Enhancing Entrepreneurial Discovery: Advancing Smart Specialisation and Ecosystem Development in Małopolska

Smart Specialisation Community of Practice (S3 CoP)

June 2025

Agnieszka Olechnicka

EUROPEAN COMMISSION

Directorate-General for Regional and Urban Policy
European Commission
B-1049 Brussels

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Smart Specialisation Strategies Community of Practice

(S3 CoP)

completed in June, 2025

First edition

This document should not be considered as representative of the European Commission's official position.

Luxembourg: Publications Office of the European Union, 2025

Table of Contents

List of Figures

Executive Summary

This assessment was designed to support the ongoing transformation of the Entrepreneurial Discovery Process (EDP) in Małopolska. It is currently undergoing a structural consolidation of its seven smart specialisations into four thematic platforms. The assessment had four objectives: (1) to provide recommendations for the development of the two planned platforms; (2) to assess the current stakeholder landscape and identify engagement challenges; (3) to synthesise good practices from Małopolska and other EU regions; and (4) to propose practical tools to scale up and systematise the EDP process.

The assessment employed a mixed-method approach, which included structured desk research (regional strategy documents and European good practices), ten structured online interviews with key actors (regional administration, cluster organisations, research institutions), and a three-day study visit to Kraków that involved in-person interviews and four thematic workshops.

Main Results

The two pilot platforms, Healthy Society and Sustainable Energy and Industry, contributed to regional innovation and sectoral integration despite differences in their maturity, structure, and development needs. The Healthy Society platform builds on the long-standing activities of a specialised life science cluster and benefits from institutional maturity, strategic foresight, structured knowledge exchange, and stakeholder mobilisation. It supported cross-sectoral collaboration through the Regional Knowledge Base, Special Interest Groups (SIGs), and recurring events. The Sustainable Energy and Industry platform, developed in a more fragmented and less formalised environment, activated the ecosystem around low-emission solutions such as biogas, circular economy models, and carbon capture and storage.

Both platforms face persistent gaps in stakeholder representation. In Healthy Society, SMEs from the medtech and biotech sectors, hospitals, and academic institutions remain under-engaged. In Sustainable Energy and Industry, the absence of local governments, vocational educators, and financial institutions limits the platform's capacity. Barriers include institutional constraints, limited awareness of benefits, lack of incentives, and low climate literacy. Across both platforms, companies feel their contributions are insufficiently recognised, and the weak link between engagement and strategic influence reduces their motivation to stay involved.

Thematic ambiguity, especially in the planned platforms, makes it difficult for stakeholders to understand the platform's focus and define their role within it. Inter-platform coordination mechanisms are only partially implemented, resulting in duplicated efforts and fragmented resources. The absence of a shared knowledge base and system-wide monitoring limits the identification of cross-cutting challenges and opportunities. International collaboration remains fragmented and uncoordinated, which hinders the region's ability to engage in EU-level instruments.

The planned platforms – Accessible Services and Quality of Life and Advanced Materials, Processes and Equipment – present thematic potential and relevant institutional involvement

but remain at an early stage. Accessible Services, supported by actors such as the Małopolska Regional Development Agency (MaRR), covers high-impact social areas but lacks a shared understanding of its value. It is not yet perceived as a space for joint action. In Advanced Materials, strong technological foundations and expert communities are in place, but the absence of a unifying leadership and coordinated strategy limits its ability to function as a coherent platform.

Challenges addressed

The report identified key challenges affecting the development and implementation of Smart Specialisation Platforms in Małopolska:

- Structural stakeholder representation gaps include SMEs, hospitals, educational institutions, and local governments.
- Thematic ambiguity and insufficient platform model differentiation limit stakeholder engagement and adaptability to ecosystem maturity.
- Lack of institutional mechanisms linking platform outputs to RIS3 updates or support instruments, reducing participant motivation.
- Short-term project logic, weak public sector anchoring, and fragmented responsibilities across actors undermine strategic continuity.
- Limited inter-platform coordination, duplication of functions, and underutilised potential for international cooperation.
- Delays in implementation and staff turnover disrupt coordination and reduce the visibility of platform activities.

Recommendations

1. Strategic orientation and flexible governance: acknowledge platform diversity; allow sub-platforms and thematic segments; separate horizontal functions; clarify strategical and operational roles; increase Marshal's Office involvement as process owner; improve transparency of RIS3 update procedures.
2. Empowering key ecosystem actors: leverage the role of clusters; introduce participation symbols; develop knowledge brokerage functions; involve underrepresented actors and end-users.
3. Orienting platforms towards real needs and implementation potential: align with business needs and implementation themes; develop non-financial incentives; design around cross-sectoral challenges; scale up successful pilot practices.
4. Societal legitimacy and capacity for interregional collaboration: promote public campaigns on emerging technologies; integrate platforms with the "Innovative Małopolska" brand; strengthen cross-regional capacity; establish a structured mechanism for international cooperation.

1. Introduction

The report aims to assess and support the Entrepreneurial Discovery Process (EDP) in the Małopolska region. The initiative responds to ongoing changes in the regional organisation of the EDP, particularly the consolidation of the original seven smart specialisation areas into four thematic platforms and the progressive reinforcement of the coordination role delegated to external operators, continuously engaged in the EDP implementation since its launch in 2020. The original seven specialisations – Life Sciences, Sustainable Energy, Information and Communication Technologies (ICT), Chemistry, Metal Production, Electrical Engineering and Machine Industry, and Creative and Leisure Industries – have been restructured into four platforms: (1) Healthy Society, (2) Sustainable Energy and Industry, (3) Accessibility of Services and Living Comfort, and (4) Advanced Materials, Processes and Equipment. So far, Małopolska has developed two pilot platforms – in Life Sciences (1) and Sustainable Energy (2) – though neither is fully operational[1].

This report has four main objectives:

1. To provide recommendations for the development of two new platforms, based on lessons learned from the implementation of the pilot platforms.
2. To assess the current stakeholder landscape and identify key engagement challenges, particularly in relation to the platforms that are yet to be established.
3. To synthesise selected good practices from pilot platforms and other EU regions, focusing on platform governance and stakeholder involvement.
4. To propose practical guidelines to scale up and systematise the EDP process across all specialisation areas in Małopolska.

The report consists of six parts. Part 1 introduces the background and purpose of the assignment. Part 2 presents the methodology applied in the analysis. Part 3 assesses the current state of the two pilot platforms developed in the region, focusing on stakeholder involvement, regional knowledge bases, and the platforms' contribution to innovation and sectoral integration. Part 4 reviews the initial methodology used for platform setup and reflects on its strengths and limitations. Part 5 outlines good practices from pilot platforms and other EU regions concerning platform management and stakeholder engagement. Part 6 provides recommendations, including best practices, lessons learned, and methods for identifying and involving relevant participants and stakeholders.

[1] The pilot platforms (1) *Life Sciences* and (2) *Sustainable Energy* were based on the previous structure of seven specialisation areas. As the current approach consolidates them into four broader thematic platforms, the pilots do not fully correspond to the new configuration.

2. Methodological Approach

This report is based on the following research methods:

Desk research. The desk research was conducted in two stages. The first stage consisted of a review of key strategic documents related to the implementation of the Regional Smart Specialisation Strategy (S3) in Małopolska. It included publicly available documents and materials provided directly by the Marshal's Office of the Małopolska Region, including two updated Appendixes on specialisation areas and Regional Knowledge Bases – key output documents from the pilot actions. The second stage, conducted after analysing the material gathered through empirical research, was focused on identifying promising practices relevant to the challenges diagnosed in the region. The analysis included JRC documents, strategic materials from selected regions, and – in greater detail – the case of Catalonia, developed based on consultations with a regional expert.

Structured online interviews. Between 19 and 25 March 2025, ten structured online interviews were conducted with key stakeholders from the regional innovation ecosystem. Interviewees included representatives of regional administration and EDP platform coordinators from the Marshal's Office (Department of Ownership Supervision and Economy, Marshal's Office of the Małopolska Region), leaders of major clusters (Life Science Cluster, Polish Composite Technology Cluster, Sustainable Infrastructure Cluster), as well as representatives of the science sector and business and innovation support institutions (Kraków Technology Park and the Małopolska Regional Development Agency – MARR). The interviews aimed to explore the procedure for establishing the platforms in Małopolska, gather details on the pilot actions, assess their results, and collect recommendations for the platforms currently under development. The interviews were also an essential preparatory step for the study visit and stakeholder workshops. Some interviews involved multiple participants. All interviews were recorded and transcribed for content analysis. Annex I includes the meeting schedule and the list of interviewees.

Study visit in Kraków. A three-day study visit to Małopolska was organised from 31 March to 2 April 2025. It included in-person meetings and interviews with representatives of the Marshal's Office, a separate meeting with a representative of the Małopolska Regional Development Agency (MARR), and a group interview with three researchers from the Mineral and Energy Economy Research Institute of the Polish Academy of Sciences (IGSMiE PAN). A key element of the visit was a series of four thematic workshops dedicated to the EDP platforms: Healthy Society, Service Accessibility and Quality of Life, Sustainable Energy and Industry, and Advanced Materials, Processes, and Equipment. The workshops employed the Mentimeter tool to collect anonymous input and fostered real-time group reflection and prioritisation. All interviews and workshops were recorded and transcribed for further analysis. Annex I provides a detailed agenda of the study visit.

3. Assessment of the Smart Specialisation Platforms

3.1 Stakeholders Landscape

i. The Role of Clusters

The pilot Smart Specialisation Platforms in Małopolska were developed around two Kraków-based clusters, both holding National Key Cluster (KKK) status: the Healthy Society platform was built on the long-established Life Science Kraków Cluster (certified since 2016), while the Sustainable Energy platform was developed around the Sustainable Infrastructure Cluster, Poland's largest cluster in the field of energy-efficient construction.

The Life Science Cluster, launched in 2006 as a bottom-up initiative led by the Life Science Cluster Foundation, has benefited from long-standing support from regional authorities — including the Marshal of the Małopolska Region and the Mayor of Kraków — as well as from major academic institutions such as the Jagiellonian University and the Jagiellonian Innovation Centre (Life Science Park). It brings together over 70 members from the life sciences, healthcare, and biotechnology sectors, including research institutions, hospitals, companies, and civil society organisations. The cluster is a well-anchored and institutionally mature actor within the regional innovation ecosystem.

In contrast, the Sustainable Infrastructure Cluster was formed around a training-oriented organisation (Instytut Doradztwa Sp. z o.o.) and is less embedded in regional governance structures. It started its operations later, with more limited initial support and fewer institutional resources to build upon. Nevertheless, thanks to the cluster coordinator's strong leadership and active engagement, it has gained significant visibility and achieved the status of a National Key Cluster (KKK). The cluster brings together over 120 entities, including businesses, universities (AGH University of Science and Technology, Cracow University of Technology, and the Jagiellonian University), research institutes, and non-governmental organisations.

Despite their different trajectories, both clusters face similar systemic barriers — most notably, the lack of a stable national model for long-term cluster support. The KKK designation provides prestige and access to competitive calls, but does not ensure sustained funding. As a result, clusters frequently compete for limited resources.

The role of clusters as key actors in the regional innovation ecosystem should be appropriately recognised and strengthened, as they offer valuable experience in facilitating cooperation, mobilising enterprises and scientific institutions, and activating their networks of contacts.

ii. Regional Knowledge Base

A key result of the pilot actions undertaken in Małopolska to support the development of Smart Specialisation Platforms was the creation of Regional Knowledge Bases. They provide structured information on entities involved in the platforms.

In the case of the *Healthy Society* platform, 672 out of 943 entries (71%) refer to entities located in Małopolska. Of the 598 entries with defined classifications, 74% (442) are enterprises, 12% (74) are business environment institutions, 6% (36) are healthcare providers, 3% (16) are science and academic institutions, 1% (5) are public administration bodies, 3% (23) are research institutes, and 0.3% (2) are media organisations. The structure reflects the predominance of small and medium-sized organisations (39% and 26%, respectively), while large entities account for 15%. Additionally, 20% of the entities are classified as micro-enterprises.

The database developed for the *Sustainable Energy* platform includes records on 123 enterprises, 32 scientific institutions, 30 energy clusters, 29 associations and other clusters, 10 cooperation networks, and 22 trade media organisations.

The Regional Knowledge Bases offer an important source for understanding the structure of actors involved in the platforms. They cover enterprises, scientific institutions, clusters, cooperation networks, and less conventional yet relevant stakeholders, such as media outlets. In addition to mapping actors, the databases document projects, good practices, publications, patents, events and experts. However, the two databases for the two pilot platforms differ in scope, structure, and maturity which complicates comparative analysis.

Regional knowledge bases should be harmonised and systematically developed as strategic tools for stakeholder mapping, cross-platform analysis, and the coordination of innovation ecosystem actors.

iii. Relational Contexts

As part of the analytical process, workshop participants assessed the current and expected strength of three categories of relationships—knowledge exchange, trust and partnership, and business-related collaboration—using a five-point Likert scale. In addition, they provided associative terms that describe their perception of the platform's current and future vision. The results generally confirm the participants' awareness of the importance of different types of relationships and feedback mechanisms for building durable linkages, even though some discrepancies were noticed (see Fig. 1 and 2 in Annex II).

The **Healthy Society** platform stands out for its institutional maturity and embeddedness in the regional innovation system. Participants understand the strategic role of relationships and mutual feedback in sustaining cooperation and generating impact. While trust and partnership-based relationships received the highest average score (3.92), knowledge exchange (3.67) and especially business relations (3.08) were rated lower, indicating an underutilised potential for cooperation with the private sector. A comparison of the current and desired strength of relations reveals a recognised need to enhance all three types of ties,

particularly with enterprises. The absence of references to specific technologies and the dominance of socially oriented terms (*cooperation, integration, communication*, and *innovation ecosystem*) in the association-based word cloud suggests that the platform functions as a collaborative space, grounded in trust and knowledge sharing. Associations related to the platform's future, such as the *EU innovation hub, tailored knowledge,* and *firms consortia,* suggest an ambition to position it as a systemic actor in cooperation and development, including at the international level.

The Sustainable Energy and Industry platform's goals—focused on climate and energy transition and sustainable development—are reflected in participant associations such as *sustainable development, energy efficiency, circular economy,* and *just transition*, confirming both its alignment with current public policy priorities and the participants' strong thematic awareness. At the same time, the platform is still transitioning from a programmatic setup to a stable cooperation structure, as reflected in the moderate-to-low scores across all three relationship types: trust-based and knowledge-sharing relations were rated at 3.5, while business relations received the lowest score (3.0). Comparing these ratings with the expected levels reveals a significant gap across all dimensions, particularly in trust and partnership (a difference of 1.3 points). This gap is mirrored in how participants envision the platform's future through associative terms such as collaboration space, exchange of experience, dialogue, synergy and potential, pointing to aspirations for a more integrated and relationally grounded cooperation model.

Future actions should reflect the heterogeneity of platform ecosystems. Their varying levels of institutional maturity, structural design, and sectoral engagement require context-sensitive implementation strategies rather than a uniform delivery model.

3.2 Challenges in Engaging Stakeholders

i. Stakeholders Gaps

Both existing platforms face structural gaps in stakeholder representation, which significantly constrain their ability to generate innovation and foster lasting cross-sectoral linkages.

In the case of the Healthy Society platform, the most significant gap concerns the limited engagement of small and medium-sized enterprises from the medtech and biotech sectors, despite their recognised role as a core pillar of innovation in this domain. Even if formally associated with the platform, the companies perceive it as a supplementary rather than a strategic tool. Another notable deficit is the limited engagement of hospitals, despite their presence in the Regional Knowledge Base, even though they possess a unique resource—medical data—crucial for innovation-driven R&D in the life sciences sector. Attempts to integrate hospitals into platform activities, such as through thematic groups (e.g. the SIG on innovative hospitals), have not delivered the intended outcomes. The main obstacles include misaligned priorities, institutional constraints, and a lack of appropriate incentive structures. The academic sector also shows low activity, particularly in education. The initiatives focused

on development of students' competencies and integration of the academic community (e.g. competitions, educational projects) are largely absent.

The most critical gap for the Sustainable Energy and Industry platform is the absence of active participation from local governments, even though municipalities will play a central role in delivering the energy transition. Mayors and local council leaders are not among the intended target groups of the platform's activities. Identified barriers include limited awareness of the platform's benefits, political sensitivity to innovation-related risks, low level of climate literacy, and vulnerability to disinformation. SMEs, due to the staff shortages, also remain not adequately involved. Educational actors are similarly underrepresented: vocational and technical school teachers often lack preparation, curricular rigidity hinders innovation, and systemic barriers persist in school–industry collaboration. In addition, financial institutions — crucial for enabling the green transition — are largely absent from platform activities.

To address persistent representation gaps, platforms should adopt elements of the living lab and quadruple/quintuple helix models by actively engaging SMEs, hospitals, local governments, vocational educators, and financial institutions, each according to their relevance within the platform's specific context.

ii. Role of the Marshal Office

The analysis results, although based on qualitative methodology, clearly indicate that current Marshal Office involvement levels may not fully support the platforms' intended collaborative potential and stakeholder engagement. Stakeholders expressed expectations regarding the Marshal Office's firm and clearly visible presence in platform activities. Their experience shows that invitations issued directly by the regional administration are more likely to gain interest among local governments and businesses. The active participation of regional authorities in key events reinforces the perception of platforms as relevant public policy instruments.

Stakeholders highlighted the importance of formal political support in sustaining engagement, building trust, and anchoring collaborative efforts in regional policy frameworks. Both symbolic visibility, such as consistent branding and public communication, and operational involvement contribute to the credibility of the platforms and their integration into the regional innovation ecosystem.

Reinforcing the institutional position of the platforms is crucial for successful stakeholder engagement. A visible and sustained role of the Marshal Office signals political legitimacy and embeds platform activities within the broader regional development policy framework.

iii. Unclear Platform Scope

The thematic scope of the new Smart Specialisation Platforms, as defined in the Appendix to the programme document (Szklarczyk 2024), has not been sufficiently internalised by stakeholders. Excessive generality or inconsistency with previous specialisation areas hinders

the stakeholders' identification with the topics and limits their readiness to engage. For instance, in the case of the Sustainable Energy and Industry platform, the focus shifted away from themes such as energy efficiency and smart city solutions towards heavy industry and energy transition. Moreover, some specific topics (e.g. hydrogen technologies) had already been developed through independent initiatives at a time when no coherent platform framework existed, making their integration into the current structure challenging. The absence of clearly defined segments for the "Healthy Society" platform for biotechnology, pharmaceutical technologies, or diagnostics raises doubts among stakeholders.

This issue of thematic ambiguity is particularly acute for the planned platforms, leading to misunderstanding over competencies and preventing the development of coherent collaboration structures. Representatives of key clusters and institutions are often unaware of the actual thematic scope that should form the basis for future cooperation. For the "Accessible Services and Quality of Life" platform, participants highlighted the lack of clarity in the title and the thematic inconsistency of the areas it encompasses. Stakeholders from the creative industries and ICT reported difficulty in identifying their place within the platform, with some unable to relate their activities to any of its areas. Similarly, the thematic scope of the "Advanced Materials, Technologies and Equipment" platform is very broad — covering both highly specialised material technologies and data processing, which raised doubts about the coherence of the platform and its ability to engage SMEs.

While broad thematic frameworks should be retained, it is essential to clearly communicate and operationalise the scope of each platform by introducing practical tools for further specification—such as technological niche mapping and the development of sub-platforms.

iv. Misaligned Communication

A clear narrative explaining the platforms' purpose and shared language for collaboration are lacking. At this stage of platforms' development, stakeholders' participation is driven primarily by practical motivations, such as opportunities for joint projects, cross-sector collaboration, or access to knowledge. Strategic motivations related to influencing policy decisions, internationalisation, or prestige are far less common or absent (see Fig. 3 in Annex II). As a result, the platforms currently do not fulfil stabilising, representative, or strategic functions. Their attractiveness lies mainly in their potential for cooperation and tangible implementation benefits. The way the Marshall Office communicates the platforms as elements of innovation policy often fails to resonate with entrepreneurs, whose motivation is driven by concrete and immediate benefits. This functional imbalance highlights the opportunity to build an operational model of platform functions, distinguishing between internal (e.g. coordination, knowledge sharing) and external (e.g. policy influence, strategic representation) roles.

A shared language of collaboration needs to be developed. It has to be grounded in a "language of benefits" that highlights specific opportunities: participation in projects, partnerships, access to new markets, or joint technological solutions. An operational model clarifying stakeholders' expectations and roles within the platforms could be developed to support more effective communication and engagement.

v. Disconnect Between Engagement and Impact

A significant challenge in stakeholders' engagement is the limited sense of agency among platform participants, resulting from the lack of connection between pilot platform outputs and strategic planning at the regional level. The Smart Specialisation Annex—one of the key deliverables of each pilot platform—resulted from extensive work and significant involvement from stakeholders. The Annex was critical in mobilising participants, consolidating knowledge, prioritising technological areas, and increasing business engagement. Although regional authorities presented the Annex as a tool for updating the Regional Innovation Strategy, the document has, so far, had no actual impact on strategic planning or support schemes. The absence of mechanisms linking stakeholder contributions to the strategic direction of innovation development in Małopolska has a detrimental effect: it discourages engagement and deprives platform leaders of a key tool for motivating stakeholder participation.

To strengthen the long-term value of the EDP process, it is important to establish precise and transparent institutional mechanisms for incorporating its results into strategic planning and the design of financial support instruments.

vi. Insufficient Business Incentives

Companies receive insufficient recognition and support for their involvement in platform activities. There is a lack of mechanisms, even symbolic, to acknowledge the substantive and organisational contributions to the entrepreneurial discovery process. As a result, companies, particularly SMEs, increasingly perceive participation as costly and of limited usefulness. The problem is not a lack of willingness to cooperate, but a lack of conviction that engagement in the platform translates into concrete, measurable benefits for their development. Introducing even simple forms of recognition could help overcome this barrier and rebuild companies' motivation to participate.

Mechanisms that reward company engagement should be introduced, ideally within the scope of existing resources. These may include, for example, access to structured and up-to-date contact databases (as used in the Life Science cluster), public recognition for companies active in EDP (e.g. "active partner" status), formal acknowledgement of their involvement in official documents or promotional activities, preferential access to pilot initiatives.

3.3 The Contribution of the Platforms to Regional Innovation and Sectoral Integration

i. Pilot Platforms

The two pilot platforms – Healthy Society and Sustainable Energy and Industry – contributed to regional innovation and sectoral integration despite differences in their maturity, structure, and development needs.

Healthy Society Platform represents a mature and well-established platform, building on the long-term activities of a specialised life science cluster. Its institutional maturity enabled strategic foresight, adequate mobilisation of stakeholders, and structured knowledge exchange. The platform supported cross-sectoral collaboration by facilitating knowledge exchange (regional knowledge base), organising Special Interest Groups (SIGs), and hosting recurring sectoral events such as cluster breakfasts and the international Life Science Open Space forum. These activities helped to build trust, enhance internal cohesion, and raise the visibility of regional capabilities. Current expectations of the stakeholders include further internationalisation (e.g. through EU platforms and international cluster partnerships), greater visibility of the region as a leader in the life science sector, and improved access to strategic information. The cluster aspires to co-shape policy, which requires stable financial frameworks and infrastructure support (e.g. a dedicated technology park).

Sustainable Energy and Industry Platform emerged from a more fragmented and less formalised environment, through bottom-up mobilisation of business actors. The starting point was also a cluster – albeit with more limited experience, a weaker institutional background, and no initial support. Despite these constraints, strong commitment from the coordinating team enabled the platform to quickly activate the ecosystem around low-emission solutions such as circular economy models, biogas, and carbon capture and storage (CCS) technologies. The platform's current technological and functional scope has evolved significantly since the pilot phase, with the addition of the "industry" component. For this reason, the pilot should not be seen as a completed stage but rather as a starting point for further development and broader stakeholder inclusion.

The platform's contribution to sectoral integration involved initiating cooperation among industry, local authorities, educational institutions, and expert organisations. In addition to the need to mobilise key actors (see 1.2.1), the platform also faces the impact of local responses to EU and global policy agendas (e.g. from the USA). Current expectations include branding under "Innovative Małopolska," educational initiatives targeting diverse audiences, and public awareness campaigns to reshape the social perception of technologies whose image remains burdened by persistent stereotypes, such as waste-to-energy plants or biogas facilities.

ii. Planned Platforms

The planned platforms "Available Services and Life Comfort" and "Advanced Materials, Processes and Equipment" present distinct potentials to strengthen regional innovation and sectoral integration, although both currently face structural limitations.

Available Services and Life Comfort addresses high-impact social areas such as public services, education, health, quality of life, and social responsibility. The platform brings together actors with experience in intersectoral collaboration, notably the Małopolska Regional Development Agency (MaRR), which provides stakeholder coordination and networking tools. The sectoral scope of the platform is broad, but includes several strong thematic anchors, notably well-recognised domains in Małopolska, such as the gaming industry and tourism. These assets create favourable conditions for building an innovation framework that connects public institutions, creative industries, and digital services, especially beyond metropolitan areas where integrated service models are critically needed. However, the platform is still in its early stages. There is no common understanding of its added value, and some stakeholders view it narrowly as a digital product (e.g. a knowledge base) rather than a coordination mechanism. Sectoral integration remains abstract, and the platform is not yet perceived as a space for joint action. Its potential contribution to territorial cohesion outside urban centres is under-recognised (See Fig. 1 and Fig. 2 in Annex II).

To address these gaps, one option would be to create temporary, thematically coherent sub-groups focused on specific domains. These could support pilot projects, build trust, and test collaborative formats, laying the groundwork for longer-term integration — while being continuously coordinated and supported through knowledge exchange, face-to-face meetings on key shared challenges, and a sense of collective identity and responsibility. These two levels of engagement — focused sub-group meetings and broader platform-wide forums — naturally follow different temporal and spatial dynamics, with the former enabling more flexible, frequent collaboration and the latter offering structured opportunities for strategic alignment and cross-cutting exchange. Over time, such sub-groups could provide replicable models or reference points for integrating the platform as a whole.

Advanced Materials, Processes, and Equipment has strong technological foundations and high alignment with R&D priorities, particularly in industrial materials, automation, artificial intelligence, and circular economy, offering the highest potential for inter-platform interactions. Its assets include the National Composite Materials Cluster, which has strong international linkages, and major R&D institutions, such as the Oil and Gas Institute – National Research Institute, which is actively involved in low-emission technologies and industrial transformation. However, the platform lacks organisational coherence. It appears that two distinct and, at times, competing visions have emerged: one led by the Polish Composite Technology Cluster, focused on advanced lightweight materials and industrial applications, with strong international partnerships, and another promoted by regional R&D actors such as the Oil and Gas Institute, oriented toward supporting circular economy transformation in SMEs, based on strong ties with local industry and practical experience from projects such as SPIN. Without a unifying leadership structure or coordinated strategy, the platform remains

to be a loosely connected group of expert communities. While its technological capabilities are significant, system-level contributions to innovation and sectoral integration—such as actor coordination, goal alignment, and ecosystem-building—are not yet in place (See Fig. 1 and Fig. 2 in Annex II). Addressing these gaps will be essential for the platform to function as a driver of smart specialisation.

iii. Cross-platform Integration

The current model for selecting and operating platforms within the Małopolska Smart Specialisation (MPS) policy formally provides inter-platform coordination mechanisms—such as meetings of platform leaders—but their limited implementation significantly constrains the system's overall effectiveness. Firstly, the absence of shared management mechanisms and common infrastructure leads to the fragmented use of financial resources. Tasks that, from a public policy and governance perspective, should be implemented horizontally are now duplicated within individual platforms. The example is a development of digital tools and the collection of data on regional innovation actors. Establishing a unified, independently managed regional knowledge base—a shared repository of entities and projects accessible to all stakeholders, regardless of platform affiliation—would enhance inclusiveness and allow participation by actors operating at the intersection of multiple domains.

Secondly, the current structure reinforces thematic silos and hampers the identification of cross-cutting opportunities. Platform activities often overlap and address similar territorial challenges aligned with strategic priorities such as energy transition, public health security, climate adaptation, or water scarcity. Regular inter-platform exchange could support experience sharing, the transfer of good practices, or the joint identification of horizontal challenges. This lack of connectivity limits the development of durable intersectoral relations and the emergence of new, integrated smart specialisation areas based on cross-sectoral and transdisciplinary collaboration.

Thirdly, internationalisation remains underdeveloped at the system level. While individual platforms engage in international projects or cluster consortia, these efforts remain fragmented and uncoordinated. The absence of a mechanism to consolidate and scale up such initiatives regionally may hinder Małopolska's ability to strenghen its role in European cooperation networks. As a result, the region is not fully leveraging key instruments such as Interregional Innovation Investments (I3), S3 Thematic Platforms, Regional Innovation Valleys (RIVs), or Partnerships for Regional Innovation (PRI). This limits opportunities to build joint value chains, strengthen knowledge transfer, and develop lasting interregional links in strategic domains (Boschma, Iammarino, & Olechnicka, 2025).

To strengthen inter-platform coordination within the MPS system, three complementary actions are recommended:

- *Establish horizontal system functions (knowledge management, digital tools, promotion, analysis) operated beyond individual platforms.*

- *Set up a permanent coordination mechanism through regular meetings, cross-cutting working groups, and knowledge exchange.*
- *Introduce a shared monitoring framework to track platform progress, identify cross-cutting challenges, and support evidence-based adjustments to joint strategic actions.*
- *Launch Forum4Progress as a structured cooperation format linking Małopolska's platforms with international partners to foster thematic alignment, B2B matchmaking, and joint project development.*

4. Past Methods for Platform Setup

4.1 Platform Governance Model: Delegation for Effectiveness

The model for establishing Smart Specialisation Platforms in Małopolska follows a decentralised governance approach to the entrepreneurial discovery process (EDP), with operational responsibilities delegated to external agents. The strategic objective of this model was to progressively build the autonomy of platform ecosystems, primarily through externally funded, project-based collaboration. This design is grounded in the assumption, validated by policy experience, that delegating coordination to competent, sector-embedded actors can improve the effectiveness of sectoral consolidation under smart specialisation priorities and enhance regional innovation outcomes. As a result of analytical and consultative processes, four platforms were established, covering seven smart specialisation areas. Two pilot platforms were managed by an operator selected via public procurement. The operator's mandate included identifying a platform animator, coordinating the EDP, overseeing the implementation process, and ensuring the timely delivery of expected outputs. The required deliverables included: a Platform Specialisation Annex, action plan, regional knowledge base, business technology roadmaps, and the organisation of smart lab meetings.

4.2 Strengths

Approaches based on stakeholder agency and a unified operational logic of smart specialisation platforms have been shown to bring measurable benefits to the organisation and the effectiveness of EDP implementation. Such models provide a coherent and transparent framework that enhances regional-level governance and coordination. Relying on already active and institutionally embedded actors allows the process to leverage existing resources, established networks, and accumulated sectoral knowledge. Common methodological standards and a harmonised set of outputs improve platform quality, traceability, and comparability. Moreover, the systematic use of bottom-up discovery tools, including smart labs, knowledge repositories, and roadmap methodologies, has proven effective in identifying high-potential technologies and thematic areas. This approach strengthens the strategic focus of the platforms and reinforces their capacity to contribute to regional smart specialisation strategies in a targeted and evidence-based manner.

4.3 Implementation Challenges

While the applied model reflects a conceptually sound and widely acknowledged approach to structuring smart specialisation platforms, evidence from interviews and workshops in Małopolska suggests that, in practice, its implementation has revealed several limitations. These findings do not undermine the model's validity but stress the need for its context-specific adaptation.

i. Procurement Logic vs Ecosystem Needs

The use of a standard public procurement procedure to select platform operators proved problematic. High formal requirements regarding prior experience in delivering advisory services for public institutions tended to favour entities that were not necessarily the most desirable from the perspective of ecosystem development. At the same time, support for the platforms was delivered through short-term contracts. As a result, coordination was sometimes taken over by entities with no established ties to the regional ecosystem, treating platform management as one of many time-limited projects, or by organisations with relevant experience but operating in different technological domains.

If this model is to be retained, the offer evaluation criteria should emphasise regional embeddedness, preferring documented, long-term engagement in the regional ecosystem, and, when feasible, extend the duration of contracts to ensure the durability of cooperation networks.

ii. Strategic Use of Platform Results

The products developed during the pilot phase (18 distinct deliverables), particularly the Platform Specialisation Annex—which was intended to serve as a key input for the revision of the Regional Innovation Strategy (RIS)—have not been integrated into policy processes. This outcome was at odds with the expectations of operators, animators, and platform participants and significantly weakened stakeholder engagement, especially among business actors. The documents produced as part of the pilots are valued by platform participants and are treated as operational tools. However, to date, they have not been incorporated into the RIS update process, and no official timeline for the revision has been made publicly available.

It is necessary to integrate monitoring and feedback mechanisms and ensure transparency regarding the procedures and timeline for updating the RIS, including incorporating EDP outcomes.

iii. One-Size-Fits-All Trap

The standardised operational logic adopted within the MPS framework, based on a uniform model of platform functioning and a fixed set of expected deliverables, was ineffective given the diversity of platforms and the varying maturity levels of regional innovation sub-

ecosystems. The current implementation scheme does not allow for sufficient adaptation to each platform's specific conditions and developmental stages.

For instance, the "Healthy Society" platform builds on the long-established Life Science Cluster, which has operated in the region for over 18 years. Its maturity would have justified more ambitious objectives than those defined in the tender specification, including a shift from diagnostic activities toward actions targeted at enterprises. In contrast, diagnostic activities were essential within the less developed "Sustainable Energy" platform and contributed to consolidating a previously fragmented sector.

A more flexible operational model that reflects each platform ecosystem's maturity and specific characteristics needs to be introduced. This requires the ability to differentiate objectives, implementation pathways, and expected outputs, enabling mature ecosystems to undertake deployment-oriented actions, while allowing less developed ones to concentrate on diagnostic or consolidating objectives.

iv. Public Sector Anchoring

Greater expectations have emerged regarding the active role of the regional authority in animating and promoting platform activities. While delegating platform implementation to external operators, justified as a means to deepen public–private partnership in the spirit of the EDP, was conceptually sound, it also revealed limitations of a model in which the public authority acts solely as a contracting party. From the agency theory perspective, such an arrangement increases the risk of goal misalignment and information asymmetry, weakening the capacity to ensure coherence and sustainability of actions.

Consequently, difficulties arose in leveraging available regional resources, such as the "Innovative Małopolska" brand or the institutional memory of earlier initiatives. The absence of effective mechanisms for horizontal and cross-platform coordination has reduced the model's overall efficiency and raised stakeholder concerns about its durability and the potential loss of competitiveness in selected areas vis-à-vis other regions.

Regional authorities should act as an anchor in coordinating and ensuring strategic coherence and cross-platform synergy. Their involvement in promotional, integrative, and horizontal activities builds essential governance linkages that reduce fragmentation, enhance the sustainability of platform outcomes, and unlock untapped potential at the interface between thematic areas.

v. Timeline and Engagement

Procedural delays significantly shortened the implementation period of the "Sustainable Energy" platform pilot, which was completed in just three months—much less than initially planned. Expectations regarding results, however, were not adjusted accordingly, which

limited the platform's ability to reach its full potential, despite the determination demonstrated by both the operator and the animator.

Additionally, staff turnover and the erosion of institutional memory created coordination challenges, affecting communication continuity and diminishing the coherence and visibility of platform activities. It is worth bearing in mind that the sectors involved in the platforms operate within distinct temporal dynamics: the pace of learning institutions, political processes, and business activities varies significantly. Such differences amplify the adverse effects of procedural delays and shortened implementation periods. The political sector, in particular, should avoid subordinating all other time perspectives to its own.

Future implementation phases should be governed by realistic timelines aligned with the scope of expected outcomes. In parallel, mechanisms should be introduced to ensure institutional memory and consistency of communication.

5. Good Practices from the Pilot Platforms and Other Regions

5.1 Successful management

The Review of relevant best practices from two existing platforms and from other EU regions that have successfully managed and scaled Smart Specialisation Platforms.

i. Scaling SIG Collaboration: The Case of SANO

The Digital Health Special Interest Group (SIG), developed by the Life Science Kraków Cluster, evolved into an institutional research centre through the strategic mobilisation of EU funding. Initially part of the SIG activities, the SANO project attracted €30 million in funding (H2020 + national), leading to the creation of an independent International Research Foundation in computational medicine. SANO now employs over 80 people and delivers cutting-edge solutions in personalised diagnostics. This case illustrates a scalable pathway: from thematic group to long-term infrastructure, driven by cluster leadership, effective networking, and Horizon Europe synergies.

ii. "Operator + Animator" Platform Model

A dual-actor model proved effective in piloting platforms: a strong cluster acts as the formal operator (e.g. managing procurement), while a specialised, less formalised cluster serves as a thematic animator. This arrangement enables the participation of smaller actors, supports capacity building, improves thematic anchoring, and balances institutional asymmetries. The model facilitates inclusive governance and can serve as a transitional mechanism, especially when younger clusters have expertise but lack operational capacity.

iii. Knowledge Brokers in Public Administration

An analyst from the Marshal Office voluntarily curates and distributes sector-specific intelligence (reports, trends, media news) to platform stakeholders. This practice, praised by recipients, addresses information overload and time constraints. It enhances knowledge flow and supports strategic reflection. Institutionalising such knowledge brokerage—common in advanced RIS3 systems like Catalonia and Emilia-Romagna—could improve ecosystem coordination. Brokers are evidence translators between the government, research, and business sectors.

iv. Entrepreneur-Led Thematic Working Groups

Involving individual entrepreneurs directly in platform structures (beyond institutional representation) improves responsiveness and market alignment. In Umbria, dynamic entrepreneurs in RIS3 working groups diffused ideas rapidly through peer networks and grounded strategies in practical needs. This model fosters early ownership, supports grassroots mobilisation, and counters top-down bias, particularly useful in early-stage platforms. Entrepreneurs act as knowledge brokers and trusted local champions, accelerating project generation.

v. High-Level Strategic Alignment (Mission Integration)

Ensuring the platform's objectives and governance align with broader strategies or missions at regional, national, and EU levels. Catalonia explicitly links its shared agendas with higher-level plans – for example, the BIOHUB CAT agenda is formally recognised as a priority in Catalonia's 2030 Bio-economy Strategy and the National Pact for Industry. Similarly, European missions are used as a compass: experts note that missions help regional stakeholders, creating a more cohesive multi-level approach. This practice is being implemented by embedding mission-oriented goals into RIS3CAT (e.g. ecosystem-based missions for sustainability) and coordinating policies accordingly. The result is greater policy coherence and directionality, which improves the platform's impact by uniting stakeholders around clear, ambitious targets.

vi. International Collaboration and Learning Mechanisms

Embedding structures for cross-regional cooperation and mutual learning in the platform's governance. RIS3CAT 2030's technical committee has a mandate to strengthen international collaboration by connecting Catalan initiatives with European networks and projects. On a pilot basis, the Dialogue4Innovation (D4I) Interreg project serves as a meta-governance experiment, providing a space for Mediterranean regions to test systemic approaches and transfer them into their home institutions. This approach, using interregional "governance experiments" and communities of practice – is ongoing. It boosts effectiveness by importing best practices and fostering a culture of innovation and adaptability within the platform's management.

5.2 Stakeholder engagement and governance

i. Life Science Open Space (LSOS) – Forum + Digital Continuity

Since 2008, the LifeScience Kraków Cluster has hosted LSOS, a hybrid event linking health and quality-of-life innovators. The event evolved into a recognised EU-wide summit backed by a digital platform that maintains year-round collaboration, matchmaking, and joint calls. LSOS enabled international consortia, including the SANO Teaming project. Its continuity and stakeholder ownership (members defending the LSOS brand) illustrate how combining physical forums with digital infrastructures can internalise engagement and scale EU project development.

ii. Access to Knowledge Resources

The Healthy Society platform cluster maintains an extensive internal database of over 700 regional actors, supporting SMEs in finding relevant partners and mapping potential collaborations. Initially created for other purposes, the database now strengthens the platform's operational capabilities. It helps firms navigate the ecosystem and reduce search costs—an embedded support structure valued by businesses and a replicable model of ecosystem intelligence.

iii. Virtual Agora in the Composite Technologies Cluster

The Polish Composite Technologies Cluster introduced digital collaboration tools: a 3D virtual space to present resources, online meeting slots, and chatbots trained on cluster offerings. These tools reduce entry barriers, enable asynchronous collaboration, and expand participation—particularly for SMEs. This "virtual agora" facilitates targeted dialogue and knowledge sharing, making the platform more accessible and dynamic. The approach is easily transferable and enhances inclusiveness.

iv. Open Innovation Platforms

Lombardy's online Collaborative Open Innovation Platform enables continuous engagement beyond traditional EDP formats. Businesses, researchers, and citizens can propose projects and debate RIS3 priorities. Public officials participate directly, fostering transparency and responsiveness. Such digital hubs sustain the entrepreneurial discovery process and help anchor innovation governance in participatory, open-ended dialogue. The model is replicable across regions seeking to scale stakeholder engagement.

v. Quadruple Helix Co-Creation (Shared Agendas)

Multi-actor collaboration (academia, industry, government, civil society) in defining visions, priorities, and solutions. For example, Catalonia's Shared Agendas use participatory

governance models to align diverse stakeholders on shared challenges. The Lleida–Pyrenees–Aran agenda exemplifies a model in which stakeholders collaboratively define challenges and responses across priority areas. This approach is actively implemented under RIS3CAT 2030 (one agenda has already promoted 40+ innovation actions).

vi. Drama Labs for Inclusive Governance

A participatory method rooted in applied theatre, creative drama, and improvisation is used to engage diverse stakeholders in complex policy environments. Drama Labs were developed and tested within the Horizon 2020 project CONTRA – Conflict in Transformations. Pilot cities were Gdynia (Poland), Tilburg (Netherlands), Genk (Belgium), and Drammen (Norway). The urban settings, undergoing socio-economic transitions, provided a context for testing the method to surface tensions around local development priorities and to support more inclusive dialogue on innovation-driven transformation.

vii. Youth Engagement via Challenge-Based Learning

Empowering young people as key stakeholders in innovation ecosystems is a strategic priority in RIS3CAT 2030. Catalonia actively promotes youth involvement through challenge-based and service-learning programmes that connect education with real-world transition processes. For instance, secondary schools, vocational centres and universities are encouraged to involve students in local green and digital transition projects. These methods (already piloted in some Catalan schools) have students actively solve community challenges or deliver social/environmental services as part of learning.

6. Recommendations

6.1 Best Practices and Lessons Learned

Best practices and lessons learned from other EU regions concerning platform setup and stakeholder engagement in the context of EDP. Recommendations will also address governance strategies and methods for improving interregional collaboration aligned with Małopolska's objectives for innovation and sustainable growth.

i. Strategic Orientation and Flexible Governance

Recommendations on institutional architecture and the operational logic of the Małopolska Platform System - MPS:

- Acknowledge the diversity of platform profiles (maturity level, governance structure, and development phase) and move away from a uniform model towards a more flexible approach.
- Maintain a thematic framework, but allow for the creation of sub-platforms, thematic segments, or shared problem-solving spaces.
- Separate horizontal system functions (knowledge base, promotional activities, analytical tools) and manage them regionally.
- Clarify the roles and relationships between the strategic level (Marshal's Office) and platform operators/animators – increase the regional authority's involvement as the process owner (e.g., through visible leadership, strategic guidance, and regular engagement in platform activities).
- Improve the predictability and transparency of the processes for updating the RIS3 strategy and incorporating platform outputs into strategic documents and support instruments.

ii. Empowering Key Ecosystem Actors

Recommendations for people and institutions driving the platforms: clusters, operators, experts, local authorities:

- Recognise and leverage the role of clusters in integrating actors across sectors and innovation communities, building on their embeddedness, thematic expertise, and animation capacities.
- Introduce symbols of participation (e.g. "platform leader" status) to build prestige and long-term motivation.
- Develop the function of "knowledge brokers" within platforms and public administration to ensure systematic information transfer and selective knowledge sharing.
- Involve new actor groups, especially hospitals, local governments and educational institutions, as data providers, key implementing entities and end-users of solutions (e.g. technical schools, municipalities, and civic organisations).

iii. Orienting Platforms Towards Real Needs and Implementation Potential

Operational recommendations to ensure that platforms contribute effectively to innovation, industrial transformation, and cross-sectoral synergies:

- Align platform activities with business needs and implementation-oriented themes (e.g. functional food, CCS, digital health).
- Develop non-financial incentive instruments (access to knowledge, symbolic awards, project preferences), particularly for SMEs and start-ups.
- Design activities around cross-sectoral challenges, such as security-related issues, water management, and energy transitions, as areas for inter-platform collaboration and joint value creation.

- Scale up successful pilot practices, such as the Special Interest Groups as project incubators, the access to knowledge base, Life Science Open Space Conference and Platform.

iv. Societal Legitimacy and Capacity for Interregional Collaboration

Recommendations to enhance the social anchoring and interregional positioning of the Małopolska Platform System:

- Conduct or promote public campaigns related to contested and emerging technologies (biogas, waste-to-energy, CCS), fostering public dialogue and reducing resistance to innovation.
- Integrate platforms with the "Innovative Małopolska" brand – through shared visual identity, media outreach, and inclusion in regional promotion strategies.
- Gradually enhance platforms capacity to operate as cross-regional partners to integrate Małopolska into EU-wide cooperation schemes such as Thematic S3 Platforms (TSSPs), Interregional Innovation Investments (I3), Regional Innovation Valleys (RIVs),
- Establish a structured mechanism for international inter-platform cooperation, potentially under the Forum4Progress umbrella, to boost visibility, learning, and strategic alignment with EU priorities.

It is important to notice that the effectiveness of smart specialisation policy hinges not only on policy design, but also on the development of institutional capacities—analytical, organisational, and political—within the regional administration. In particular, the RIS3 managing unit must be able to interpret and operationalise complex policy objectives, a task which requires more than formal mandates or technical expertise. While the delegation of platform coordination to external operators is a promising model, it presupposes a sufficiently mature and networked innovation ecosystem, which may not yet be fully developed in all regional contexts. Therefore, reinforcing internal analytical capabilities, maintaining a visible and strategic role for public authorities, and fostering learning across the ecosystem should remain core priorities (Szklarczyk, Kwiatkowski 2025).

6.2 Methodology for Identifying Participants and Key Stakeholders

Identifying participants and key stakeholders is a critical strategic element of the Smart Specialisation design and structure of the regional innovation ecosystem. This section outlines two complementary operational methodologies tailored to different contexts: one grounded in data-driven analysis of R&D linkages, the other in co-creation processes organised around shared challenges.

i. Evidence-Based Mapping of Knowledge Assets and Interregional Linkages

One of the possible methodologies for identifying participants and key stakeholders of Smart Specialisation Platforms with a substantial research and innovation component – such as the Advanced Materials, Technologies and Equipment platform – is a comprehensive analysis of bibliometric, patent and scientific project data referring to the specific domain of specialisation in the region. Scientific publications (e.g. Web of Science, Scopus), patent filings (e.g. the EPO/PATSTAT), and participation in EU Framework Programmes (Horizon 2020, Horizon Europe, via the CORDIS database) constitute the empirical foundation for mapping the totality of research and development activity by institutions affiliated with a given region.

This approach makes it possible to allocate R&D outputs to specific smart specialisation domains and identify key actors from all sectors actively engaged in the thematic area. At the same time, co-authorship of publications, joint patent applications and collaborative participation in projects allow us to capture the structure of relationships between these actors. Network analysis methods can reveal intra-regional and interregional connections, including cross-sector collaborations (e.g., between academic and industrial environments).

The methodology relies on objective data sources and standardised analytical techniques, ensuring high scalability and the potential for replication across different regions and sectors. An additional advantage lies in embedding the results in a broader international context by analysing scientific, technological and investment linkages – including knowledge and capital flows from other regions of Poland and the EU. The method has already been applied in the regional (Chumachenko et al., 2023) and national contexts (National Information Processing Institute – National Research Institute & University of Warsaw, 2022).

In the case of Małopolska, analyses relating to stakeholder identification have also been conducted; however, these have typically relied on survey-based approaches (Openfield Sp. z o.o., 2022) or have made use of similar data sources without aiming at the identification of specific actors (Kwiatkowski, 2024).

ii. Stakeholder Identification through Co-Creation around Shared Agendas

In case of platforms, where innovation is highly embedded in complex social systems and spread across diverse sectors, as in the Accessible Services and Quality of Life platform, stakeholder identification requires a more flexible and participatory approach. This platform spans a broad spectrum of domains, including user experience design, the gaming industry, tourism and leisure, digital education and research tools, Smart City systems, FinTech, e-commerce support, immersive technologies, and IT-based solutions that enhance working conditions, mobility, safety, and community engagement. In such cases, sectoral mapping based on scientometric methodology fails to capture the breadth of actors involved. Instead,

the Shared Agendas methodology developed under Catalonia's RIS3CAT 2030 provides an adaptive model for stakeholder mobilisation around societal or territorial challenges. These agendas function as collaborative platforms where actors from the quadruple helix jointly define visions, priorities, and actions related to a common challenge (e.g. urban wellbeing, digital inclusion, active ageing). The Opportunities Discovery Mechanism (MDO) supports the process, which ensures continuous stakeholder involvement and flexibility to adapt priorities over time. Additionally, creative methods may complement this model. While the Shared Agendas approach fosters solution-oriented collaboration around shared challenges, creative methods such as Drama Labs—rooted in participatory theatre and tested in the Horizon 2020 CONTRA project—enable critical, embodied reflection on underlying tensions, particularly in socially embedded and conflict-prone innovation settings.

Applied to the context of Accessible Services and Quality of Life, this methodology enables the emergence of transdisciplinary communities of practice, where designers, technologists, cultural actors, social organisations, municipalities, and citizens co-create actionable solutions. Participatory tools such as innovation camps, collaborative labs, citizen dialogues, drama labs, and challenge-based learning formats help to identify relevant actors and simultaneously build trust and long-term engagement through shared experimentation. This method recognises and legitimises non-institutional innovation actors and fosters horizontal interaction between different innovation cultures.

Moreover, this methodology is particularly suitable for horizontal actions across multiple platforms. In the case of Małopolska, where four Smart Specialisation Platforms operate in parallel, this agenda-based, co-creative approach offers a structured yet flexible mechanism to identify shared challenges that cut across platform boundaries and bring together stakeholders from different thematic areas.

These two complementary methods are particularly relevant in the context of Małopolskie, where both the redefined existing platforms and those still in development differ significantly in institutional maturity and thematic structure.

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8. Annexes

Annex I. List of Interviews and Meetings

Online Meetings Agenda
Wednesday, 19 March

- Interviewees: Magdalena Maciejewska-Gębiś (Healthy Society Platform) – Magdalena.Maciejewska-Gebis@umwm.malopolska.pl
  and Paweł Soja (Acting Head, Innovation Development Team, Department of Ownership Supervision and Economy, Marshal Office of the Małopolska Region)
- Interviewee: Kazimierz Murzyn (Life Science Cluster) – kmurzyn@lifescience.pl
- Interviewees: Kacper Krupiński (Advanced Materials, Processes, and Equipment Platform) – Kacper.Krupinski@umwm.malopolska.pl
  and Paweł Soja (Acting Head, Innovation Development Team, Department of Ownership Supervision and Economy, Marshal Office of the Małopolska Region)
- Interviewee: Andrzej Czulak (Polish Composite Technology Cluster) – andrzej.czulak@kompozyty.net

Friday, 21 March

- Interviewees: Magdalena Klimczyk (Accessible Services and Quality of Life Platform) – Magdalena.Klimczyk@umwm.malopolska.pl
  and Paweł Soja (Acting Head, Innovation Development Team, Department of Ownership Supervision and Economy, Marshal Office of the Małopolska Region)
- Interviewee: Monika Machowska (Kraków Technology Park) – mmachowska@kpt.krakow.pl

Monday, 24 March

- Interviewee: Jerzy Kopeć (Director, Department of Ownership Supervision and Economy) – Jerzy.Kopec@umwm.malopolska.pl
- Interviewees: Anna Wojsa (Sustainable Energy and Industry Platform) – Anna.Wojsa-Swietlik@umwm.malopolska.pl
  and Paweł Soja (Acting Head, Innovation Development Team, Department of Ownership Supervision and Economy, Marshal Office of the Małopolska Region)
- Interviewee: Irena Łobocka (Sustainable Infrastructure Cluster) – il@klasterzi.pl

Tuesday, 25 March

- Interviewee: Jerzy Fugas (Intelligent Specializations Management Team) – Jerzy.Fugas@umwm.malopolska.pl

In-Person Meetings Agenda – Kraków
Monday, 31 March

- Initial Meeting with the UMWM Management Team – 56 Racławicka Street
- The Department of Circular Economy, Mineral and Energy Economy Research Institute of the Polish Academy of Sciences (7 Wybickiego Street)

Interviewees: Head of Division, professor Joanna Kulczycka, pof. Zygmunt Kowalczyk, dr Agnieszka Nowaczek

- Department of Innovation and Business Development, Małopolska Regional Development Agency (11 Kordylewskiego Street)
- Interviewee: Deputy Director, Anna Sowa-Jadczyk

Tuesday, 1 April

- Workshop: “Healthy Society” Platform
- Workshop: “Service Accessibility and Quality of Life” Platform

(Marshal’s Office of the Małopolska Region, 56 Racławicka Street, Room 414.)

Wednesday, 2 April

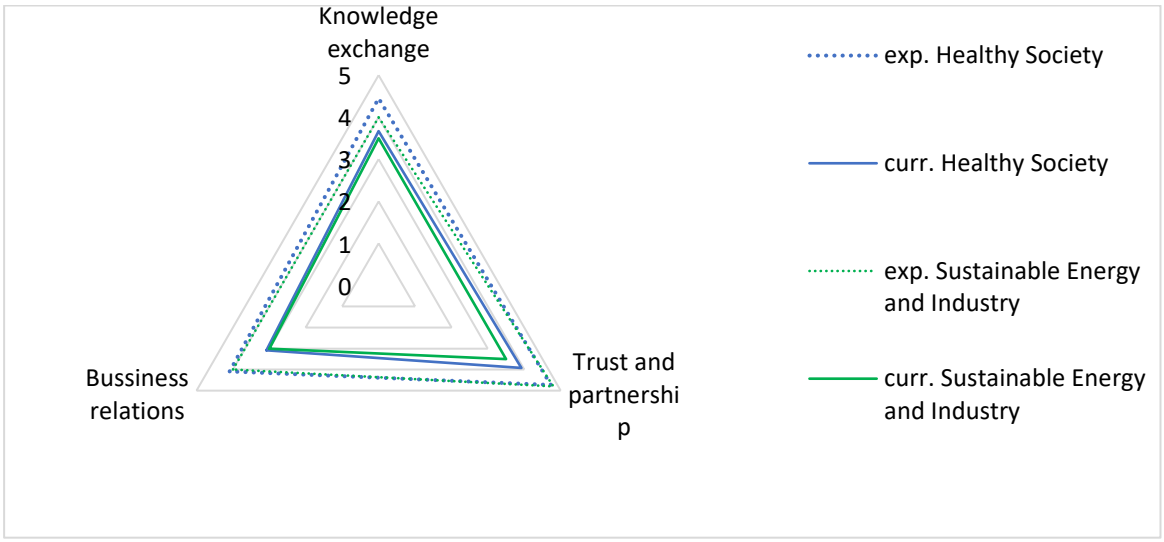
- Workshop: “Sustainable Energy and Industry” Platform
- Workshop: “Advanced Materials, Processes, and Equipment” Platform
- Summary Meeting with the UMWM Management Team

(Marshal’s Office of the Małopolska Region, 56 Racławicka Street, Room 414.)

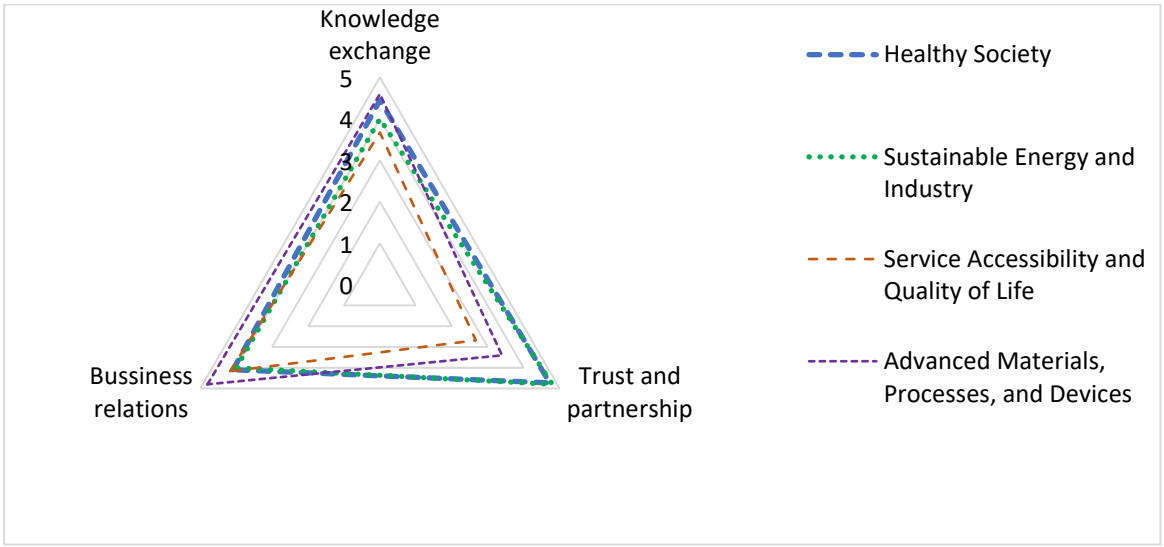
Annex II . Selected Results of the Mentimeter Exercise during Platforms Workshops

Fig. 1. Types of relations in the Smart Specialisation Platforms (current vs. expected).

a. Existing Platforms (current and expected relations)



b. Planned Platforms (current relations)



Source. Based on workshop data

Fig. 2. Clouds of associations with the current and future vision of the Smart Specialisation Platforms in Małopolska

Healthy society (state of the art)

Sustainable energy and industry (state of the art)

Healthy society (vision)

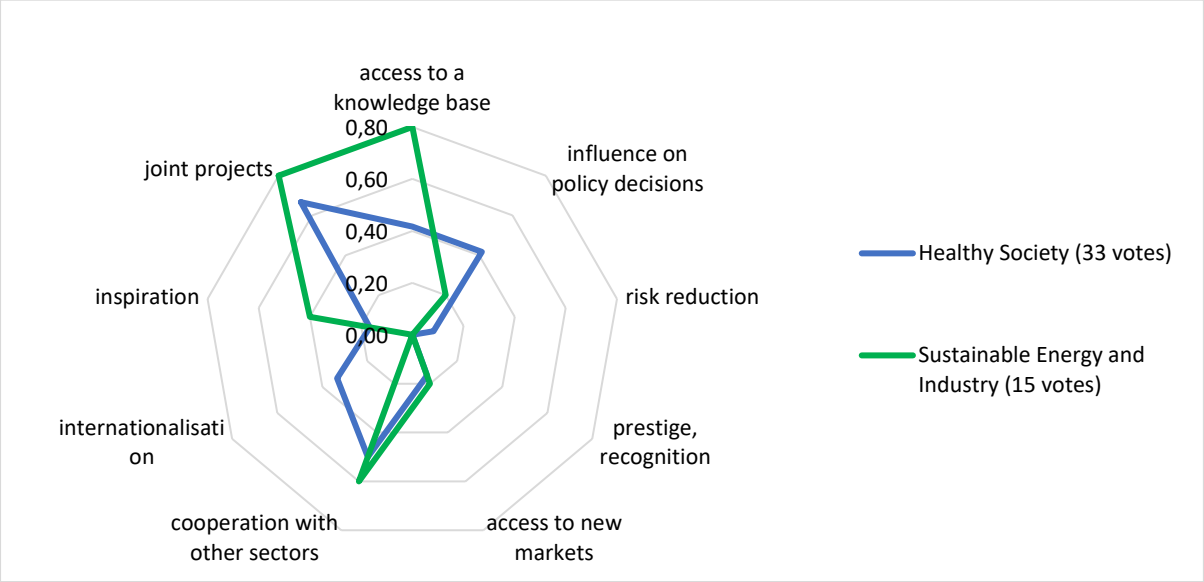
Sustainable energy and industry (vision)

Available services and life comfort

Advanced materials processes and equipment

Source. Based on workshop data.

Fig. 3. Motivations for Platforms engagement (choose 3 out of 9 the most important motivations).



Source. Based on workshop data.