Integrating the territorial dimension for cohesive S3

Policy Recommendations

Policy learning document
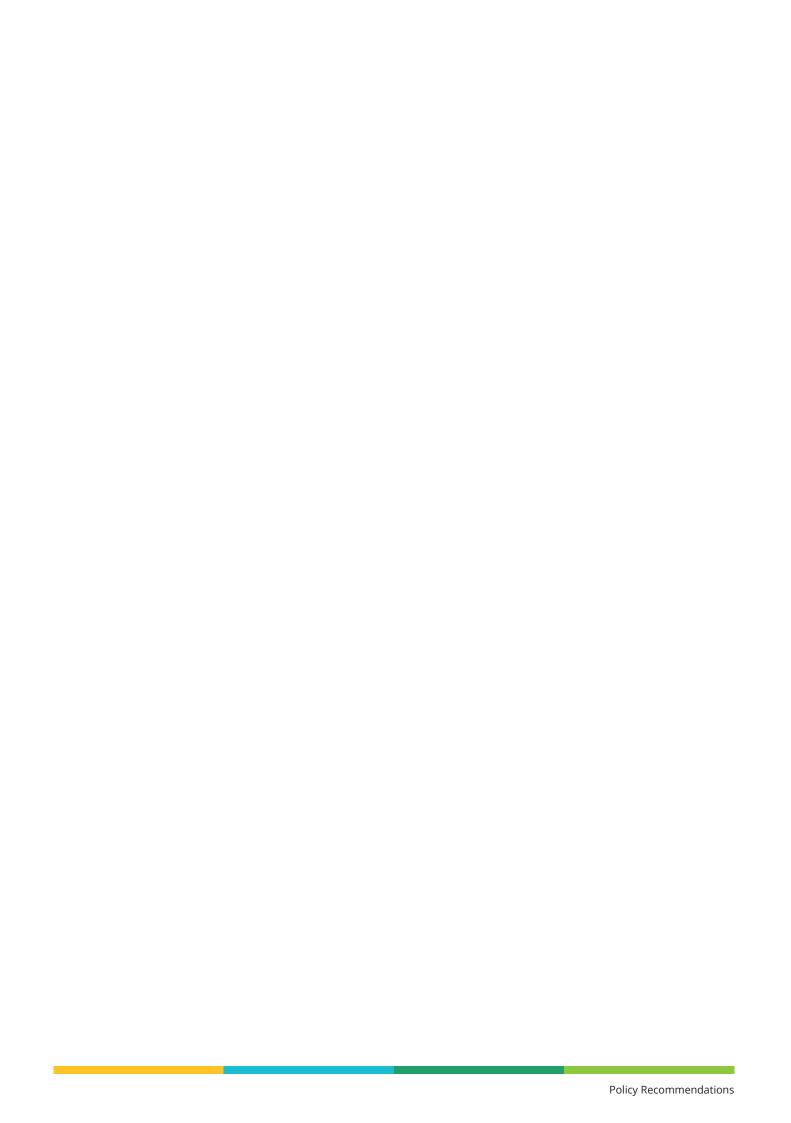
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1. Introduction

Regional and national governments play the main role as managing authorities of smart specialization strategies (S3) in the European Union (EU). Meanwhile, cities and other sub-regional levels typically remain unaddressed as potential managers/leaders/facilitators of these processes in an explicit way within the main S3 policy initiatives. Notwithstanding, some of them are already playing a role in their areas of influence.

Multiscale coordination allows for S3 to draw on local knowledge and strengths as demanded by place-based policy agendas, while benefiting from the policy-making capacity that often only exists at higher levels of government. This place-based approach to S3 fits with arguments for making the territorial dimension of S3 explicit and for a territorial focus of smart specialization.

Moreover, multilevel governance (MLG) that considers sub-regional governments together with regional, national and EU levels can increase the overall effectiveness of S3 strategies. Multi-level governance is defined in this context as a complex process of collaboration between different levels of governments and public administrations, with the aim of opening up S3 to other actors (in the production and knowledge systems) simultaneously and at various scales.

Starting in 2019, the Interreg Cohes3ion project aims to improve partners' S3 governance and related policies though the integration of the territorial dimension. The project brings together 10 institutions from 8 regions:

• Beaz, the competitiveness and innovation agency of the Provincial Council of Bizkaia (Basque Country) (Lead partner)

• Azaro Foundation (Basque Country)

• Southern Regional Assembly (Southern Region Ireland)

• Calabria Region (Calabria)

• North-West Regional Development Agency (North West Romania)

• Business Metropole Ruhr (Ruhr Metropolis)

• Region Stockholm (Stockholm)

• Office of the Marshal of the Mazowiecke Voivodeship of Warsaw (Mazovia)

• Welsh Government (Wales)

• Orkestra – Basque Institute of Competitiveness (advisory partner)

The first phase of the project (2019-2021) was focused on sharing experiences and learnings among partners and through a series of activities, such as a smart territorial mapping, case study discussion, peer review exercises and thematic workshops. These learnings will shape the development of Regional Action Plans, which are to be implemented in the second phase (2021-2022) in each of the regions to upgrade their selected policy instruments.

This document of policy recommendations is the third policy learning document. The first one was focused on Smart Territorial Maps and the second one provided a guide to the Good Practices uncovered during the first phase of the project. This document aims to synthesis learning from the project in policy recommendations. The next Section presents a conceptual framework to provide structure to the analysis. The third section then summarises the specific challenges and areas for improvement identified by partner regions during their smart territorial mapping processes. The fourth section

synthesises these challenges and combines them with the insights stimulated by the initial conceptual framework to propose five sets of concrete policy recommendations.

2. Conceptual Framework to Structure Policy Recommendations

The framework we use in this document to structure the policy recommendations is the one proposed in the methodology document that has guided the project.

Figure 1. Pillars for the construction of multilevel governance for S3

Source: Larrea, M., Estensoro, M. and Pertoldi, M. (2019) Multilevel governance for smart specialisation: basic pillars for its construction? S3 Policy Brief Series. Joint Research Center. Luxembourg: Publications Office of the European Union.

The method proposes four pillars for a more efficient implementation process of the construction of multilevel governance for S3:

a) **Complexity.** We take a definition of territorial complexity as a situation where there are multiple governments (national and regional governments, city councils, county administrations, etc.) that are autonomous but interdependent. They might have different perspectives on what the problems of innovation, S3 and

MLG are and what the solutions might be, but none of them has the hierarchical power to instruct the others on what to do. To face such complexity, the method in this document proposes evolving from linear approaches based on planning to emergent ones. In a linear approach, policy makers first analyse the problem, gather information about related issues, make decisions and, afterwards, use their time and dedication to implement what was planned. The emergent approach is the second pillar of the method.

b) **Emergent strategies.** The key element to develop emergent strategies is to understand that emergence is not a kind of laissez-faire, or a synonym for improvisation. In the case of emergence based on learning and negotiation, as we are proposing in this methodology, spaces and procedures to learn and negotiate must be constructed in an active and sustainable way. Considering this, the final two pillars are two specific elements that help work on the pillar of emergence.

c) **Context specificity.** Part of the features that make each region different when implementing S3 strategies are conditions that could be described as "soft" contextual conditions. These are often difficult to detect or diagnose, though they play a critical role. They are critical to understand the capabilities of a territory that determine its ability to successfully implement S3.

d) **Reciprocity.** Among the different stakeholders in the implementation process there needs to be a mutual recognition of each other as a significant actor in S3 processes.

Mutual recognition depends on the one hand, on the role attributed to the different types of organizations (governments and others). Literature has mostly emphasized the role of regional governments while sub-regional governments have got much less recognition. On the other hand, reciprocity depends on trust.

3. Key Features of the Project that Inspire Policy Recommendations

The process to define Smart Territorial Maps (STM) helped display strengths and areas of improvement in the different regions regarding multilevel governance of S3. In the following paragraphs we synthetize some of the main conclusions that inspire the policy recommendations.

3.1 Overview of specialization synergies and governance strengths

In relation to the synergies and complementarities of priorities/capacities linked to smart specialization, most of the partner regions consider that **despite the existence of gaps that need to be addressed, there is in general an alignment of strategies among different territorial levels analysed in their regions**. In some cases, this alignment responds to a deliberate intention and explicit work to seek synergies.

Some partner regions, such as Bizkaia and Stockholm are making a deliberate effort to include the local level in their efforts to develop multilevel governance. For instance, partners from Bizkaia consider that the regional RIS3 strategy is quite adequately rooted and aligned at different territorial levels. On the other hand, there are cases such as **North West Romania**, where greater complementarity is sought between the national S3 and the regional RIS3. In the case of **Stockholm**, not only is there alignment between region-district-municipality, but an effort has also been made in the inter-regional dimension, through a cross-regional collaborative platform (Stockholm Business Alliance).

Mazovia also notes complementarity in national and regional S3 priorities, although the local level is not yet considered a relevant focus of attention since communes focus on very general local economic development actions. **Wales** finds synergies between the Welsh and UK strategies, both in terms of innovation and development objectives, as well as in some specific S3 priorities and within some specific initiatives, such as City Deals (currently three, with a possibility of a fourth one), which are reflected in different plans and actions. In the case of **Calabria**, due to the relevance given by Calabria Region to improving the governance system of RIS3, there has been little focus until now on analysis of the differentiated capacities and strengths of the territories.

Ruhr and **Southern Region Ireland** have noted a special need to work on the S3 strategies developed by higher territorial level institutions in their regions – North West Westphalia and Ireland – because they consider that relevant capacities and priorities of their regions are not sufficiently present nor territorially targeted in these strategies. However, in **Southern Region Ireland** although the local authorities develop their plans without explicit mention or consideration of S3 priorities, there is an alignment between some priorities and there are also common priorities at the regional and local level. In addition, the Regional Spatial and Economic Strategies (RSES) has adopted a territorial approach. In the **Ruhr** region there is a greater need to focus on the different sub-regional specialization priorities that have not been able to be identified to date and are not sufficiently considered by North-Rhine Westphalia's S3 strategy.

Regarding the dimension of **governance**, there are differences in the types of governance mechanisms of the RIS3 and innovation strategies in general, especially in relation to sub regional levels. This is largely driven by the different institutional contexts of the

regions. However, and even though there is **still a broad path for improvement**, most regions have self-diagnosed the **existence of strong governance systems** that constitute the basis for the development and strengthening of strategies with a diversity of territorial actors and for vertical and horizontal inter-institutional collaboration.

Such is the case of ***Stockholm***, a region that has many well-established coordination/governance mechanisms and formal and informal collaborative dynamics involving many relevant actors at different territorial levels and from different sectors. ***Mazovia*** also acknowledges the existence of innovation governance mechanisms (e.g. Mazovian Innovation Council, Forum of Business Environment Institutions, RIS3 working groups) which enable including the vision of representatives of different territorial scales (national to local) and triple helix actors. The RIS3 governance system in ***North West Romania*** is also overall considered as an asset. In the view of North West Romanian partners, the RIS3 Steering Committee constitutes a space that has enabled different administrations to work together and support innovation projects, and S3 working groups also gather relevant representatives from different administration levels. ***Calabria*** has also set up a governance system which – although with many issues to be addressed – can serve as a basis for developing a more territorially aware S3 strategy through the improvement of inclusiveness and collaboration mechanisms.

Even though the sub-regional link constitutes an area to be improved, ***Ruhr Metropolis*** has governance mechanisms/spaces where potential innovation capabilities can be discussed (e.g. Ruhr Conference, which connects the Ruhr Metropolis with the federal state). Moreover, Business Metropole Ruhr has well established links with key actors in government and in the region, a strength that can be used for fostering multilevel governance. Similarly, the RSES in ***Southern Region Ireland*** is considered an opportunity to establish a more place-based, bottom-up approach to S3, placing the regional level in a

key position for playing a boundary-spanning role. Besides, as in the case of ***Stockholm***, there exists strong and clear levels of effective governance in economic development that can be an example for a similar multilevel governance model for S3. Putting the focus on a more reduced analysis and intervention area, ***Bizkaia*** considers that the specific collaborative dynamic put in place between the province level government and the county level local development actors for jointly developing innovation activities has brought an improved governance system and alignment of strategies.

In sum, all regions have pillars on which they can build to strengthen the integration of the territorial dimension and multilevel governance in their S3 strategies.

3.2 Areas of Improvement: Shared Challenges

As indicated above, the partners represent diverse regional contexts and have different objectives in terms of developing more territorially aware S3 strategies, which translates into very specific challenges and areas for improvement identified through their *Smart Territorial Mapping* exercises. Despite the differences, it is possible to identify some common challenges shared by several of the partners, although each of them with of their own specificities. Table 1 shows these shared challenges, which are the focus of the later policy recommendations.

Table 1. Synthesis of areas of improvement identified by Cohes3ion partners

Areas of improvement identified	Partner region							
	Bizkaia	Calabria	Mazovia	North West Romania	Ruhr	Southern Region Ireland	Stockholm	Wales
Awareness raising on S3 & capacity building for innovation promotion (mainly) at local level	x		x	x		Along the region, not only at local level	x	
Fostering collaboration between (mainly) local level administrations – municipalities	x		x			x	x	
Improve inclusion of territorial specialization strengths/ differences in S3 and innovation strategies	x	x	x	x	x	x	x	x
Incorporation of local players and other key sectoral actors in strategy development	x	x	x	x			x	
Strengthening collaboration with territorial actors & rethinking/ creating S3 governance bodies		x	x	x	x	x	x	x
Monitoring & evaluation with territorial perspective	x	x				x	x	
Establishing links with strategies of higher scale administrations (national/regional)			x		x	x		x

Source: own elaboration

The following paragraphs address each of these challenges in more detail:

a) Awareness raising on S3 and capacity building for innovation promotion (mainly) at local level

Several partners have pointed out the need to raise awareness about S3 among territorial actors who may not be familiar with these strategies, especially among local level governmental actors. Although usually local level strategies are more centred on general economic development issues and innovation promotion in its widest sense, creating knowledge around S3 strategies is seen as one of the elements on which to base an improvement in the alignment between strategies. In a similar line, capacity building among local actors for innovation promotion has been identified as an element that can improve alignment and the development of innovation strategies throughout the territory.

Specifically, partners from **Bizkaia** have put the focus on the need to review and rearrange the capabilities for economic promotion among county and local development agents and to support them in their role of local development promotion. In **Mazovia** the need for better linking the development objectives of local governments with the regional RIS3 and raising awareness to increase the local strengths has been underlined. The need to develop local and county level strategies which are more aligned to S3 has also been pointed out by **North West Romania** for consolidating meta-priorities. Also putting the focus at the local level, partners from **Stockholm** county have identified that some sectors with potential for innovation are missing in the strategies of several municipalities, and that the limited knowledge on S3 could be one of the reasons for the missing potential for aligning the business development strategies of municipalities. The little presence and impact of S3 at the local

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level has also been identified as an issue in **Southern Region Ireland**. Moreover, given the more centralized approach to innovation policymaking in Ireland, awareness raising around S3 and around the benefits of targeted regional priorities and capacity building at the regional level emerges as a key area on which to work.

b) Fostering collaboration between (mainly) local level administrations – municipalities

While the need of improving collaboration and coordination among many public and private actors both horizontally and vertically is a common theme in all regions, some regions have specifically identified the collaboration between local level administrations as one of the relevant elements for contributing to improve the development of S3 with a territorial perspective.

In **Bizkaia**, collaboration between municipalities for jointly responding to economic and innovation challenges is already fostered through their collaborative strategy. However, since their collaborative work is based on geographical proximity, they consider relevant to complement it with an approach that will also foster collaboration between territorial areas that share the same challenges in terms of specialization and innovation, regardless of their geographical location. In a similar line, despite the strong collaborative governance system present in **Stockholm**, a gap has been identified on the lack of spaces for municipalities for jointly discussing and developing initiatives for innovation and business development in Stockholm, thus proposing the need to develop collaborative platforms with that goal. As part of their S3 strategy, **Mazovia** is developing integrated territorial investments, for which, fostering cooperation among different municipalities for jointly defining the needs and developing the instruments is considered relevant. **Southern Region Ireland** has also emphasized the need of a collaborative approach between regions, for avoiding potential competition for resources/funding opportunities within the framework

of the S3 and further leverage innovation performance.

c) Improve inclusion of territorial specialization strengths/differences in S3 and innovation strategies

All Cohes3ion partners considered that they have a challenge to develop S3 strategies, policies and instruments which are place-sensitive and inclusive of different territorial strengths. This challenge requires:

* Including local actors in strategy development
* Improving the S3 coordination bodies so that they are more inclusive
* Developing more space-aware strategies and policy programmes
* Identifying sub-regional specialization strengthsImproving data and analysis of intra-regional differences and sub-regional specialization strengths

For example, **Calabria** region acknowledges a different distribution of resources and a less active participation of businesses from certain territorial areas in S3 programmes and funding calls, an issue that needs to be tackled for fostering a more balanced development of the region. **Ruhr** has identified the need to improve vertical and horizontal cooperation. They also acknowledge a need to better analyse and identify specialization capabilities at the different sub-territorial levels. In **Southern Region Ireland** a regional recognition in the S3 is a special concern. Besides, a more strategic and flexible 'lens' concerning how different geographies of Ireland can be targeted for support is needed to address their regional variable geography and specificities. **North West Romania** has emphasized the inclusion of local/county perspective in the Regional Operational Programme as a clear area to be improved. As for **Bizkaia**, although they have analysed territorial strengths, they also consider there is still room for improvement in the integration of those differences in province level policies. The **Welsh Government** has a special interest

on this overall challenge since they are making a considerable effort on territorializing their innovation strategy and policies. In the case of **Stockholm** County, a gap concerning data is identified as relevant, both for working on the sub regional and regional dimension of the S3.

d) Incorporation of local players and other key sectoral actors in strategy development

The inclusion of new actors in S3 and innovation strategies is an area of improvement shared by many partners. Some put the focus on the vertical dimension and underline the relevance of considering local level players to include local knowledge and perspective in regional innovation strategies. Some others have stressed the horizontal dimension since they miss relevant sectoral and other types of innovation related actors in their strategies, such as cluster associations.

In **Calabria** the need to develop a more participatory approach for involving regional innovation stakeholders has been underlined. Although in **Stockholm** there is large representativeness of territorial actors in strategy development through their multiple collaborative platforms and governance spaces, they still have identified the need to involve both more municipalities and private actors in regional development initiatives and in specific thematic platforms. In **Mazovia** they have also noted the need for involvement of new actors, particularly in working groups, since there is low representation of some types of public and private actors, and the need for increasing the activity of these actors. **North West Romania** proposes developing one-to-one meetings with relevant actors as a way of increasing inclusion of actors in S3 strategies and complementing existing S3 governance groups. Lastly, **Bizkaia** has identified a very specific set of actors who are missing in their collaborative territorial strategy, such as the capital city and regional level actors (to improve articulation with regional S3), sectoral players and cluster associations, and a stronger involvement and commitment of local level political representatives.

e) Strengthening collaboration with territorial actors & rethinking/creating S3 governance bodies

Another area of improvement pointed out by most partners is rethinking the governance system to improve the communication, coordination, and collaboration with public and private actors within the region. This should generate more regular cooperation procedures. Moreover, the mapping exercise has also allowed some of the partners to identify specific forums, local or regional, that could be of help when facing this challenge. Besides, some partners specifically see the need to improve or create official S3 coordinating and steering bodies.

North West Romania has identified the need to improve communication with existing forums at local level (e.g. innovation hubs) that could be useful for supporting S3. For the **Welsh Government**, continuing to develop an inter-institutional cooperation with the recently created regional consortia of local government is key and that cooperation may even include the development of a regional economic framework with involvement of relevant stakeholders. Stressing the need for vertical and horizontal collaboration, **Mazovia** has emphasized the need to create regular forms of cooperation with representatives of local government units to ensure a better implementation of regional strategies and territorial investments and the need to strengthen clustering and establish a closer cooperation with cluster organisations.

Similarly, whereas there are strong governance mechanisms in **Ruhr**, the sub regional link and exchange and cooperation spaces/mechanisms with sub-territorial innovation promotion agents to identify Ruhr's S3 potential should be improved, together with coordination with other relevant actors, such as local business development agencies, the local chambers of industry and commerce. The **Calabria** region shows a special concern for the S3 governance and coordination system and has put the focus on this dimension. They note an absence of

real coordination and insufficient functioning of the Coordination Board at the strategic level; an inadequate structure of Sector S3 to the regional Departments and a special need to improve and empower the steering body – Calabria Innova Project – and the S3 thematic tables.

In the case of three of the regions (**Southern Region Ireland**, **Stockholm**, and **Wales**) the creation of specific regional S3 bodies is a step to be taken for developing a place based S3 strategy.

f) Monitoring and evaluation with a territorial perspective

Although to a lesser extent than other challenges, improving monitoring and evaluation systems has also been identified by some partners in their overall goal of integrating the territorial dimension in innovation strategies. Partners put the focus on different aspects of evaluation and monitoring that respond to their specific challenges.

Calabria points out to general need of improving the existing S3 monitoring systems to make it more accessible so that information and data are more available and they can be useful to direct innovation policies. **Southern Region Ireland** consider regional monitoring and evaluation as a key area to prioritise and accordingly see an opportunity for improving the Irish S3 monitoring and evaluation system by taking advantage of the evolving evaluation framework being developed by a regional strategy (RSES), through introduction of metrics relevant to regional smart priorities. Responding to other types of needs, **Bizkaia's** partners have identified the need to develop an ad hoc balanced scorecard to assess and evaluate the collaborative work that is already being developed between sub regional governments. In **Stockholm**, data access and availability for intra and interregional comparison is an obstacle for deepening on identifying regional and sub regional strengths, and thus can also affect evaluation and monitoring of S3 strategies.

g) Establishing links with strategies of higher scale administrations (national/regional)

While all the shared challenges listed above mainly refer to putting an intra-regional focus on the areas of intervention of partner regions and on subregional levels (local level, county level), establishing links with and influencing the strategies of higher territorial level administrations is a challenge shared by several partners for different reasons. For some partners coordination and alignment of strategies with higher level strategies is relevant in their aim of improving multilevel governance of S3. For others, there exists a clear lack of acknowledgement of territorial differences (regional, subregional) within those strategies, and that is a fact that needs to be changed through seeking ways to influence the strategies developed by other administrations. This is especially relevant for regions like Southern Region Ireland, where the aim is precisely fostering a more regionally focused S3, which is ultimately a competence of the national government. Thus, working multilevel governance *upwards* is especially relevant in some regions.

That is the case of **North West Romania**, where although synergies between the national and regional S3 have been worked on and constitute a strength, there is still room for improvement. In fact, a more active participation of the North West development region authority in the National S3 Steering Committee has been identified as an area of improvement. In **Ruhr**, the smart mapping exercise has confirmed that sub regional differences are not sufficiently considered in North Rhine Westphalia's state innovation strategy and there is a need for more attention and consideration in terms of funding. A more clear case can be seen in **Southern Region Ireland**, where a centralized and arguably space-blind policy-making with limited attention to regional differences has been diagnosed, which is reflected among others in the absence of a high number of regionally targeted priority areas in national S3 or a limited attention to the SME level in the national S3. Hence, some areas

of improvement are seen key for changing this current approach. This includes to create a 2-way dialogue between national and regional levels, using the potential of RSES, for upgrading Ireland's S3; the adoption of an aligned approach (regions – national) for addressing transition challenges; and revitalizing the S3 EDP process making use of the evidence-base underpinning the RSESs. In **Wales**, whereas the coordination with UK government strategies has been always relevant, this is especially true currently due to the uncertain Brexit scenario. Thus, for Welsh government it is particularly important to continue to develop the inter-governmental relationship between Welsh Government and UK Government from an Innovation funding perspective.

4. Policy Recommendations

Most challenges identified by the different partner regions can be connected to different dimensions and stages of the process to develop *multilevel place based S3 strategies*. Considering the regional level as an intermediate level between national and subregional actors, we can synthesize the challenges presented in the following categories:

- **Policy challenges to improve governance mechanisms connecting regional and subregional levels:** This category would include the challenges of generating awareness and capabilities at local level and fostering collaboration between different local agents.

- **Policy challenges to improve governance mechanisms connecting regional and national levels:** This would include the challenge framed in terms of the establishment of links with strategies of higher scale administrations.

- **Policy challenges to strengthen the place-based dimension of S3 strategies:** This encompasses challenges about connecting S3 and the territorial perspective, the incorporation of new agents to the governance of S3 and creating S3 governance bodies.

We consider that monitoring and evaluation is a need that is more instrumental and could be incorporated into all the previous categories as a horizontal dimension of S3 related initiatives.

To propose policy recommendations, we have analysed the challenges identified by the regions in the light of the conceptual framework presented in Section 2. This leads to the following five groups of policy recommendations:

1. Clarify, negotiate and agree the roles of participants in action plans

The policy recommendations in this document are the link between Regional Action Plans based on Smart Territorial Maps (STM) and their implementation. Their aim is thus to support the action plans of the different regions which will be implemented during the following years.

In this context, the first policy recommendation is to develop a specific process to clarify the roles of each participant in the implementation process. This recommendation could seem to be self-evident at a first glance. However, many of the processes that inspired the conceptual frame-work shared in this document had integrated participants and roles in action plans without a previous process to discuss, negotiate and agree such roles.

Agreement on roles is often a process that meets conflicting perspectives that can stagnate the process if unaddressed. Workshops for all agents involved in the implementation of the action plan can be a useful instrument to address roles through a 'pre-kick-off process' where roles are collectively defined and negotiated. This is likely to smoothen the initial stages of implementation.

2. Create spaces for dialogue between regional and subregional policy agents

Although the action plans to be implemented by the regions will differ, the creation of dialogue spaces can be a common feature that will facilitate the implementation of all plans. Dialogue spaces are not physical spaces, but established procedures for different territorial actors involved in S3 to meet, reflect, learn and negotiate S3 processes.

Dialogue spaces can be of very different nature. Some of them are formal, which means that they are usually official bodies nominated with some specific policy goal. However, this is not always the case. There can be very efficient informal dialogue spaces where different policy agents involved in a shared endeavour can informally discuss their perspectives and even reach agreements that have an impact on the implementation of the goals.

Power and trust are two relevant features to consider when initiating a dialogue space or when articulating an existing one to support specific implementation processes. In spaces where regional and subregional policy agents meet, regional representatives are often stronger players and usually have a recognised role regarding S3. Mutual recognition of each other's roles and capabilities is important to make dialogue spaces work. When subregional actors are the weaker part of the system, spaces between regional and subregional policy agents require that regional actors genuinely feel there is a role for subregional agents in S3. However, in some situations there might be little tradition of regional policies or the regional identity might we weak. In these cases, regional authorities will need to be empowered and formal or informal training processes can play a role. Such training can help regional policy makers understand their potential value in the S3 strategy and contribute to the development of narratives and arguments that can later be used in dialogue spaces with national authorities.

3. Create spaces for dialogue between regional and national policies

These spaces for dialogue share with the previous the relevance of considering trust, power and mutual recognition. However, when national governments are included regional policy actors are often a weaker player. This might reduce the capability of regional actors to create dialogue spaces. However, when there are good communication channels between national and regional agents regarding S3, regions can become strong intermediaries

enabling an efficient multilevel governance that includes both national and subregional levels.

4. Empower policy agents to involve relevant S3 actors in their respective levels

The construction of dialogue spaces where multilevel governance is materialized often requires the involvement of governmental and public administration bodies. However, S3 strategies also require the involvement of many other actors in the production and knowledge subsystems. When approaching these actors, there is a policy level that has better conditions than others to establish a good communication. For instance, small firms might more easily be accessed by local policy agents, while big firms tend more to speak to regional and even national representatives.

To build a strong multilevel governance, it will be important to identify who are the government and administrative bodies better suited to approach each type of territorial actor. If these do not have the capabilities to open dialogue with firms, universities, technology centres etc. operating at their level, the most efficient strategy to implement the plan might be to help them develop such capabilities and to empower them to play this role.

5. Develop shared monitoring and evaluation tools

The construction of multilevel governance requires dialogue and collaboration. The previous recommendations focused on such dialogue and collaboration. One of the features that make multi-level governance, and its development, complex is that they depend, to a great extent, on intangible assets such as trust, agreement, and mutual recognition. This makes monitoring and evaluation difficult too.

To follow up their development, it is important that the dialogue spaces previously mentioned have tools to monitor and evaluate how multilevel governance of S3 is evolving. Besides the hard data about numbers of meetings, people participating in coordination, programs

and initiatives developed in collaboration and the results and impact of such programs, it can be useful to have evaluation tools that measure the subjective interpretation of all participants on how they think multilevel governance is evolving. Features such as the quality of collaboration, trust etc. can then be measured and brought again for discussion to the different dialogue spaces. Moreover, if the evaluation tools are shared between the different level participants, evaluation can become a process to strengthen multilevel governance of S3.

Cutting across these five recommendations is the need to shift from hierarchical relationships to network relationships to ensure that multilevel governance is effectively integrated into S3. However, this is not a straightforward shift. While it may be easier to envisage a more balanced relationship in the sphere of knowledge-sharing and idea-generation, which are the engine-room of smart specialisation strategies, the need for critical mass of both finance and capabilities tends to re-enforce a hierarchical approach in the ultimate decision-making processes. A key therefore is to develop mechanisms and spaces that can bridge these two processes and engender the trust and mutual understanding required for balanced governance relationships.

Moreover, as the green transition accelerates, multilevel governance that integrates the local level is arguably becoming even more important for the effective implementation of innovation strategies and solutions. The high population density in urban contexts enable innovation ecosystems that make possible to 'touch' real social practices and problems, and cities themselves are especially vulnerable to sustainability challenges. They therefore offer great laboratories to address these challenges. Indeed, the evolution of S3 to S4 (Sustainable Smart Specialization Strategies) will depend in no small part on the ability to connect urban strategies and processes with regional and national strategies.