



# FEEDBACK REPORT ON THE FUTURE OF SMART SPECIALISATION

23-24  
April  
2019

Peer eXchange & Learning Workshop  
**Seville** (Spain)

*Representatives from Castile and Leon, Valencia and Murcia (ES) presented their current experience and work on Monitoring of the Smart Specialisation Strategies, Entrepreneurial Discovery Process and Industrial Transition in a Peer eXchange & Learning Workshop (PXL) in Seville (ES). The workshop was organised by the Smart Specialisation Platform (S3 Platform) of the Joint Research Centre (JRC) in collaboration with the Region of Andalusia. The presentations and following peer discussions provided the basis for this report.*

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# PART 1 | WORKSHOP FINDINGS AND KEY LESSONS

## KEY LESSONS

### MONITORING

- **There is no “one size fits all” solution for monitoring activities.** The monitoring system should be designed according to the characteristics (e.g. objectives, measures, resources, etc.) of the individual Smart Specialisation Strategy and specificities of the regional socio-economic context.
- The improvement of the quality and articulation of the logic of intervention of the Smart Specialisation Strategy is necessary in many cases. **A well-defined articulation of objectives, actions, expected results and indicators is essential for an effective monitoring system.**
- It is crucial to **debate and build consensus on what constitute strategies’ success and how to measure it.** This helps to improve the effectiveness of monitoring activities.
- **The effectiveness of the data collection and analysis process requires the enhancement of internal coordination mechanisms within the public administration.**
- **Qualitative data** – obtained through workshops, interviews, focus groups etc. – **are also particularly important for monitoring the progress of strategies.**
- Monitoring Smart Specialisation has its inherent challenges, such as the **difficulties in monitoring progress on the selected priorities.**
- **Adequate financial and human resources** should be secured for monitoring activities.
- **It is necessary to improve the quality and reliability of the information systems and the coordination among different administrations.** A sound monitoring system should allow systematisation, traceability and automation.
- **An evaluation culture should be actively promoted,** among public and private actors, to increase the chances of evidence being actually used in policy making.
- It is essential to **continuously assess the evolution of the regional economic and innovation system.**

### ENTREPRENEURIAL DISCOVERY PROCESS

- **It is crucial to ensure sufficient resources for the operationalisation of the Entrepreneurial Discovery Process** (e.g. identification and mobilisation of relevant actors, follow-up and communication activities, etc.).
- It is important to **involve different actors not only in the identification of priority areas of intervention, but also in their implementation, follow-up and revision.**
- **Solutions to increasingly complex policy problems require bringing together knowledge and practices scattered among different actors.** Public administrations should listen and learn from others to effectively steer transformation processes.
- **There is a need to promote 'change management' in public administration:** reducing

bureaucracy, increasing the quality of planning and working on the establishment of a common understanding of the innovation concept count among the key challenges to address. Similarly, foresight activities and future-literacy (e.g. the ability to work systematically on multiple future scenarios) are extremely relevant. Public administrations should prepare for future technological transitions and act accordingly in due time.

- **Specific training for politicians and civil servants on innovation and related public support is essential:** training public-procurement officials on instruments such as innovative public procurement seems like a good step.
- **The role and responsibilities in the Entrepreneurial Discovery Process of public and private actors should be clear from the beginning.**
- In view of the next programming period, **each region should assess the effectiveness of the Entrepreneurial Discovery Process on the basis of its own specificities** (e.g. tradition of stakeholder engagement, coordination mechanisms, etc.).

### INDUSTRIAL TRANSITION

- The “Industrial Transition Pilot” initiative carried out by the European Commission indicates that **Industrial Transition is not only about digitalisation. There are other important working areas** in this field - e.g. social innovation, climate change issues, ageing population, 3D printing etc.
- **“Industrial Transition” represents a fulfilment criterion of the new enabling condition on Smart Specialisation in the European Commission's proposed regulation for the EU Cohesion Policy under the next Multiannual Financial Framework (2021-2027). In order to develop a common understanding on this criterion and how to assess it, it is necessary for the European Commission to work together with national and regional authorities.** In the case of Spain, the Directorate-General of European Funds (Ministry of Finance) proposed to work together with the Spanish regions and the European Commission on these aspects.

This report summarises the debate and outcomes of a two-day workshop held in Seville, on 23-24 April 2019. The workshop was organised by the S3 Platform (European Commission, JRC) together with the Smart Specialisation Working Group of the Spanish Association of Regional Development Agencies and the Innovation and Development Agency of Andalusia (IDEA), with the collaboration of the Spanish Research, Development and Innovation Network (hereinafter, R&D&I Network).

On the first day, the future of Smart Specialisation was debated among the European Commission staff and representatives of the Spanish national and regional authorities. Presentations on Smart Specialisation, within the current and future EU Cohesion Policy framework, were provided by representatives of DG REGIO, the Spanish Ministry of Finance and the Spanish Ministry of Science, Innovation and Universities. These talks provided the basis for a question and answer session and a debate with the Spanish regional authorities. The discussion mainly focused on the new enabling condition on Smart Specialisation and its seven fulfilment criteria – their meaning and assessment process – contained in the European Commission's proposal for regulations of the EU Cohesion policy over 2021-2027 (hereinafter, proposed regulations). More in general, the proposed regulations introduce new elements in the Smart Specialisation policy framework (e.g. the industrial transition concept; a stronger

connection with different policy areas, such as those on skills development and digitalisation) that require clarity and common understanding by policy makers placed at different territorial scales.

On the second day, the topics of monitoring Smart Specialisation Strategies, Entrepreneurial Discovery Process and industrial transition were addressed according to the Peer Exchange and Learning (PXL) workshop format of the Smart Specialisation Platform. Presentations on the selected topic were provided by three different regional authorities in Castile and Leon, Valencia and Murcia, followed by group discussions.

### **Day 1 - Session 1: The future of Smart Specialisation Strategies**

In the first session, representatives of the European Commission, the Ministry of Finance and the Ministry of Science, Innovation and Universities presented their reflections, proposals and initiatives on Smart Specialisation in the context of the current and future EU Cohesion Policy.

As commented by the European Commission staff (DG REGIO), the proposed regulations for the 2021-2027 EU Cohesion Policy reinforce the role of Smart Specialisation. The existence of “a good governance of national or regional Smart Specialisation strategy” (with its seven *fulfilment criteria*) represents the *enabling condition* of a new *Policy Objective: A smarter Europe by promoting innovative and smart economic transformation*, whose span is wider than the current Thematic Objective 1 (2014-2020 programming period). In fact, it includes four specific objectives: *research and innovation, digitalisation, small and medium-sized enterprises (SMEs) and capacities for smart specialisation*. Clearly, this enlargement of objectives and policy areas will have deep implications on Smart Specialisation Strategies. Future strategies have to evolve taking into account this new context.

The European Commission has launched a series of initiatives to facilitate the evolution of the Smart Specialisation Strategies towards a Smart Specialisation Strategy “2.0”.<sup>1</sup> In the new EU Cohesion Policy, there is much more emphasis on the synergies and complementarities among different funds, as well as new measures and resources for inter-regional investments on innovation.

The pilot initiative on inter-regional collaboration launched by DG REGIO and the partnerships of the Smart Specialisation Thematic Platforms represent important fields of experimentation to promote common projects and understand what works and what does not work in collaborative initiatives involving different territories. Broadly speaking, the European Commission has identified two different broad areas of intervention: one concerning regions with solid inter-regional cooperation where the European Commission can move, more or less, directly to investments; and, the other one, regarding less developed regions with

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<sup>1</sup> For instance, the Smart Specialisation Platform, based on its knowledge on regional priorities, facilitates regional collaboration for related priorities through the three Thematic Platforms on energy, agri-food and industrial modernisation. There are other EU initiatives for regions with different profiles (e.g. very advanced v. less advanced regions; regions depending on the coal industry; lagging regions; regions with difficulties to participate in Horizon 2020).

some difficulties to position themselves in international value chains because they are not aware of their capacities and possibilities for complementarity.

The introduction of the abovementioned elements is, however, still pending on approval. The negotiation with the European Parliament and the Council on the new regulations is ongoing. The European Parliament adopted a very positive position at the end of March 2019 (e.g. increased funds for cohesion, increased pre-funding, increased co-funding, etc.), but it is necessary to wait until the end of the negotiations. A challenge is that the adoption of the regulation will probably not take place in 2019 and the European Commission needs to start working on the Partnership Agreements and Operational Programmes with Member States and regions. The geographical desks of DG REGIO have already started (or plan to do so soon) having meetings with national authorities to discuss the agreements on the forthcoming programming period.

As regards the evolution of the current Cohesion policy in Spain, DG REGIO representatives indicated that there has been a significant advance in 2018 in terms of fund allocation and absorption regarding Thematic Objective 1 (TO1) on research and innovation. Nonetheless, a number of observations and concerns were formulated during the meeting.

- In terms of financial resources allocated under TO1, there is still some delay compared to the EU average, 40% (Spain) vs 72% (EU average). There is also a gap in relation to the total amount of expenditures declared thus far: 8% (Spain) compared to 20% (EU average).
- Data shows that some categories of intervention are not evolving as expected.<sup>2</sup> Accordingly, the European Commission invites Spanish national and regional authorities to reflect on why this is happening.
- The 2019 Country Report for Spain under the European Semester includes an Annex with specific guidance on investments within the EU Cohesion Policy that Spanish authorities need to take into account.<sup>3</sup>

Finally, preliminary insights were provided by DG REGIO representatives in response to some questions raised by regional representatives on the fulfilment criteria of the enabling condition on Smart Specialisation concerning the new Policy Objective 1 of the forthcoming EU Cohesion Policy.

*Fulfilment criterion 1: “up-to-date analysis of bottlenecks for innovation diffusion, including digitalisation”.*

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<sup>2</sup> 1) Intervention category on research and innovation in large companies: 100% of resources allocated to projects and 66% of total expenditure declared; 2) Intervention category on research and innovation in SMEs (the largest in Spain): 41% resources allocated to projects and 24% of total expenditure declared; 3) Intervention category on cooperation and technology transfer: 20% of resources allocated to projects and 5% of total expenditure declared.

<sup>3</sup> Annex D: investment guidance on cohesion policy funding 2021-2027 for Spain, available at:

[https://ec.europa.eu/info/sites/info/files/file\\_import/2019-european-semester-country-report-spain\\_en.pdf](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-spain_en.pdf)

- In relation to the first fulfilment criterion, it has been specified that the concept of "diffusion of innovation" comes from the Oslo Manual of the OECD (Chapter 6). The production of scientific knowledge and outputs in the EU is quite high; however, there is not enough innovation diffusion. The diffusion of innovation is about reaching out to actors to help them to take advantage of new developments and technologies. There are typologies of companies and territories in which the capacity to absorb and use the new digital and technological opportunities is low.

*Fulfilment criterion 2: "existence of a competent regional/national institution or body, responsible for the management of the Smart Specialisation strategy".*

- Clearly, there is not a single solution or model to apply here, but rather common elements that have to be defined (e.g. distribution of powers and responsibilities). The way in which powers and responsibilities are shared between the different State levels and governance arrangements vary significantly across the EU. For example, in Germany, there is not a single body at national level dealing with industry, research and innovation. National and regional administrations interact on these issues, but decisions are taken at the regional level (Länder). What is important is that the chosen governance setting works.

*Fulfilment criterion 4: "effective functioning of entrepreneurial discovery process".*

- The meaning of "effective functioning" of the Entrepreneurial Discovery Process really depends on regions and countries (e.g. their business culture, openness to collaboration). They need to be able to recognise when the process is effective or not.

DG REGIO representatives' talks were followed by two presentations of the representatives of the Spanish Ministry of Finance and the Ministry of Science, Innovation and Universities. Both contributions pointed out that most Spanish regions have an intermediary evaluation scheduled soon and that Spanish national and regional authorities need to start working on the next programming period (2021-2027).

To support these two activities, the R&D&I network plans to promote initiatives on the evaluation of the Smart Specialisation Strategies and the fulfilment criteria of the new enabling condition on Smart Specialisation.

For the evaluation part, the R&D&I network has already prepared some guidance/orientations to help Spanish regions to carry out meaningful evaluation exercises, which can provide useful information for the revision of the strategies. For the new enabling condition, the proposed regulations state that it will be up to the Member States to determine how to assess the fulfilment of the seven criteria. In Spain, the responsible body for doing that is the Directorate-General of European Funds (Ministry of Finance). Before starting drafting any type of indications or guidance on such assessment, the Directorate-General of European Funds will work together with the different national and regional authorities involved in the Smart Specialisation process to develop a common understanding of the meaning and implication of each of the seven criteria.

The Ministry of Science, Innovation and Universities is currently focusing on two main lines of work: complementarities and coordination between national and regional strategies and different Operational Programmes; and governance arrangements.

In relation to the *complementarities and coordination* between national and regional strategies, the Directorate-General for R&D&I (DG for R&D&I) has started working internally on the elaboration of the new Spanish Strategy of Science, Technology and Innovation. This strategy aims to include the national and regional strategic approach. As far as *governance* is concerned, the work will mostly focus on the identification of all relevant actors at different territorial levels and the simplification of the existing governance arrangements to make the decision making process and policy implementation more effective.

Finally, the Spanish Association of Regional Development Agencies (ADR forum) was presented as a useful tool to share, among regions, good practices and challenges on the elaboration and implementation of the Smart Specialisation Strategies. In general, Spanish regions acknowledged that the Smart Specialisation process has generated new dynamics and led the Spanish regional governments to select policy instruments in a joint way with stakeholders from the quadruple helix.

### **Day 1 - Session 2: Dialogue among the Spanish national and regional authorities and the European Commission**

In this session, regional representatives addressed a number of questions to the representatives of the European Commission, the Ministry of Finance and the Ministry of Science, Innovation and Universities. The issues/questions posed by the regional representatives are summarised below, so as the main points arising from the dialogue.

Preliminary insights from the Smart Specialisation experience in Spain:

- Smart Specialisation Strategies, in theory, could be funded with other financial resources beyond the European Regional Development Fund (ERDF); but, in reality, this has not happened. Besides, limiting the use of the ERDF available resources to finance operations falling under Smart Specialisation priorities exclusively was a very restrictive approach.
- The governance model established for the design of the Smart Specialisation Strategies at national and regional levels in Spain was very dynamic and participative during the elaboration of the strategy, but it is difficult to maintain over time. A simpler governance model could be more effective for the whole Smart Specialisation process.

With respect to the burden on public administrations of the monitoring systems and the differences between the current "ex-ante conditionality" and the future "enabling condition", the following emerged:

- There is some convergence in the monitoring of the Smart Specialisation Strategies and the ERDF funding that can help to create a critical mass. In the current programming period, and probably also in the next one, technical assistance as part of the ERDF can be used for the analysis, preparation and monitoring of Smart Specialisation Strategies.
- There is no need to have a daily-based monitoring system of the Smart Specialisation Strategies. The periodicity of the monitoring system has to be decided together between the European

Commission and Member States. For instance, changes in the Smart Specialisation Strategy should be notified to the European Commission.

- Otherwise, the Spanish Ministry of Finance's advice is to have a simple governance model throughout the programming period and to use the existing mechanisms (e.g. meetings with the monitoring committee or R&D&I network) to monitor the Smart Specialisation process.
- The Spanish Ministry of Finance is going to prepare a methodology to evaluate the fulfilment criteria under the enabling condition of Policy Objective 1.

About the scope of Smart Specialisation Strategies under the next 2021-2027 programming period:

- Future Smart Specialisation Strategies will include research, innovation, SMEs and digitalisation. The proposed regulations refer to Smart Specialisation Strategies (in a broad sense) and not to Smart Specialisation Strategies only for research and innovation.
- During the negotiation phase of the proposed regulations, some Member States asked the enabling condition on Smart Specialisation to refer only to research and innovation and not to the whole (new) Policy Objective 1.
- SMEs and digitalisation are included under the new Policy Objective 1 with the purpose of disseminating existing technologies through the economy, particularly towards SMEs. Diffusion of innovation in the current programming period has not occurred as expected.

About the coordination between the national and regional Smart Specialisation Strategies:

- In Spain, regional Smart Specialisation Strategies establish their regional priorities but the State as a whole may have other priorities on top of the regional ones. The question is how the State can complement the regional level.
- Besides, it would be useful to find some common areas of specialisation (e.g. tourism, etc.).

About stakeholder engagement in the policy process:

- In Spain, all programmes include mechanisms for public consultation/participation to involve stakeholders from the quadruple helix. Nonetheless, it was suggested that politician's interests and the points of view of the national authorities and European Commission services dealing with innovation also have to be taken into account. It was suggested that bottom-up has to be combined with top-down decisions. The difficulty mentioned is how to keep stakeholders involved beyond the design phase of the strategies.

About skills' development in the 2021-2027 programming period:

- The integration of skills' development in the ERDF (Policy Objective 1) is a novelty. There is room to be creative and effectively support the Smart Specialisation logic. A general training for public sector employees would not be possible.
- The idea is not to finance some basic training, but the development of more specialised skills to support Smart Specialisation priorities. For instance: innovation management in companies to

bring technologies and innovations to the market; business training for academics and scientists to help them understand how business managers think, etc.

About the scope of "industrial transition" (fulfilment criterion 6 of the new enabling condition on Smart Specialisation):

- The Industrial Transition Pilot shows that it is not only about digitalisation. There are other working areas of interest (e.g. social innovation or climate change issues). Preliminary lessons from this pilot are expected by the end of 2019. The areas covered by this pilot are several, including social innovation, ageing population, 3D printing etc. The main purpose of this pilot is to learn how to encourage the process of change.
- In Spain, the Directorate-General of European Funds (Ministry of Finance) will work together with the Spanish regions and the European Commission to adopt a common understanding of the scope of this fulfilment criterion before establishing any requirement.
- The JRC is launching a Working Group on "Understanding and Managing Industrial Transitions".<sup>4</sup> This initiative aims to support regional (and where appropriate national) authorities facing major industrial transitions, away from declining sectors and activities and charting actionable paths towards employment-intensive economic growth. The core activity of the Working Group will be the Industrial Transition reviews following a methodology that draws on expertise on system innovation / transition management, foresight, industrial policy and innovation governance. Focusing on an industrial theme of growing global importance provided by the relevant authorities (e.g. electrification of transport, circular economy, and artificial intelligence) the reviews will map the existing orientation, resource mobilisation, production and consumption systems and develop a vision for their future transformation, offering concrete suggestions for the advancement of the transition. Three such reviews are envisaged in the current phase of the project (by late spring 2020).

About the importance of evaluation and monitoring in the 2021-2027 programming period and the outline of indicators to monitor the implementation of the Smart Specialisation Strategies:

- A single monitoring system is not foreseen. Indicators should be adapted to the different national and regional Smart Specialisation priorities. Having said that, during the discussion it was pointed out that common result indicators have now been included in the proposed regulation regarding the ERDF. Clearly, these indicators will be used by all regions.
- In the case of Spain:
  - The Information System in Science, Technology and Innovation (SICTI) was indicated as a useful tool to avoid overlaps with other national/regional indicators on science and innovation.

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<sup>4</sup> This project is within the frame of the project "RIS3 Support to Lagging Regions":

<http://s3platform.jrc.ec.europa.eu/ris3-in-lagging-regions>

Although the SICTI does not include specific/homogenous indicators in line with the Smart Specialisation priorities, this was considered something to be worked out for the future (e.g. in the meetings of the R&D&I network).

- The European Commission's Evaluation Network is negotiating a number of indicators for the operational programmes. Once these indicators are defined, the R&D&I network in Spain plans to convene a group to analyse them and their implications. Some indicators might require to be adopted from the beginning of the strategy.

*About fulfilment criterion 4: "Effective functioning of the entrepreneurial discovery process":*

- It seems pretty easy to identify a non-efficient Entrepreneurial Discovery Process. The definition of some elements to assess this criterion could perhaps come from the work done during the Peer and Exchange Learning workshops. The results of these meetings may help the European Commission, Member States and regions to identify together successful elements for an Entrepreneurial Discovery Process.

*About the link with the Sustainable Development Goals (SDGs):*

- The Smart Specialisation Platform has launched a survey about experiences that link Smart Specialisation priorities to the SDGs. Obviously, this link is not an obligation of the policy, but it was suggested as a useful exercise in light of future Smart Specialisation Strategies. Some EU policies are already making an explicit connection to the SDGs and more policies are expected to do so in the future. The Smart Specialisation Platform is looking at these practices in Europe and will provide soon information on the results of the survey.

Given that the responsibility for managing the Structural Funds lies with the public administration, how can quadruple helix actors be involved in the governance, monitoring and communication activities of the Smart Specialisation Strategy?

- Based on the experience regarding the funds managed directly by the European Commission (e.g. Horizon 2020), there is a clear distinction between strategic programming to the scientific objectives of innovation (e.g. with a lot of stakeholder participation) and the funding decisions (e.g. with neutral evaluators). It was suggested that this distinction should be ensured by the administration also in the Smart Specialisation process.

## **Day 2 - The regional presentations and group discussions**

On the second day, Inmaculada Periañez Forte (Territorial Development Unit, JRC, European Commission) presented the PXL methodology and the organisation of the peer-review sessions.

Presentations and talks of the first day provided some conceptual and empirical insights that helped to frame the topic on the "Future of Smart Specialisation", in general, and the monitoring system, Entrepreneurial Discovery Process and industrial transition in particular. The topics discussed on the first

day, in particular those related to the scope and interpretation of the enabling condition and its fulfilment criteria, were addressed during the peer sessions through the regional experiences of Castile and Leon, Valencia and Murcia (ES)<sup>5</sup>.

The three presenters had collected before the meeting the inputs and concerns of the representatives of the other Spanish Regional Development agencies. The aim was to include these comments in their presentations and provide insights from the experience of the Spanish regions.

- Gregorio Muñoz (Smart Specialisation advisor for Region Castile and Leon) focused his presentation on the monitoring system for Smart Specialisation Strategies (fulfilment criterion 3).

Gregorio pointed out the necessity of providing evidence for policy learning and moving towards a result-based policy making process. He explained that involving stakeholders in the monitoring process creates shared expectations and a common understanding of the Smart Specialisation process. He also discussed some of the challenges for building efficient monitoring systems in Spain: inadequacy of the information sources with respect to the real needs of the Spanish regions; lack of indicators related to the objectives set in the strategies; lack of disaggregated information at regional level (e.g. CNAE classification is not in line with Smart Specialisation priorities); delay in the publication of information; lack of data comparability across Spanish regions.

Finally, he pointed out that the proposed regulation for the next 2021-2027 programming period introduces new 'common results' indicators for the ERDF.

- The second presentation was focused on the Entrepreneurial Discovery Process (fulfilment criterion 4). Based on the Spanish regional experience, Roberto Parras (Smart Specialisation advisor for Region Valencia) identified the following elements as necessary in any "effective" Entrepreneurial Discovery Process: a clear definition of the roles of actors involved in the process; a formalised and transparent participative structure led by the business sector; a commitment of the public administration to the process; and an assessment of the impact of stakeholders' participation in the policy process. In addition, he suggested that the "effective functioning" of the Entrepreneurial Discovery Process should be assessed in terms of working arrangements, expected results and achievements.
- Finally, Antonio Romero, Info-Murcia (Smart Specialisation advisor for Region Murcia) addressed the topic of industrial transition (fulfilment criterion 6). Antonio explained that challenges such as globalisation, technological and digital revolution, climate change, ageing and brain drain are affecting Murcia's territory. Among the main difficulties for the management of the industrial transition, he referred to the coordination of regional, national and European policies; and the high dedication, in terms of time required, to involve actors in the process. He also raised questions such as whether specific monitoring and evaluation mechanisms are needed for industrial transition processes; and

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<sup>5</sup> The presentations and background documents are available at: [http://s3platform.jrc.ec.europa.eu/events/-/asset\\_publisher/assets3peventscaendar/content/peer-learning-and-exchange-workshop-pxl-](http://s3platform.jrc.ec.europa.eu/events/-/asset_publisher/assets3peventscaendar/content/peer-learning-and-exchange-workshop-pxl-)

whether a specific set of indicators (populated by data coming from official sources) will have to be used to monitor the selected industrial areas. A set of similar indicators for all Spanish regions was pointed out as useful.

Besides these challenges, the peer-review sessions provided an interesting account of some initiatives launched by the Spanish regional authorities. For instance, to help with the management of industrial transition, it is worth highlighting some of the initiatives carried out in the region of Murcia. The Innovation Accelerator is a global services programme aimed at improving innovation management capabilities among advanced pre-innovative SMEs, disadvantaged by the implementation of an occasional or unstructured innovation culture; the Digital Innovation Hub (DIH), is a one-stop shop that aims at helping companies in identifying and capturing the resources needed to undertake their digital transformation. And the elevator pitch, a tool to make effective contacts that a project/company may need.

The issues/questions posed by the representatives of Castile and Leon and Valencia fostered a lively debate in the smaller group discussions. Specific recommendations and lessons learnt for each question are presented in detail in Part 2 of this report.

Unfortunately, there was no time to have a group discussion on the specific issues/questions posed by Murcia. However, some comments on industrial transition were provided during the plenary discussions held on the first and second day as follows:

- The Industrial Transition Pilot shows that Industrial Transition is not only about digitalisation. There are other working areas of interest (e.g. social innovation or climate change issues). By the end of 2019 it is expected to start extracting lessons from this project. This pilot is very broad, including social innovation, ageing population, 3D printing etc. which opens new market opportunities. The main purpose of this pilot is to learn how to encourage the process of change.
- In Spain, the Directorate-General of European Funds (Ministry of Finance) will work together with the Spanish regions and the European Commission to adopt a common understanding of the scope of "industrial transition" as a fulfilment criterion, before establishing any requirements.

These two paragraphs are already on page 9 – please delete one of the two references.

# PART 2 | PXL QUESTIONS AND RECOMMENDATIONS

[CASTILE AND LEON]

Questions/issues posed by the country for peer discussion

QUESTION 1	What elements should a monitoring system have?
QUESTION 2	What are the specific needs of Spanish regions in relation to monitoring? Which are those that can be jointly addressed?
QUESTION 3	How to measure the impact of the strategies on the transformation of productive systems?

During peer discussions, participants were divided in three groups/tables, all of which had representatives from various EU Member States and regions. A facilitator from JRC was present to steer the work of each table. Each table was offered to choose one of the questions prepared by the representatives. A summary of these discussions is presented below.

## EVOLUTION OF QUESTION 1

<b>QUESTION</b>	What elements should a monitoring system have?
	
<b>RECOMMENDATIONS</b>	There is no “one size fits all” solution for monitoring activities.

Design the monitoring system according to the characteristics (objectives, measures, resources, etc.) of the Smart Specialisation Strategies and the specificities of the regional socio-economic context.

Improve the quality and articulation of the logic of intervention of Smart Specialisation Strategies. A well-defined articulation of objectives, actions, expected results and indicators is essential for an effective monitoring system.

Debate and build consensus on what constitute strategies' success and how to measure it. This helps to improve the effectiveness of monitoring activities.

Enhance the internal coordination within the public administration to increase the effectiveness of data collection and analysis process. Build dedicated teams for monitoring the strategies.

A monitoring system should be seen as an opportunity to improve policy making and not just as administrative burden. However, it was stressed that it can be quite difficult to act on monitoring results and change plans (e.g. there is significant inertia in the system and once capacities are developed to issue a certain type of instrument, it is difficult to adopt new ones).

Monitoring indicators should be developed regularly, following the launching and implementation of calls.

Qualitative data, gained through workshops or interviews, is also considered important.

Monitoring Smart Specialisation Strategies has inherent challenges. For instance, it is difficult to monitor priorities, as they are very much diluted in the current calls.

Last but not least, monitoring is considered a resource-intensive activity. Adequate financial and human resources should be secured.



#### LESSONS LEARNT

A clear logic of intervention is essential for effective monitoring activities.

Improve the quality and reliability of the information systems and the coordination among different administrations.

It is essential to dedicate adequate human and financial resources to monitoring activities.

It is necessary to improve the quality and reliability of the information systems and the coordination among different administrations. A tracking system should allow systematisation, traceability and automation.

An evaluation culture should be actively promoted, among public and private actors, to increase the chances of evidence being actually used in policy making.

Responsibilities in the evaluation process should be shared among participants.

## EVOLUTION OF QUESTION 2

<b>QUESTION</b>	What are the specific needs of Spanish regions in relation to monitoring? Which are those that can be jointly addressed?
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<b>RECOMMENDATIONS</b>	<p>Statistical data available should be adapted to the needs of the Smart Specialisation Strategies (e.g. CNAE classification does not correspond to the regional Smart Specialisation priorities).</p> <p>Create working groups composed of representatives of regional and national authorities to jointly identify indicators, procedures for data collection, etc. that could help to monitor the progress of the Smart Specialisation Strategies.</p> <p>Enhance the comparability of data on research and innovation across Spanish regions.</p>
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<b>LESSONS LEARNT</b>	<p>Statistical data available in Spain is not sufficient to monitor the progress of the Smart Specialisation Strategies. There is also a need to have a common system to manage regional data.</p> <p>There is a need to ensure human resources, technical assistance and clear methodologies to monitor the Smart Specialisation Strategies. Technical assistance on evaluation processes should be promoted at the national level (e.g. pilot initiative).</p> <p>The Science, Technology and Innovation Information Subsystem (SICTI) in Spain is considered a good initiative, but it is not enough to monitor the Smart Specialisation Strategies. SICTI is decontextualised and does not offer relevant information for the Smart Specialisation process.</p>
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## EVOLUTION OF QUESTION 3

<b>QUESTION</b>	How to measure the impact of the strategies on the transformation of productive systems?
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<b>RECOMMENDATIONS</b>	<p>A group of indicators was identified as potentially useful:</p> <ol style="list-style-type: none"> <li>1. Job demand and job offer;</li> </ol>
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2. Training needs;
3. Productivity *per* employee;
4. Sectors of economic activity in which new companies are created;
5. Contracting with R&D&I organisations by companies;
6. Internationalisation: participation in international R&D programmes, new products, new markets, etc.;
7. Other specific indicators: reduction of CO2 emissions, water consumption, plastic waste reduction etc. (for each specific objective).



#### LESSONS LEARNT

It is essential to continuously assess the evolution of the regional economic and innovation system. A good practice is the creation of a specific panel of companies that are representative of the whole regional economic fabric. This practice is not expensive and provides up-to-date information (e.g. The Economic Development Agency in La Rioja and the Innovation Barometer of Acció in Catalunya).

## [VALENCIA]

### Questions/issues posed by the region for peer discussion

**QUESTION 1** How to ensure an effective participation of different stakeholders, and that their contribution is taken into account by public administrations?

**QUESTION 2** To what extent do public administrations, with their lack of flexibility and limits, and knowledge actors, with their focus on scientific production, influence the Entrepreneurial Discovery Process? How to limit the impact of these constraints on the process?

**QUESTION 3** Is it possible and advisable to identify common measures and criteria to assess the effectiveness of the Entrepreneurial Discovery Process when regional realities and strategies' objectives are different?

During peer discussions, participants were divided in three groups/tables, all of which had representatives from various EU Member States and regions. A facilitator from JRC was present to steer the work of each table. Each table was offered to choose one of the questions prepared by the representatives. A summary of these discussions is presented below.

## EVOLUTION OF QUESTION 1

<b>QUESTION</b>	How to ensure an effective participation of different stakeholders, and that their contribution is taken into account by public administrations?
	
<b>RECOMMENDATIONS</b>	<p>Ensure sufficient resources for the operationalisation of the Entrepreneurial Discovery Process (e.g. identification and mobilisation of relevant actors, communication activities).</p> <p>Guarantee the transparency of the processes and the participation, in terms of quality and quantity, of the actors involved (e.g. innovation companies, SMEs, etc).</p> <p>Involve the different actors interested in the process, not only in the identification of the priorities, but also in their follow-up and implementation.</p>
	
<b>LESSONS LEARNT</b>	<p>It is important to encourage business participation throughout the process, and not only in the priority setting phase.</p> <p>It is important to ensure adequate human resources to design and manage the process and to reach out to companies interested in specific themes.</p> <p>It is necessary to have a clear strategy and instruments to reduce the frustration of participants that might emerge during the process.</p>

## EVOLUTION OF QUESTION 2

<b>QUESTION</b>	To what extent do public administrations, with their lack of flexibility and limits, and knowledge actors, with their focus on scientific production, influence the Entrepreneurial Discovery Process? How to limit the impact of these constraints on the process?
	
<b>RECOMMENDATIONS</b>	<p>It is important to encourage business participation throughout the process, and not only in the priority setting phase.</p> <p>The public sector tends to have significant inertia and to be more resistant to</p>

change than other segments of society.

Yet there are actions that can be taken. For instance,

- 1) Requesting participation of private representatives in governance bodies of public technology centres.
- 2) Supporting hybrid careers in universities (e.g. finding proper incentives for academics to engage regularly with the private sector without paying a price in terms of career consolidation).
- 3) Supporting instruments such as industrial doctorates or innovative public procurement.

As for the last point, it was observed that Smart Specialisation demands a flexibility that is currently not available in the public sector. ERDF regulations and public procurement rules may be stringent and may not fully allow the interactions and collaborations required by a continuous Entrepreneurial Discovery Process.

There is a need to promote 'change management': reducing bureaucracy, increasing better planning, working on a common understanding of the concept of innovation

New Smart Specialisation Strategies should promote a culture of dialogue and innovation.

It is important to ensure adequate human resources to design and manage the process and to reach out to companies interested in specific themes.

It is necessary to have a clear strategy and instruments to reduce the frustration of participants that might emerge during the process.



#### LESSONS LEARNT

Smart Specialisation requires careful planning to effectively manage changes.

Solutions to increasingly complex policy problems require bringing together knowledge and practices scattered among different actors. Public administrations should listen and learn from others to effectively steer transformation processes.

The public administration is not used to change. Change management is therefore critical. Similarly, foresight activities, and future-literacy in general (e.g. the ability to work systematically on multiple future scenarios) is extremely relevant. For instance the public administration should prepare for future technological transitions and act accordingly in due time.

Specific training for politicians and civil servants on innovation and related public support is essential: Training public-procurement officials on instruments such as innovative public procurement seems like a good step.

## EVOLUTION OF QUESTION 3

<p><b>QUESTION</b></p>	<p>Is it possible and advisable to identify common measures and criteria to assess the effectiveness of the Entrepreneurial Discovery Process when regional realities and strategies' objectives are different?</p>
	
<p><b>RECOMMENDATIONS</b></p>	<p>Identify an analytical framework for analysing the Entrepreneurial Discovery Process (expected results of the process, level of stakeholders' engagement and effectiveness of their contribution, etc.)</p> <p>Define the role and responsibilities between the public administration and quadruple helix actors at the beginning of the process.</p> <p>Ensure flexible measuring criteria which can be adapted to different contexts.</p>
	
<p><b>LESSONS LEARNT</b></p>	<p>In view of the next programming period, each region should assess the effectiveness of the Entrepreneurial Discovery Process on the basis of its own specificities (e.g. tradition of stakeholder engagement, coordination mechanisms, etc.).</p> <p>A functional analysis is helpful to define the intervention logic that leads to the panel of indicators that is flexible and adaptable to change.</p> <p>It would be useful to rely on digital tools to facilitate Smart Specialisation teamwork on entrepreneurial discovery related issues at regional and interregional levels.</p>

# ANNEX | PEER EXCHANGE & LEARNING – PXL

## [ABOUT THIS REPORT]

### **PXL Methodology**

Peer eXchange and Learning (PXL) is a methodology for reviewing specific elements of innovation strategies for Smart Specialisation (S3) and territorial development strategies and tackling the associated implementation challenges. It is an important instrument currently offered by the S3 Platform of the European Commission to EU Member States and regions.

PXL builds on the well-established peer-review approach of the S3 Platform. It supports transnational learning by bringing together regions and countries for an exchange of knowledge and experience, mutual learning and the exploration of ways in which innovation and development strategies can be effectively implemented, adjusted and revised.

PXL creates an open and trusted learning environment where practical and conceptual issues can be discussed and explored through the experience of individual regions and countries. It engages peers and experts in focused discussions on important issues that the regions and countries under review raised and guides them to distil a range of collective suggestions and lessons into a coherent picture.

PXL especially aims to tackle the challenges emerging during the transition from strategy design to implementation. It does so by: (1) focusing the discussion among regional and country representatives, experts and European Commission staff around a *thematic frame* which is typically a single theme, process or element of the strategy; (2) preferentially targeting a community of policy makers and practitioners who are at the stage of transforming planned objectives into results through concrete actions.

### **PXL Workshop**

A PXL workshop has a single thematic frame (e.g. governance settings, priority definition, monitoring, policy mix, etc.). It runs over one full day and includes peer review of two to four regions and/or countries. Individual PXL sessions focus on one region or country and last around one and a half hour.

The workshop is opened by one or more expert presentations and a debate around the framing topic. This opening session should set the scene and provide a broad set of views, approaches and insights for the individual PXL sessions. The debate can take the form of a dialogue between experts who will alternately provide arguments in support of and against common practices or believed-to-be-good practices in the field defined by the workshop's framing topic. This type of dialogue would help to stimulate the following discussion to go beyond traditional formulations of problems and solutions.

The workshop continues with individual PXL sessions. A presentation of each region or country's current work on the thematic frame is generally followed by a Q&A session. Specific issues identified by the regions and countries under review are then discussed at individual tables in two iterations, which ensure that participants can: *work together* to understand the actual problems; *propose solutions* to these

problems by discussing what worked well and what did not work; and *learn together* how to deal with new policy issues in new contexts.

An S3 Platform team member facilitates each PXL session in line with the participatory leadership approach. Such a participative approach encourages all participants to share or participate in the discussion and to identify key messages. It allows engaging participants in a dynamic and creative discussion, which benefits both the regions and countries under review and their peers.

PXL sessions are followed by a final session during which all participants (experts, representatives of the regions and countries under review, peers, and European Commission staff) summarise the results of the sessions, and discuss individually and mutually lessons learnt. At this point, the regions and countries under review have the opportunity to respond to any feedback collected throughout the workshop. Finally, they share their main insights with peers and may mention any short- to mid-term plans to apply them.

Building on the general structure described above, the format of the workshops is tailored according to the topic's requirements and needs expressed by regions and countries.

### **Objectives and Expected Outcomes**

Regions and countries volunteer to be reviewed in an attempt to source both critical and well-timed advice addressing specific issues they are currently facing in the implementation of innovation and development strategies. Regional and national policy makers may also view PXL workshops as a good opportunity to build their networks of counterparts across Europe.

PXL sessions aim to achieve the following outcomes: (i) to better *understand* the thematic frame of the whole PXL workshop; (ii) to *provide* general feedback to each region and country under review; (iii) to *examine* the specific issues presented by each region and country under review and propose how they could be tackled or solved; and (iv) to *build up* awareness and knowledge about problems that are common across Europe.

During the workshop, the S3 Platform team collects any relevant information and data covering different elements of each PXL exercise. A brief summary/feedback report will be drafted and circulated by the S3 Platform team as a final output of the workshop.