruments.

Each Brochure will be between 10 to 15 pages long, with common features across every technology issue. A common framework will be built to ensure alignment between technology topics. A mock-up of the E-Brochure can be seen in Figure 5.

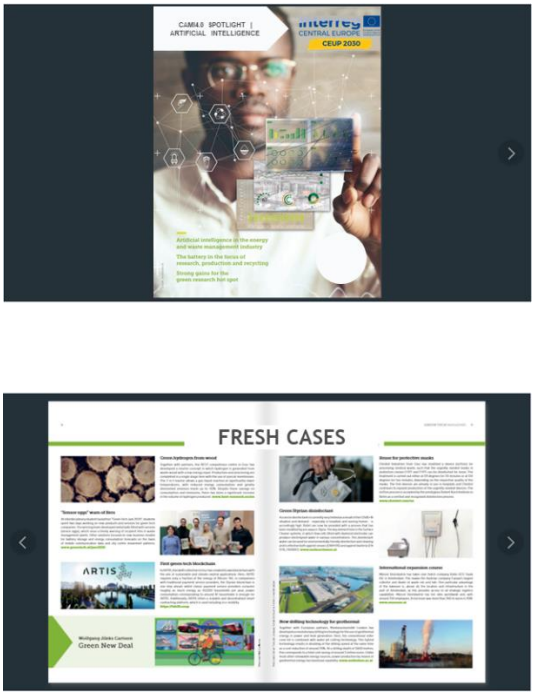

Figure 5 Mock-Up of the E-Brochure, EX: Artificial Intelligence (Source: Author Generated, building on the Green Tech Radar Styria's Format)

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2.2.2. PID in Practice Responsible Ideation

Following the development of the PID Wireframe, a meeting was arranged to showcase the ideas to the Partners who are responsible for implementing the PID in Practice (HAMAG, PTP, PBN and PIA). In this meeting the Lead Partner and their support, presented the idea behind the PID in Practice and the work which was done to consolidate the ideas into the wireframe. There-after the wireframe was discussed, and feedback was gained on the content and functionality which should be prioritised as the Partnership moves towards Implementation.

During this session the PID in Practice Partners, agreed with the wireframe concept and agreed to pursue next steps in keeping with the development of this Guidance document and framework.

3. PID in Practice Implementation

Following the principle of human-centered design, the next stage after inspiration and ideation, comes implementation. The purpose of this section is to provide a process-based overview of how implementation of the Policy Intelligence Dashboard should operate. It is important to note that there are multiple parts to PID in Practice Implementation:

(1) The website/ landing page;

(2) The user-manuals & linking of complementary tools;

(3) The brochure embedding/design

(4) The brochure contents

Within each of these areas, there will be clear management responsibilities clarified. However, all Partners should expect to contribute to the provision of content and review of all material provided in the PID in Practice. Therefore, the implementation section should be read carefully by all Partners, so they can act on the steps required of them to implement Activity A.T2.3.

3.1. Website/ Landing Platform Implementation

The first area of implementation is creating the landing platform or website of the PID. This website should be designed in accordance to the requirements of the AF & PP inspiration/ideation.

Responsible: Krakow Technology Park

Process Description: TBD

(1)

(2)

Other PP Obligations:

- The PP members of other consortia where tools will be linked, are asked to support the LP gain written consent from the project group to connect the tools to the central platform;

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- The Communication Lead (PBN) will support the Lead Partner in ensuring all appropriate linkages to the project's social media channels are enabled, and that all of the communication branding is appropriate.

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3.2. User Manual for Linked Tool Implementation

As previously described, each linked tool from other consortia must be described in a one-page user-manual. The goal of this user manual is to provide a description of the tool and the benefit which policy-making stakeholders can gain from utilizing the tool. Note: In the Appendix of this document sits a user-manual template which each responsible PP must use to create the simple explanation for upload on the main website/landing page.

Responsible:

- 3D Central Tools – Krakow Technology Park (Moodle), AFIL (Hypertree Tool)
- Synergy Tools: PROFACTOR (Profiling Tool) and Karlsruhe Institute of Technology (Open Innovation Tool)
- S3HubsinCE: Fraunhofer IWU (DIHNET, specifically)

Process Description: TBD

(1)

(2)

Other PP Obligations:

- The PPs should review the user manuals presented by the Partners.

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3.3. PID in Practice Brochure Implementation

In order to ensure appropriate branding and design, a common framework will be spearheaded by the Communication Lead, to ensure that the Partnership is aligned in its format for interactive Brochure. This Brochure concept should be intertwined with the key content areas that the Partnership would like to showcase within all CAMI4.0 Brochures. In addition to the Brochure's framework structure, the structure for the Tech Radar and all content stories will be provided

Responsible: Pannon Business Network

Process Description: TBD

(1)

(2)

Other PP Obligations: TBD

- Krakow Technology Park will create the base Technology Radar to be inserted into the basic Brochure Framework;
- The PID in Practice PPs will work with KPT & PBN to make sure the content areas which are most relevant are chosen for data gathering exercises within the partnership;
- To be clarified, other responsibilities.

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3.4. PID in Practice Brochure Content Implementation

This section provides detail on the process which needs to occur in order to gather the appropriate knowledge which will provide the technological and trend insight within the PID.

- Each PID in Practice Brochure will integrate knowledge and insight developed from dialogue occurring within the Partnership's workshop series.
- Each PID in Practice Brochure will have a PP who is responsible, acting as "Editor-in-Chief" of the specific Brochure Issue (those PPs are named in the AF & below).
- Each PID in Practice Brochure will have content provided by all PPs (out of the PPs Expert Network, if necessary – if the PP does not have the specific knowledge).

Responsible:

(1) Intelligent Production Systems – HAMAG

(2) Automation & Robotics – PBN (?)

(3) Smart Materials – PTP

(4) Artificial Intelligence – PIA (?)

Process Description:

(1)

(2)

Other PP Obligations: TBD (but should be linked to the content templates which each PID in Practice has to steward to set the basis of the brochure.

- KPT will work with AFIL and the other CAMI4.0 Topic Leaders to ensure that the appropriate content topic areas are being facilitated out of the Partnership's expert network (as engaged during the TTTDMs).
- Each PID in Practice Responsible will work with their respective CAMI4.0 Topic Leader to gather the content from the Core and Learner Partners involved with the topic.
- Each PP will provide a use case on each CAMI4.0 topic, to be submitted into the brochure
- Each PP will provide insights on the….

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4. PID Demonstration Testing

The AF clearly indicates that the model which the PPs deliver for the PID, must be tested with a balanced group of stakeholders. On the one hand, this is connected to Impact Controlling across WPT2. Therefore, stakeholders who are integrated as peer reviewers in the TTTDM (Technology and Trend Dialogue Meetings), should also be considered the target testers of the Policy Intelligence Dashboard. These Experts should provide you feedback on the process of gathering content for input into the PID in Practice.

The Partners should also look to create synergies between these TTTDM peer reviewers and those organisations who are attending the PLL and RIS3 Round Table. As mentioned previously, Policy-Influencing stakeholders are the key target group of the Policy Intelligence Dashboard. Through the showcasing of the PID in Practice, the Partnership should gain key feedback on how to effectively transfer knowledge to Policy-Makers. These stakeholders should provide tested feedback on the quality of content and the receiving format.

Each PP will need to facilitate the testing of each PID in Practice Brochure, and also the generate testing of the website landing platform. Therefore, in the Appendix of this document, two simple forms can be found to gather feedback.

1) For Expert Feedback (TTTDM) on PID in Practice Content Gathering Processes;
2) For Policy-Influencing Stakeholder Feedback (RIS3 Round Tables) on the PID in Practice Demonstration (quality of content and format).

Also one PP (KPT &/or PBN) will organise to present the Platform to the Joint Secretariat, and representatives of the European Union. This meeting can occur as part of the Partner's regular public conferences, or be a bespoke, bilateral meeting to gain feedback. This should also be consolidated into the final Output Report, uploaded to eMS.

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5. Conclusions & Next Steps

The purpose of this document has been to provide the CEUP 2030 Partnership with detail of the requirements, implementation, and testing procedure expected within Activity AT2.3 "Establish PID to Translate TINs Work into Future Robust Policy & Strategy". Within this activity, four Policy Intelligence Dashboards in Practice will be created as exemplary models of how to connect expert insight on technology and market trends with use cases and insight which can advance policy-makers decision making on the topic of Industry 4.0 and Advanced Manufacturing.

5.1. Call to Action

To summarize, the Partners must work together to generate four, aligned demonstration models associated to each CAMI4.0 topic. These model tools should be the Partnership's demonstration of how to present critical technology trend insights towards a policy-making audience, with a goal of promoting knowledge exchange to enhance policy-related decision making. The Partners will build the tool, implement content within the tool, and present and test the tool to various key stakeholders and target groups in order to gain feedback on the model tool.

5.2. Next Steps

There are multiple next steps which the PPs must deliver, this section summarizes all the key dates and responsibilities for the dedicated actions which need to be delivered in order to complete Activity A.T2.3

Table 2 End-to-End Process for Policy Intelligence Dashboard in Practice

(Source: Author Generated)

Action	Responsibility	Due Date
Provide Draft PID Design Guidance	KPT	**March 2021 (delayed from August)**
Review PID Design Guidance	All PPs	**March 2021**
E-Brochure Content Alignment Discussions	**All PPs**	**March 2021**
Deliver Final PID Design Guidance	**KPT**	**March 2021**
Deliver Draft Landing Platform	**KPT**	**March 2021**
Deliver E-Brochure Template Design Elements	**PBN**	**March 2021**
Deliver Draft User Manual Papers for Linked Tools	**KPT, AFIL, KIT, PRO and IWU**	**March 2021**
PPs work with TTTDM / TINs to Develop Content for the PID in Practice (across all CAMI4.0 Topics)	**All PPs**	**January to August 2021**
Deliver the IPS PID in Practice	**HAMAG**	**TBD**

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Action	Responsibility	Due Date
Deliver the Automation & Robotics PID In Practice	**PIA**	**TBD**
Deliver the Smart Materials PID in Practice	**PTP**	**TBD**
Deliver the Artificial Intelligence PID In Practice	**PBN or PIA**	**TBD**
All documents to be inspected for appropriate Communication branding	**PBN**	**August 2021**
All items uploaded to the PID Landing Platform	**KPT**	**1 September 2021**
PID Demonstrations Take Place, Including to the JS & EU DGs.	**All PPs**	**September 2021**
Demonstration Feedback Meeting	**KPT to Host, all PID in Practice PPs to Summarize Feedback**	**October 2021**
Output Description Written for eMS upload, including Feedback	**KPT**	**November 2021**

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6. Abbreviations

Abbreviation	Explanation
AF	Application Form
ASP	Associated Partner (i.e. Strategic Partner)
CAMI4.0	Central European Advance Manufacturing and Industry 4.0
PI	Policy Instrument
PIF	Policy Implementation Framework
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
TTTDM	TIN Transnational Technology Dialogue Meeting

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7. Annex

7.1. Templates for PID in Practice Brochure Content Gathering

7.1.1. The Base Trend Radar

To be input by KPT.

7.1.2. Form for CAMI4.0 Specific Insight

To be built by KPT, PBN, HAMAG, PIA and PTP.

7.2. User Manual Template

Tool User Manual	
Administrative Information	
Tool Name	[Insert Name of the Tool]
User Manual Owner	[Insert PP name who wrote the tool manual]
Version Control	Version Number of the Document
Description of Project Sponsoring Tool	[Insert Name & funding sponsor of the Tool]
Tool Details	
Description of Tool	Maximum 2000 Characters in English, describing the intended use of the tool and its key goal in Central Europe.
Description of Policy-Maker's Use/Benefit of the Tool	Maximum 2000 Characters in English, describing the benefits a policy-making stakeholder could gain from reviewing the insights in this specific tool.
Log-In Description	Maximum 1000 Characters in English, picture guidance recommended to help a policy-maker log-in and gain access to the tool benefits.
Key Use Tips & Hints	Maximum 2000 Characters.
Any Other Comments	Maximum 2000 Characters
Tool Owner Contact Details	

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7.3. Testing Forms

Testing is a critical part of the PID in Practice exercise, with each Partner facilitating a minimum of 4 (40 across the full partnership) stakeholders to review the PID in Practices.

It is recommended that the Partners gain insight from 2 stakeholder for each PID in Practice (so 2 per CAMI4.0 Topic), one Expert and one Policy-Making Stakeholder. These two stakeholder provide different insight on demo improvements, and therefore will foster a well-rounded feedback on the PID in Practice.

PPs should deliver 4 Expert Testing Forms and 4 Policy Maker Testing Forms to the PID in Practice Leads for the respective CAMI4.0 Topics!.

7.3.1. Test Survey for Experts from the TTTDM

Expert Testing Form	
Administrative Information	
PP Associated to Expert	
Expert's Name	
Expert's Organisation	
CAMI4.0 PID in Practice Under Testing	Choose an item.
Testing Feedback	
Description of Data Gathering Experience	Gain feedback about how the expert experienced the data gathering process.
Description of the Trend Radar Analysis Process	Gain feedback about the expert's experience reviewing the Trend Radar.
Description of the Industry Impact Analysis Process	Gain feedback about the expert's experience in the dialogue session about the impact of specific trends on central Europe's industries.
Key Recommendations to Improve Data Gathering and Insight Generation Process	Maximum 2000 Characters.
Any Other Comments	Maximum 2000 Characters

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7.3.2. Test Survey for Policy Influencing Stakeholders

Policy-Influencing Stakeholder Testing Form	
Administrative Information	
PP Associated to Policy Making Stakeholder	
Stakeholder's Name	
Stakeholder's Organisation	
CAMI4.0 PID in Practice Under Testing	Choose an item.
Testing Feedback	
What is the stakeholder's feedback on the aesthetics of the PID in Practice (Website & Specific E-Brochure)	
What is the stakeholder's feedback on the use-cases presented? What value do they see in learning about these cases?	
What is the stakeholder's feedback on the industry risk analysis? What value do they see in learning about this expert analysis?	
What is the stakeholder's favourite component?	
What is the stakeholder's view on what should be improved for future version?	
Key Recommendations on Type of Insight Needed in Future Iterations of the PID	Maximum 2000 Characters.
Any Other Comments	Maximum 2000 Characters

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