From Smart Growth to Smarter Europe: Learning from Smart Specialisation Delivery

IQ-Net Thematic Paper 43(2)

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PREFACE

The IQ-Net Network promotes exchange of experience on the management and implementation of Structural Funds programmes among managing authorities and intermediate bodies. The network is managed by the European Policies Research Centre Delft under the direction of Professor John Bachtler, Stefan Kah and Dr Laura Polverari. The research for this paper was undertaken by EPRC in preparation for the 45th IQ-Net meeting held in Bilbao, Spain on 21-23 November 2018. The paper was written by Dr Laura Polverari and Viktoriya Dozhdeva.

The paper is the product of desk research and fieldwork visits during autumn 2018 to national and regional authorities in EU Member States (notably partners in the IQ-Net Consortium). The field research team comprised:

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- Kaisa Granqvist (Finland)
- Fabian Gal (France)
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- Dr Eleftherios Antonopoulos (Greece)
- Dr Martin Ferry (Poland)
- Viktoriya Dozhdeva (Portugal)
- Dr Carlos Mendez (Spain)
- Heidi Vironen (Sweden)
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The partners in the IQ-Net network are as follows:

**Austria**
- ÖROK Secretariat

**Belgium**
- Enterprise Agency Flanders

**Croatia**
- Ministry of Regional Development & EU Funds

**Czech Republic**
- Ministry of Regional Development

**Denmark**
- Danish Business Authority
Finland
- South and West Finland (Etelä- ja Länsi-Suomi)

France
- Commissariat Général à l'Égalité des Territoires (CGET)

Germany
- Nordrhein-Westfalen (North Rhine-Westphalia), Ministry for Economic Affairs, Innovation, Digitalization and Energy

Greece
- Management Organisation Unit of Development Programmes S.A.

Poland
- Marshal Office of the Pomorskie Region
- Marshal Office of the Warmińsko-Mazurskie Region

Portugal
- Agency for Development and Cohesion (ADC)

Spain
- Provincial Council of Bizkaia, País Vasco (Basque Country)

Slovenia
- Government Office for Development and European Cohesion Policy

Sweden
- Swedish Agency for Economic and Regional Growth (Tillväxtverket)

United Kingdom
- Ministry of Housing, Communities and Local Government
- Scottish Government
- Welsh European Funding Office

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Disclaimer

It should be noted that the content and conclusions of this paper do not necessarily represent the views of individual members of the IQ-Net Consortium.
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CF</td>
<td>Cohesion Fund</td>
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<tr>
<td>CP</td>
<td>Cohesion Policy</td>
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<tr>
<td>CPR</td>
<td>Common Provisions Regulation</td>
</tr>
<tr>
<td>DG</td>
<td>Directorate General</td>
</tr>
<tr>
<td>EACs</td>
<td>Ex-ante conditionalities</td>
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<tr>
<td>EAFRD</td>
<td>European Agricultural Fund for Rural Development</td>
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<td>EC</td>
<td>European Commission</td>
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<td>EDP</td>
<td>Entrepreneurial Discovery Process</td>
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<td>EMFF</td>
<td>European Maritime and Fisheries Fund</td>
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<td>ERDF</td>
<td>European Regional Development Fund</td>
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<td>ESIF</td>
<td>European Structural and Investment Funds</td>
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<td>ESF</td>
<td>European Social Fund</td>
</tr>
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<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>IB</td>
<td>Intermediate Body</td>
</tr>
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<td>ICT</td>
<td>Information and communications technology</td>
</tr>
<tr>
<td>IP</td>
<td>Investment Priority</td>
</tr>
<tr>
<td>IROP</td>
<td>Integrated Regional Operational Programme (Czech Republic)</td>
</tr>
<tr>
<td>ITI</td>
<td>Integrated Territorial Instrument</td>
</tr>
<tr>
<td>JRC</td>
<td>Joint Research Centre</td>
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<td>MA</td>
<td>Managing Authority</td>
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<td>MS</td>
<td>Member State</td>
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<td>OP</td>
<td>Operational Programme</td>
</tr>
<tr>
<td>NUTS</td>
<td>Nomenclature des unités territoriales statistiques</td>
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<td>PA</td>
<td>Partnership Agreement</td>
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<tr>
<td>RIS3</td>
<td>Research and innovation strategies for smart specialisation</td>
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<tr>
<td>ROP</td>
<td>Regional Operational Programme</td>
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<tr>
<td>RTD</td>
<td>Research and Technological Development</td>
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<td>RTDI</td>
<td>Research, Technological Development and Innovation</td>
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<td>R&amp;I</td>
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<td>SME</td>
<td>Small and medium sized enterprises</td>
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<td>S3</td>
<td>Smart Specialisation Strategy (S3s Smart Specialisation Strategies)</td>
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<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities and Threats</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<td>TO</td>
<td>Thematic Objective</td>
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EXECUTIVE SUMMARY

In line with the growing focus of EU objectives on innovation-driven competitiveness, last Cohesion policy reforms have led to stronger concentration of resources on ‘smart growth’ priorities, including through increased ESIF allocations to R&I, ICT and SME support. Smart Specialisation, introduced as a new strategic approach for 2014-20 Cohesion policy programmes, is seen as key for helping regions tap their innovation potential, strengthen competitiveness and unleash smart growth. Commission proposals for post-2020 Cohesion policy suggest building further on the Smart Specialisation approach as the basis for R&I investment under ESIF, Smart Specialisation Strategies (S3s) seen as a cornerstone to the ‘Smarter Europe’ goals.

At the same time, EU-level data shows that despite the S3s being a prerequisite for receiving ERDF funding, the take-up of this new approach remains diversified, with some regions having engaged with smart specialisation more successfully than others, and innovation excellence in the EU continuing to remain highly concentrated in a limited number of regions.

The 2016 IQ-Net paper1 and subsequent discussions among representatives from IQ-Net partner countries and regions highlighted that the process of designing Smart Specialisation Strategies had often been complex. IQ-Net partner authorities also highlighted a number of challenges emerging from the incipient process of implementing the Smart Specialisation approach.

Against this background, this paper provides an overview of the state of play with the implementation of the S3s in the IQ-Net partner countries and regions, as well as the main challenges that have emerged in the process of implementation, first outcomes and lessons learnt.

Implementation progress – Approaches to implementing Smart Specialisation vary greatly across IQ-Net partner countries and regions (e.g. in terms of formal status of S3s, or territorial levels at which they have been designed and implemented). Overall, however, despite delays with the S3 approval in various cases, implementation is considered satisfactory, and programmes are progressing by and large according to plan in delivering Smart Specialisation. In many cases, the strategies have been revised and/or are going to be further revised, sometimes as part of an iterative process taking and in some cases informed by evaluation exercises. In substantive terms, the changes have included, among others, the introduction of new themes, the inclusion of new support schemes, the clarification of technical aspects related to stgovernance. A number of challenges hindering implementation stem from the difficulties encountered at the design stage, although a range of new issues have emerged too. The main implementation challenges, reported by the IQ-Net partners, relate to the delayed launch of the process, low level of interest and strategy ownership among stakeholders and institutions, the instability of the organisational environment and broader governance challenges (including lack of institutional leadership), along with challenges related to weak (vertical and horizontal) coordination and low administrative, financial and ecosystem capacities. Broader contextual conditions, for instance political and macro-economic uncertainty, or lack of sufficient critical mass in terms of R&I development potential, have also affected Smart Specialisation implementation in some cases.

Entrepreneurial discovery process – Entrepreneurial discovery has continued into the implementation stage in most cases, continued interaction with stakeholders being anchored on both formal, institutionalised bodies and more informal, organic discussions. The EDP has tended to shift focus from brainstorming and knowledge creation to more targeted discussions on the fine-tuning and operationalisation of the earlier identified themes, as well as consideration of additional domains and priorities of relevance for the economic transformation of the region. At the same time, the process has not been always straightforward, and retaining a high level of continued stakeholder engagement has been challenging in some cases. Difficulty in involving the business sector (particularly SMEs) in the process, as well as the excessive size of the working groups, hindering the ability to conduct meaningful discussions, have been mentioned among main constraints in this regard. The composition of partnerships and stakeholder groups involved has largely remained the same as during S3 preparation, with small exceptions. The involvement of actors in the implementation of Smart Specialisation Strategies remains largely in line with the triple helix logic.

Embedding Smart Specialisation in project selection – Although the implementation of the S3s is being carried out in different ways in the ESIF programmes of IQ-Net partner countries/regions, smart specialisation is largely considered to have been successfully embedded in project selection systems.

Funding and synergies – In addition to the ERDF, a variety of funding sources are utilised to support Smart Specialisation. This includes the EAFRD, domestic funding, and the European Territorial Cooperation strand of ERDF, among others. Given the awareness of the crucial role of actions supporting the development of human capital for Smart Specialisation development, the European Social Fund has also been mobilised in various cases. However, despite the utility of achieving synergies between the ERDF and ESF, this has not been always easy to achieve. Not all countries and programmes have earmarked amounts specifically to support Smart Specialisation, and/or included the financial table required by the ex-ante conditionality into their S3. Horizon 2020 has been mobilised only in about 40 percent of cases. The limited uptake of Horizon 2020 is due to a number of factors that relate to the difficulty of reconciling the different logics and the different implementing rules associated with the two sets of funds. In addition, H2020 and ESIF are viewed to have a different focus, with H2020 targeting high-impact international research activities and ESIF on regional development. The Seal of excellence has not been utilised in most cases. At the same time, successful examples of actively pursued synergies exist, although most interviewees see the need in increasing further the joint mobilisation of these funds, including by improving the practical coordination between the programmes' MAs and the authorities in charge of Horizon 2020.

Capacity-building – Investing in skills and capacity-building has been necessary to support implementation of the S3s for most IQ-Net partners, even though capacity-building needs vary greatly, not only across regions and countries, but also across programme areas within the same country. The gaps that the capacity-building measures have sought to address relate to both operational and strategic aspects of Smart Specialisation implementation. Capacity-building has focused, among other things, on ensuring effective monitoring systems for Smart Specialisation, supporting continuous EDP, enhancing policy coordination and synergies, including through support to knowledge exchange and cooperation among regions and actors involved in Smart Specialisation implementation. Capacity-building measures, in most cases, have targeted regional entities and stakeholders in line with the triple helix logic, although with variations across cases. Not all IQ-Net partners have taken advantage of the support provided by the S3 Platform in Seville, but where this has happened, the feedback has been mostly positive, notwithstanding some criticism regarding the
at times generic character of discussions and difficulties in terms of the applicability of findings to specific regional contexts.

**Overall assessment** – At this stage, it is difficult to discuss the impacts of the measures implemented towards Smart Specialisation. Implementation is still at an early stage in some cases and only few evaluations have been carried out on this topic. Nevertheless, there is evidence of softer outcomes, including in terms of creation of new capacities and capacity spillovers amongst the involved actors, improved understanding of the longer-term perspective of development, and creation of trust and of a culture of cooperation and synergy. On the whole, IQ-Net programme authorities overwhelmingly consider that the S3s are valuable and geared towards delivering economic transformation, that they are improving prioritisation and contributing to a more joined-up way of working. At the same time, views are more cautious with regards to the expected impact on economic transformation, the degree to which the S3s are delivering improved results-orientation and allowing improved cross-sectorality and better synergies with H2020.

**Post-2020** – In line with the Commission’s post-2020 proposals, Smart Specialisation is set to become a cornerstone to achieving the ‘Smarter Europe’ goals and creating regional and local innovation-driven eco-systems. There are marked variations across IQ-Net partners in terms of views with regards to the Commission’s approach to ‘Smarter Europe’ and Smart Specialisation, including on issues such as the overall role for Smart Specialisation in post-2020 Cohesion policy, the thematic concentration requirements, the conditionality on Smart Specialisation, synergies and complementarities across various sources of R&I support, and the new interregional cooperation opportunities, among others. This debate is ongoing.

**Conclusions** – Although the process of designing Smart Specialisation Strategies has often been laborious and lengthy, two years down the line the implementation is fully underway. Progress achieved towards implementing the S3s is considered satisfactory by the vast majority of IQ-Net partner authorities, and the goals and thematic foci of the S3s are considered to be well embedded in the programmes’ project selection procedures. The implementation of Smart Specialisation across IQ-Net partner programmes takes different shapes and approaches. Many capacity-building and actor mobilisation activities are evidence of the commitment to Smart Specialisation that is seen in many IQ-Net countries and regions. While actual impacts in terms of regional economic transformation and increased regional specialisation cannot yet be evidenced, softer impacts are already becoming visible. They include, for example: improved mutual understanding, trust and cooperation and diffused learning, which in some cases are having positive spillovers on the absorption of the programme as well. Nevertheless, the process of S3 implementation requires constant commitment and investment of time and effort to address unfulfilled capacity needs and outstanding weaknesses. The research carried out highlights a number of outstanding shortcomings:

- First, the implementation of Smart Specialisation seems to confirm the ‘innovation paradox’ argument, whereby less innovative regions with greater need for investments in innovation have lower absorption capacity and find it harder to overcome the limitations of their productive and HE systems.
- Second, programmes have tended to implement Smart Specialisation according to a triple rather than a quadruple helix concept which may be a missed opportunity. In-depth reflection on the experience of those who are directly engaging NGOs and civil society in the process
(e.g. Slovenia), and on the utility and practice of so doing, may encourage others to attempt this.

- Third, S3s are supposed to leverage on a multiplicity of funding sources beyond the ESI Funds. In the case of IQ-Net partner programmes, they do: the ERDF is matched by a variety of domestic funding streams, national, regional and local. However, these resources are not always spelt out at the outset. This makes the actual volume of financial commitment to the S3s sometimes opaque. In the absence of a clear picture of the resources mobilised, actual impacts on economic transformation may be difficult to estimate.

- Fourth, synergy with Horizon 2020 leaves much to be desired. This appears to be the case especially in those countries and regions that are less endowed with research institutions, facilities and human capital to start with, reinforcing the innovation paradox. Similarly, while various IQ-Net partners utilise the European Social Fund to support the implementation of the strategies, many do not seize this opportunity.

If Smart Specialisation continues as a cornerstone of future Cohesion policy, in order to support the creation of innovation-oriented eco-systems and the achievement of a ‘Smarter Europe’, the new regulations will have to find ways of tackling these issues.
From Smart Growth to Smarter Europe: Learning from Smart Specialisation Delivery

1. INTRODUCTION

1.1 ‘Smart’ growth and specialisation in the 2014-2020 programming period

While Cohesion policy objectives have always focused on reducing regional disparities, they have evolved over time to address wider EU objectives. The last two reforms have aligned the policy with the EU’s objectives for growth and jobs to ensure linkages with the Lisbon agenda and its successor strategy, Europe 2020.²

In the 2014-20 period, EU Cohesion policy is fully aligned with the Europe 2020 strategy as the EU’s overarching development strategy for smart, sustainable and inclusive growth over the 2010-2020 period. It provided the reference framework for the design and programming of the ESIF PAs and OPs, including through greater thematic concentration by which programmes were required to allocate a minimum share of funding to Europe 2020 objectives. This has led to a redirection of Cohesion policy resources to Europe 2020 priorities through increased allocations to R&I, SME support, ICT and the low-carbon economy (under the ERDF/CF) as well as to employment, social inclusion, education and administrative capacity-building (under the ESF).³

The increased emphasis on innovation reflected the macro-economic concerns related to Europe lagging behind its main global competitors in terms of R&D spending, and to the associated need to boost innovation-related investment in order to better exploit research results and convert them into marketable products and processes driving economic growth. Such concentration also stems from the argument that innovation drives up to 80 percent of economic growth in developed countries, while in less-developed countries investments in innovation could improve the performance of the export sector, considered crucial in contexts of low business competitiveness and internal demand.⁴

While the thematic concentration rules of the 2013 Common Provisions Regulation require the concentration of ERDF investments on the first four of the eleven Thematic Objectives (with varying minimum allocations depending on the regional category),⁵ a heavy focus of 2014-20 Cohesion policy on supporting smart growth⁶ is evident and reflected in the emphasis on research, technological

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³ Ibid.
⁵ (1) Strengthening research, technological development and innovation; (2) Enhancing access to, and use and quality of information and communication technologies; (3) Enhancing the competitiveness of small and medium-sized enterprises; (4) Supporting the shift towards a low-carbon economy in all sectors.
⁶ The Europe 2020 strategy defines the ‘smart growth’ priority as ‘developing an economy based on knowledge and innovation’. According to the document, ‘Smart growth means strengthening knowledge and innovation as drivers of our future growth. This requires improving the quality of our education, strengthening our research performance, promoting innovation and knowledge transfer throughout the Union, making full use of information and communication technologies and ensuring that innovative ideas can be turned into new products and services that create growth, quality jobs and help address European and global societal challenges... To
development and innovation, the digital agenda, and actions aimed at increasing the innovative capacity and competitiveness of SMEs. Member States and regions are called on to ‘help attain the smart growth objectives of Europe 2020 through Regional Policy and its funding’ and Cohesion policy is seen as a key means of unlocking ‘the growth potential of the EU by promoting innovation in all regions, while ensuring complementarity between EU, national and regional support for innovation, R&D, entrepreneurship and ICT’.

It is also seen as crucial for turning the priorities of the Europe 2020 flagship initiative ‘Innovation Union’ into practical action on the ground.

Since 2000, the investments in research and innovation (R&I) under Cohesion Policy have grown significantly: from €26 billion in the 2000-06 period to over €86 billion (or 25 percent of the EU Structural Funds) in 2007-13, to €121 billion ESIF in the current 2014-20 period (the latter figure refers to ‘smart growth’ overall, 30 percent of the total allocations being deployed for innovation).

To support the innovation-driven competitiveness of Europe, a new strategic approach has been introduced for Cohesion policy programmes, via the introduction of Smart Specialisation Strategies (S3s). To support EU regions with the concentration of resources on a limited set of key strategic priorities and identify the best, context-specific policy mix to unleash smart growth, smart specialisation provides a logic and a process for policy prioritisation, through a participative reflection on regional strengths and weaknesses through the Entrepreneurial Discovery Process, in line with the new results-orientation logic. Smart specialisation is introduced as a pre-condition for ERDF funding: the approval of S3s as a strategic basis for the programmes being one of the ex-ante conditionalities under TO1 (Box 1).

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8 Ibid.
10 European Commission (2011) op. cit.
Box 1: Ex-ante Conditionalities and conditionality about Smart Specialisation Strategies

The new CPR introduced a number of **ex-ante conditionalities** (EACs), which in practice are lists of requirements applicable to the three Structural and Cohesion Funds, that programme or national authorities have to fulfil. They are linked to either the 11 TOs of the Common Strategic Framework (‘thematic’ EACs) or wider, horizontal issues, such as compliance with State aids, public procurement or non-discrimination laws and principles (‘general’ EACs).

The **EAC on Smart Specialisation Strategies, EAC 1.1**, is as follows (Annex XI CPR):

1. A national or regional smart specialisation strategy has to be in place that:
   - is based on a SWOT or similar analysis to concentrate resources on a limited set of research and innovation priorities;
   - outlines measures to stimulate private RTD investment;
   - contains a monitoring mechanism.
2. A framework outlining available budgetary resources for research and innovation has been adopted.


Aiming to make innovation a priority for all regions, improve the innovation process through smart and strategic choices, focus investment, create synergies, improve governance, encourage broader stakeholder participation and create innovation-oriented eco-systems at regional and local levels, smart specialisation is seen as key for helping regions to tap their innovation potential, strengthening regional competitiveness and maximising the contribution of Cohesion policy to the **smart growth** objectives.

**In financial terms,** in 2014-20, the ESI Funds contribute €121 billion to **smart growth**, the total investment (including national co-financing) for R&I, digital technologies and SME support reaching €181 billion. Of this, over €41 billion (and over €62 billion including national co-financing) is allocated through the ERDF to support **research and innovation** (along with €1.8 billion programmed under the ESF for strengthening human capital in RTDI). At the same time, budgets allocated for research

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13 Defined as ‘concrete and precisely pre-defined critical factor[s], which [are] a prerequisite for and ha[ve] a direct and genuine link to, and direct impact on, the effective and efficient achievement of a specific objective for an investment priority or a Union priority’ (art. 2(33) CPR).
14 The EAFRD and EMFF also have ex-ante conditionalities. These are listed in the Funds’ regulations and not in the CPR.
and innovation, both in absolute and relative terms, vary greatly across the Member States (see Figure 1 and Figure 2, and Table 1), reflecting the heterogeneous policy priorities and RTDI needs and challenges. As can be seen from Table 1, TO1 is supported primarily by the ERDF but, outside Cohesion policy, also by the EAFRD. While the ESF does not invest directly in TO1, as will be seen in Section 2.4, it contributes to smart specialisation in a number of ways with training, capacity-building, networking and other types of activities.
Figure 1: Total Budget by Member State (daily update): Research & Innovation, EUR billion


Figure 2: Percentage of Total Budget Allocated by Member State for Research & Innovation, % of total contribution

## Table 1: ESIF resources mobilised to fund Thematic Objective 1 in the EU28

<table>
<thead>
<tr>
<th>MS</th>
<th>ERDF (M€)</th>
<th>% of TOTAL ERDF of COUNTRY</th>
<th>EAFRD (M€)</th>
<th>% of TOTAL EAFRD of COUNTRY</th>
<th>TOTAL ERDF + EAFRD (M€)</th>
<th>% of TOTAL ERDF+ EAFRD of COUNTRY</th>
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<tr>
<td>Poland</td>
<td>8228</td>
<td>13</td>
<td>91</td>
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<td>82</td>
<td>67.3</td>
<td>391</td>
<td>86.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>335</td>
<td>36.1</td>
<td>38</td>
<td>33.4</td>
<td>373</td>
<td>69.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>255</td>
<td>23.5</td>
<td>87</td>
<td>54.8</td>
<td>342</td>
<td>78.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>278</td>
<td>38.3</td>
<td>18</td>
<td>21.8</td>
<td>296</td>
<td>60.1</td>
</tr>
<tr>
<td>Austria</td>
<td>206</td>
<td>19.4</td>
<td>71</td>
<td>72.3</td>
<td>277</td>
<td>91.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>142</td>
<td>13.4</td>
<td>39</td>
<td>63.9</td>
<td>181</td>
<td>77.3</td>
</tr>
<tr>
<td>Denmark</td>
<td>88</td>
<td>17.6</td>
<td>17</td>
<td>52.4</td>
<td>105</td>
<td>70</td>
</tr>
<tr>
<td>Malta</td>
<td>58</td>
<td>46.6</td>
<td>15</td>
<td>12.7</td>
<td>73</td>
<td>59.3</td>
</tr>
<tr>
<td>Cyprus</td>
<td>70</td>
<td>30.2</td>
<td>2</td>
<td>20.8</td>
<td>72</td>
<td>51</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>9</td>
<td>10.6</td>
<td>0</td>
<td>80.7</td>
<td>9</td>
<td>91.3</td>
</tr>
<tr>
<td>Territorial Cooperation</td>
<td>1873</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>1873</td>
<td>100 (ERDF)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>41732</td>
<td></td>
<td>2452</td>
<td></td>
<td>44184</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own calculations from ESI Funds Open Data Platform ([https://cohesiondata.ec.europa.eu/themes/1](https://cohesiondata.ec.europa.eu/themes/1)), 14/11/2018. Dark green indicates a concentration of ERDF support in TO1 around or above 50% of total ERDF funding; light green shading indicates a concentration of ERDF support in TO1 between 40 and 50% of total ERDF funding.
1.2 **Mixed performance so far and ‘the regional innovation paradox’**

Despite the presence of a Smart Specialisation Strategy being a prerequisite for receiving ERDF funding, the take-up of this new approach to innovation policy across the EU remains diversified, with some regions having engaged with smart specialisation more successfully than others.\(^{19}\)

The EU *Regional Innovation Scoreboard 2017* shows that while for most regions innovation performance has improved over time, there has been a process of **divergence in regional performance** (Figure 3).\(^{20}\) **Innovation excellence continues to remain highly concentrated** in a limited number of European regions, with a divide being evident between the north-western MSs (generally characterised by good interregional connections, a highly skilled labour force and an attractive business environment, allowing neighbouring regions to reap proximity benefits), and the southern and eastern MSs (with often weaker innovation performance and regions close to innovation centres not benefitting from their proximity).\(^{21}\)

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Figure 3: Regional Innovation Performance, 2017

Source: European Commission (2017a), p. 34.
Regions absorbing low ESIF amounts for business innovation make up the largest share – 71 percent – of EU regions, with over 50 percent of the low ESIF users being moderate or modest innovators located in the Mediterranean or Eastern European regions.22

In other words, the Regional Innovation Scoreboard since 2014 has highlighted the EU ‘regional innovation paradox’, whereby less innovative regions with greater needs for investments in innovation have lower absorption capacity than performing regions, and invest less into supporting RTDI activities, showing that the lack of regions’ prioritisation of investments in innovation is reflected in their low innovation performance.23 Such dynamics bring the risk of regions being locked in the ‘middle-income trap’, requiring adequate policy responses, among other things promoting R&I investment, a stronger export-orientation, a shift into new sectors and activities, and improvements to the quality of governance.24 Hunter (2017)25 argues that while some regions have recognised the S3 contribution to regional innovation, many have ‘overlooked its value as a tool to harness much needed EU investment by applying Smart Specialisation, market-led principles to better articulate ‘hot spots’ of EU competitiveness’ and that, if Smart Specialisation is to enhance its contribution to EU growth and investment, a more holistic EU response would be needed, reconsidering and reinforcing the role of S3s in driving innovation and industry-focused investment.

The application of thematic concentration and the implementation of smart specialisation have played out differently across the EU. While the Member States with previous experience of focusing ERDF support on R&I investment and devising and implementing regional innovation strategies had no or less difficulty in adjusting to the intensified thematic focus of 2014-20,26 for others, where these concepts and practices were more novel, this has been more challenging.

1.3 A number of outstanding challenges: aims of the paper

The topic of the preparation of Smart Specialisation Strategies was the subject of discussions at the 2016 IQ-Net winter conference, held in Athens in November 2016. Discussions among representatives from IQ-Net partner countries and regions highlighted that the process of designing Smart Specialisation Strategies had often been complex, notwithstanding the support on offer27 by the dedicated Smart Specialisation Support Platform, based in the Commission Joint Research Centre in Seville and tasked with the provision of ‘professional advice to EU countries and regions for the

24 European Commission (2017b) op. cit. and European Commission (2014a) op. cit.
27 Notably the Smart Specialisation Platform located in Seville (http://s3platform.jrc.ec.europa.eu/), which currently counts 179 registered EU regions and 18 registered EU Member States, plus 6 and 16 registered non-EU countries and regions respectively, and similar platforms in some cases at the national levels, e.g. in the United Kingdom the English Smart Specialisation Hub (http://smartspecialisationhub.org/).
design and implementation of their research and innovation strategies for smart specialisation (RIS3).\textsuperscript{28}

IQ-Net partner authorities also highlighted a number of challenges emerging from the incipient process of implementing the Smart Specialisation approach, for example:

- While recognising that the approach should not be about sector-picking, some regions were not successful in entirely avoiding this pitfall and in focusing their efforts on activities on a sub-sectoral and, ideally, inter-sectoral level.

- Similarly, while striving to pursue economic transformation (i.e. ‘not doing the same things as before, but better’), whether this was being achieved was considered a question mark, particularly given that incumbency often made it difficult to attain the desired selectivity.

- While there was awareness that the Entrepreneurial Discovery Process (EDP) should be ongoing, with the involvement of all stakeholders also embedded in the implementation stage, not only in the co-creation but also in the co-implementation of the strategies (rather than remain a one-off, at the stage of strategy preparation), the perception was that this was happening successfully in some case, but not in all.

- There was also acknowledgement that Smart Specialisation requires new administrative capacities as well as administrative innovations that are not easy to introduce and sustain, since they require overcoming entrenched habits, power relations and path dependencies (e.g. silo mentality).

- Lastly, while there was awareness of the utility, and necessity even, of making synergic use of Cohesion policy and Horizon 2020 funding, this was proving difficult, given the different underlying logics of the two policies (place-based versus place-blind) and the regulatory discrepancies or differences in interpretation among the leading DGs for the two policies within the Commission.

These difficulties are corroborated by more recent studies focused on experiences beyond those of the IQ-Net partner countries and regions, including various reports by the European Commission’s Joint Research Centre.\textsuperscript{29} Additionally, a key point that has emerged in the literature is the inability of the approach, as applied within EU Cohesion policy, to produce actual ‘specialisation’ insofar as the S3s identify a large number of economic and scientific domains as the focus of policy effort, as shown

\textsuperscript{28} http://s3platform.jrc.ec.europa.eu/. This support includes: Provision of guidance material and good practice examples; Realisation of high-quality research to inform strategy formation and policy-making; Facilitation of peer reviews and mutual learning; Supporting the access to relevant data; Policymaker training; Organisation of information sessions for policymakers and conferences (for example an EU-wide conference has been organised for the end of September in collaboration with the Regional Studies Association).

in a forthcoming paper by Di Cataldo and Monastiriotis, presented at the 2018 edition of the European Week of Cities and Regions.\textsuperscript{30}

**Figure 4: List of regions/countries with 40+ Smart Specialisation domains (economic and scientific) and policy objectives**

![List of regions with 40+ RIS3 domains/objectives](source)


Against this background, this paper aims to provide a picture of the state of play with the implementation of the Smart Specialisation Strategies in the IQ-Net partner countries and regions, uncovering, in particular:

- whether IQ-Net partners (continue to) face difficulties with the implementation of their Smart Specialisation Strategies (or, more widely, of the Smart Specialisation approach) as part of their Cohesion policy programmes;

- how Smart Specialisation is being implemented in practice, including the way in which the EDP has assured continuity and Smart Specialisation is embedded in project selection;

- the specific aspects of implementation that are particularly problematic or successful (and why), and

- first outcomes as well as lessons learnt for the remaining part of the 2014-20 programming period and for the future. The paper also aims to take stock of partners' views on the Commission's proposals relating to the Smarter Europe Objective for post-2020 ESI Funds.

It is structured as follows: after this Section 1, which has reviewed the overall context for Smart Specialisation within the current regulatory provisions and set the context for the paper, Section 2 discusses the actual experience of implementing Smart Specialisation in IQ-Net Partner countries and

regions (entrepreneurial discovery, actors, project selection, funding sources and capacity building initiatives). Section 3 presents a summative assessment of implementation and outcomes to date; while Section 4 provides a state of play review of the debate on post 2020 Cohesion policy, relating to ‘Smarter Europe’. Conclusions are provided in Section 5.
2. SMART SPECIALISATION FROM DESIGN TO IMPLEMENTATION

2.1 Smart Specialisation Strategies and their revisions

As can be seen from Table 1 below, not all IQ-Net partner countries and regions have formally designated Smart Specialisation Strategies (S3s). In some cases, the strategic reference for Smart Specialisation is represented by domestic innovation and/or industrial strategies, at national and/or regional levels, which in some cases were written prior to the ESIF programmes. In Finland, for example, there is a national innovation strategy that is taken as the reference point for smart specialisation within ESIF. In Austria and Flanders, the choice was made to consider Smart Specialisation as a strategic policy framework, rather than a strategy as such. In Austria, the framework consists of a national strategy that is based on 9 innovation strategies at Land-level. In Flanders, Smart Specialisation is embedded in all Flemish development policies. There are a number of policy choices and instruments that operationalise Smart Specialisation, within and outside the ERDF OP, but they are not identified as directly contributing to a single strategy. As such, Smart Specialisation is implemented following different institutional choices and organisational arrangements, an overview of which is provided in Annex I.

Further, as already noted in previous research, not all countries opted to develop national Smart Specialisation Strategies, while in other cases, the regions were left free to decide whether to develop Smart Specialisation Strategies or, instead, to utilise the national S3s or other national or regional innovation or growth strategies as a reference point for their ERDF programmes. The situation, thus, is highly diversified in these respects:

- The majority of countries (ten) have both national and regional Smart Specialisation Strategies (or equivalent strategies, not officially labelled as relating to ‘Smart Specialisation’) – Austria, Czech Rep., Denmark, Finland, Germany, Greece, Poland, Portugal, Spain and Sweden. In the three Nordic countries, however, regional strategies are present only in some rather than all regions/counties, as they can decide on a voluntary basis whether to develop regional S3s.

- Another group of countries (three), mainly smaller countries, have only national Smart Specialisation Strategies (or equivalent strategies) – Belgium, Croatia and Slovenia.

- Lastly, France and the United Kingdom only have regional Smart Specialisation Strategies.

In many cases, these strategies have been revised and/or are going to be further revised. Sometimes, as in the Czech Republic and Scotland, this is part of an iterative process taking place every few years (in Scotland, when revisions to the wider Scottish Government Economic Strategy

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32 Ibid.

33 In cases where there is no separate regional S3, the theme is embedded in the general regional development strategies.
are made). Reflecting the changing needs and views of all stakeholders involved, the evolution of the economic and technological contexts, and the strengths and weaknesses of implementation as it unfolds, are part and parcel of the process of implementing what are considered to be ‘live’ strategies (in that they are based on a continued process of entrepreneurial discovery, as will be discussed below). The revisions are also the outcome of an improved understanding of the concept of Smart Specialisation, compared to when the strategies were developed, particularly where the concept was novel to the policy context (e.g. in Sweden where, for this reason, regions engaged differently with the theme, prompting Tillväxtverket to realise various events and initiatives – described in Section 2.2).

In substantive terms, the changes introduced have included:

- the introduction of themes not initially foreseen among the eligible activities for support under the ERDF OPs (such as industrial chemistry in the Czech Republic, sustainable tourism in Slovenia, and robotics in South Denmark);
- the inclusion of new support schemes (e.g. in the Czech Republic, five new programmes by the Technological Agency and various programmes by sectoral ministries such as the Ministry of Health or of Interior);
- the clarification of technical aspects related to the implementation of the strategy (e.g. in Pomorskie); and
- the modification of the governance of the strategies, reflecting wider changes in regional governance (as in France, where a 2015 law merged regions and strengthened their economic development competences, making, amongst others, the elaboration of regional strategies mandatory).

Evaluation has supported / is expected to support the revision process in some cases (e.g. in the Czech Republic, Spain, Sweden, Warminsko-Mazurskie), while in the Czech and Danish regions and in Slovenia, the strategies are constantly kept up-to-date through annual Action Plans.

Box 2: Mid-Term Evaluation of the National Smart Specialisation Strategy in the Czech Republic

A Mid-term evaluation of the National Smart Specialisation Strategy is being carried out in the Czech Republic, with publication of the final report planned for June 2019. At the regional level, in March 2018, an external evaluation of the regional innovation strategy of the South Moravian Region (planned since the launch of the Strategy itself and thus covering the period from 2003 to 2016) was published, confirming the correct orientation of the entire strategy. 34

For the UK nations, Brexit represents a question mark in terms of the funding sources and shape that future public support for innovation might take and this will likely have implications for existing Smart Specialisation Strategies. While in England the Strategy will likely be revised soon to become better aligned with the new (2017) UK Government’s Industrial Strategy and with the local industrial

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strategies that this envisages, in Wales the Welsh government is considering the outcome of a study carried out to review the post-Brexit research and innovation policy support (Box 3).  

**Box 3: The Reid review of government-funded Research and Innovation in Wales**

<table>
<thead>
<tr>
<th>The Reid review into government-funded R&amp;I in Wales was launched to (among others):</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) collate the results of recent analyses of research and innovation activity in Wales;</td>
</tr>
<tr>
<td>(ii) identify patterns and themes in the development of business and public services in Wales that draw on R&amp;I strengths in and beyond Wales;</td>
</tr>
<tr>
<td>(iii) consider how future government-led investment and support for R&amp;I in Wales can be aligned with the requirements of the Well-Being of the Future Generations (Wales) Act (2015);</td>
</tr>
<tr>
<td>(iv) make recommendations for the development of a research and innovation strategy for Wales;</td>
</tr>
<tr>
<td>(v) provide guiding principles to inform future investment and funding decisions by the Welsh Government;</td>
</tr>
<tr>
<td>(vi) consider the implications of Brexit for government-funded research and innovation in Wales.</td>
</tr>
</tbody>
</table>

The review produced three recommendations including the establishment of:

| (i) a new Welsh Research and Innovation London Office (WRILO) in order to increase the visibility and influence of Welsh research; |
| (ii) an additional Future of Wales Fund to incentivise Welsh researchers to win funding from outside Wales, in order to strengthen the Welsh research base and enable Welsh researchers to attract a greater share of UK-wide funding; and |
| (iii) a single overarching brand for the innovation activities (the St David’s Investment Fund) in order to increase the visibility, coherence and impact of Welsh Government-funded research and innovation in Wales. |

<table>
<thead>
<tr>
<th>Country</th>
<th>Level of the S3</th>
<th>Approval National</th>
<th>Revised?</th>
<th>Approval Regional</th>
<th>Revised?</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>National (based on regional strategies)</td>
<td>2011 (pre ERDF conditionality)</td>
<td>Ongoing, regional strategies are continuously revised</td>
<td>Between 2009 and 2016</td>
<td>Continuously</td>
<td>Originally Austrian RTI Strategy, broad with no formal EDP, but EDPs at Land-level</td>
</tr>
<tr>
<td>Belgium (Vlaanderen)</td>
<td>Only regional</td>
<td>December 2014</td>
<td>In progress</td>
<td>-</td>
<td>-</td>
<td>No dedicated S3, uses a policy note for design and methodology.</td>
</tr>
<tr>
<td>Croatia</td>
<td>Only national</td>
<td>30 March 2016</td>
<td>No</td>
<td>-</td>
<td>-</td>
<td>Implementation carried out through defined criteria in project selection.</td>
</tr>
<tr>
<td>Denmark</td>
<td>National &amp; regional</td>
<td>-</td>
<td>-</td>
<td>Regional Growth Strategies in Southern Denmark 2009</td>
<td>Yes</td>
<td>Has undergone several revisions to accommodate stakeholder interests in the form of annual Action Plans.</td>
</tr>
<tr>
<td>Finland</td>
<td>Only regional (voluntary) but also National Innovation Vision &amp; Roadmap (2017, replacing 2015 National Innovation Strategy)</td>
<td>-</td>
<td>-</td>
<td>Dec 2018 (Helsinki-Uusimaa); 2014 &amp; 2017 Pirkanmaa (embedded in Regional Strategy)</td>
<td>Mixed</td>
<td>Finnish regions can develop S3s on a voluntary basis. In the rest of the regions, e.g. Pirkanmaa, the S3 is embedded in the wider Regional Strategy.</td>
</tr>
<tr>
<td>Greece</td>
<td>National &amp; regional</td>
<td>August 2015</td>
<td>No but planned for 2019</td>
<td>2015</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Poland</td>
<td>National &amp; regional</td>
<td>-</td>
<td>-</td>
<td>July 2015</td>
<td>Twice in Pomorskie; in progress in WM</td>
<td>-</td>
</tr>
<tr>
<td>Portugal</td>
<td>National &amp; regional</td>
<td>December 2014</td>
<td>No</td>
<td>December 2014</td>
<td>No</td>
<td>Centro region strategy under public consultation; some domains changed.</td>
</tr>
<tr>
<td>Spain</td>
<td>National &amp; regional</td>
<td>-</td>
<td>-</td>
<td>December 2015</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Only national</td>
<td>July 2017</td>
<td>December 2017</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Country</td>
<td>Level of S3</td>
<td>Approval National</td>
<td>Revised?</td>
<td>Revised?</td>
<td>Additional information</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>----------</td>
<td>----------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>National Innovation Strategy; some regional S3s (most counties)</td>
<td>Multiple, mixed</td>
<td>Multiple, mixed</td>
<td>Mixed approaches. Some have S3/ regional innovation strategies, others regional growth strategies.</td>
<td>-</td>
<td>Many Swedish counties continue to implement Smart Specialisation through their existing regional growth strategies.</td>
</tr>
<tr>
<td>UK</td>
<td>Only regional</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>England</td>
<td></td>
<td>-</td>
<td>-</td>
<td>April 2015</td>
<td>Expected, to be reviewed when Welsh Government Strategy is updated</td>
<td>New Industrial strategy in 2017 with plans for local industrial strategies to follow. May lead to revisions of S3s. Also local S3s in some LEPs (e.g. Tees Valley, Liverpool, North East, Cornwall and Greater Manchester).36</td>
</tr>
<tr>
<td>Scotland</td>
<td></td>
<td>-</td>
<td>-</td>
<td>December 2014</td>
<td>Updated when Scottish Government economic strategy is reviewed</td>
<td>Most innovation spend in Scotland is not ERDF.</td>
</tr>
<tr>
<td>Wales</td>
<td></td>
<td>-</td>
<td>-</td>
<td>June 2013</td>
<td>Expected, when Government Strategy updated</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: IQ-Net research 2016 and 2018.

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36 Marlow and Richardson (2016) op. cit., p. 1487.
As discussed in IQ-Net thematic paper 39(2), despite the ex-ante conditionality, there were delays with the approval of the Smart Specialisation Strategies in various cases. Mostly, however, the group of countries and regions involved in IQ-Net were not affected by the most significant delays. This also holds true when considering implementation progress to date: while it is difficult in substantive terms to appraise the progress of the S3s, due to them being embedded in the ESIF and other wider programmes, the perception of IQ-Net partners is that they are indeed progressing according to plan in most cases, as shown in Figure 5 and Figure 6 below.

![Figure 5: Going to Plan? (2018 only)](image1)
![Figure 6: Progressed according to plan](image2)

Source: IQ-Net research.

The IQ-Net thematic paper 39(2) showed that the design and approval process of Smart Specialisation Strategies was not straightforward, and it highlighted a range of issues described by the IQ-Net partners as hindering the process. It showed that the process of S3 design was often particularly challenging for those countries and regions lacking experience of EDP, participatory strategy-setting, and business-science dialogue. Some of the key constraints related to the difficulties in adapting to the new policy logic, with prioritisation and results-orientation at its core, along with finding optimal ways of linking up different territorial levels for coherent design and implementation of S3s, and ensuring that the necessary skill sets for implementing the new policy approach were in place. The process of S3 preparation was also often complicated by the excessive number of actors involved and the associated difficulty of reconciling contrasting views, along with the lack of clear outcomes expected to be achieved through the implementation of S3s.

Once the strategies were approved and the process moved into the implementation stage, the effect of these challenges could still be felt in many cases, although the key challenges hindering implementation progress have evolved, with a number of new issues emerging (see Figure 7).

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37 Polverari L (2016) op. cit.
38 Delays occurred in Bulgaria, Spain, France, Italy, Luxembourg, Malta, Poland, Romania and Slovakia. See Polverari (2016) op. cit., p. 18.
39 Polverari L (2016) op. cit.
40 Ibid.
41 Ibid.
The delayed launch of the process has been highlighted as the main reason for the implementation not progressing according to plan, with 60 percent of IQ-Net partners referring to this difficulty. By contrast, only c. 10 percent of respondents referred to this challenge back in 2016, which may be due to the fact that the scale of delays had not manifested itself in its entirety, and the accumulation of delays, affecting implementation, was to follow. The delayed launch stemmed from both internal challenges, including the necessity to adapt to the logic and requirements of the new approach, and external circumstances, including the relatively late introduction of the Smart Specialisation approach and late delivery of EU regulations and guidelines by the European Commission (as highlighted, for example, by Sweden, NRW, Greece). The latter meant that MSs and regions had to identify their Smart Specialisation priority areas, to be included in the OPs, relatively late in the programming process, with extensive work being needed for the subsequent OP negotiation, designation, and redesign of the monitoring systems. This delayed the whole PA implementation progress, including the launch of projects/calls earmarked as part of the S3 policy mix (e.g. Croatia), and delays accumulated at the programming stage led to those at subsequent stages. In addition, delayed performance of specific elements of the ESIF implementation process (e.g. state-aid information systems in Greece) further hampered the process in some cases.

Lack of interest on the part of some actors to engage with the process and the associated problem of a low ownership of the strategy among the relevant stakeholders and institutions have been mentioned as another significant obstacle to timely and smooth Smart Specialisation implementation. For instance, low demand under TO1 is reported by Warminsko-Mazurskie (where the co-financing amount under the contracts signed so far represents only c. 20 percent of total allocation), and the perception and ownership of the strategy among the relevant stakeholders is seen as limited at the level of the national Czech RIS3 strategy.

Weak strategy ownership is in some cases associated with the instability of the organisational environment and with broader governance challenges, often related to the necessity to establish new structures to ensure effective Smart Specialisation implementation or to adapt the existing
structures to the requirements of the new approach. For example, in Croatia, the main challenge to successful S3 implementation has been attributed to delays due to a vacuum of governance for S3, given the absence of an overarching Innovation Council overseeing S3 implementation (and having authority over the establishment of an efficient monitoring system). Although these challenges have been successfully resolved with the founding of a National Innovation Council, the forthcoming implementation of an effective monitoring system and a revised S3 Action Plan, they have been hindering Smart Specialisation progress up to the present. In the Czech Republic, the implementation of the national RIS3 has been hindered by frequent changes of the principal strategy coordinator. This was also the case for the national RIS3 in Portugal, where the central administration bodies supporting Smart Specialisation and the overall policy-mix of innovation in the country underwent significant staff alterations, which led to the ‘disappearance from the system’ of the actors that were at the origins of the process as its active constructors and drivers. **Lack of institutional leadership** has also accounted for implementation problems in some cases. For example, in Croatia, a Smart Specialisation ‘champion’ was not established within the existing institutional framework; the recruitment of the staff responsible for Smart Specialisation implementation (including monitoring tasks and EDP support) has been a problem in Warminsko-Mazurskie; the Paris Region OP in France was delayed due to difficulties in the authorities’ designation process. In some cases, the implementation process has not run according to expectation as the governance model foreseen for Smart Specialisation has so far failed to function in the entirety of its elements. For instance, in Portugal, a complex multi-level governance model, combining the national and regional levels, is foreseen to ensure successful RIS3 implementation, but so far its elements have not been functional in some of the regions (e.g. Lisbon, Norte).

Related issues concern **coordination and capacity challenges**. The governance system for Smart Specialisation requires effective vertical and horizontal **coordination** across levels and sectors of administration, types of actors and territories, but this has proven challenging in some cases. For example, in the Czech Republic, there has been a significant effort to renew communication with the different partners in the Smart Specialisation process after the institutional changes of principal S3 coordinator, including the regions, but coordinating gaps still remain. Warminsko-Mazurskie has referred to problems with the flow of information, wherein individual units (including Departments in the Marshalls Office) often implement actions for the development of smart specialisation independently and with little mutual cooperation, even though attempts to establish such cooperation are being made. Among other things, coordination challenges may impede the overcoming of the rooted **silo mentality** and encouraging more joined up policy-making, constituting a significant barrier to effective Smart Specialisation implementation. **Capacity** challenges, either at the level of administration or wider stakeholders relevant for the Smart Specialisation implementation process, have been highlighted by a number of IQ-Net partners. Issues included lack of expertise (Pirkanmaa Region), human resources (Warminsko-Mazurskie), or experience. For example, in Greece, the MAs of the ROPs lacked experience in promoting R&D activities or in applying the State aid rules. In the Czech Republic, low numbers of staff and expert capacity have also hindered national RIS3 implementation.

**Insufficient financial capacity and budgetary restrictions** have also been mentioned among the constraining factors. For instance, demand for ERDF support under the Paris Region OP has been significantly higher than available resources; the Pirkanmaa Regional Council in Finland noted that the implementation of Smart Specialisation has overall lacked resources; while the Helsinki-Uusimaa
Region experienced some issues with committing companies to the implementation because the ESIF regulation does not allow their direct financial support. The País Vasco ERDF OP performance evaluation (2017) showed that R&D expenditure in both the public and private sectors has been negatively affected by the ongoing fallout of the crisis and budget restrictions.\footnote{IKEI (2017) Evaluación de los objetivos y resultados del Programa Operativo FEDER de País Vasco 2014-2020 para el informe anual de 2017. INFORME, 26 de Mayo de 2017.}

**Monitoring-related issues** have also been among obstacles to Smart Specialisation implementation. For instance, the Czech Republic noted severe difficulties with monitoring the strategy, as the central MS2014+ (the system for monitoring ESIF implementation) was not adjusted to monitor the RIS3 at the outset, which forced the principal coordinator to ‘search for complicated ways of monitoring the strategy implementation’. In Croatia, there has been confusion between the monitoring role of MAs and IBs related to the monitoring and implementing of ESIF-funded projects and their role as stakeholders driving implementation of S3 objectives within the national innovation system. Lack of appropriate monitoring has also been noted by other partners (e.g. Pirkanmaa Region).

Wider **contextual conditions** have also led to implementation challenges in some cases. These have included, for instance, wider difficulties with implementation of the ESIF programmes (for example in Scotland, where project implementers have been slow to submit claims, due to Lead Partners’ concerns over the evidence required alongside a claim), or the uncertainty following the Brexit referendum (as in England – see Box 4).

**Box 4: Challenges of the S3 process in England following the Brexit referendum**

From the point of view of ERDF intervention in the S3 process, implementation in England has stalled. The ERDF-funded Smart Specialisation Hub found it easier to encourage beneficiaries to invest in Smart Specialisation as an approach and a methodology when ERDF funding under Priority 1 (RTDI) of the programme could be used as an effective incentive. The ERDF funding would in theory encourage applicants to engage, and the Smart Specialisation Hub would then help them develop projects. However, the enforced pause in the programme after the Brexit referendum and the continuing uncertainty have made it difficult to encourage applicants, and created the perception among them that there might be no continuation of the ERDF funding. The appetite for participating was then constrained across the 38 Local Enterprise Partnerships in England, who have become wary of EU funding. The Hub has seen projects being put on hold, a lack of match funding, and lack of willingness to take part in projects as lead partners. The Hub is continuing to undertake advocacy work, but local authorities and universities have shown less cumulative appetite to engage in activities that they view as time-consuming and bureaucratic. The focus on compliance in ERDF does not make the funding relatable to innovation-oriented applicants and has presented a challenge to uptake. There is concern that once ERDF is removed as an incentive, little ambition to participate in Smart Specialisation may remain.

Source: IQ-Net research.

The fact that the **pre-existing domestic strategies** have been already pursuing similar policy approaches has sometimes minimised the effect of the Smart Specialisation Strategies. For example, in Pirkanmaa Region (Finland), Smart Specialisation has led only to a very few concrete measures, as in practice the inclusion of Smart Specialisation has not presented any change to the Regional Strategy. In the UK, there is currently a plethora of domestic strategies, and according to
Interviewees in England, ‘people are not sure where to focus their attention’. For example, the first wave of domestic Science and Innovation Audits was very explicit in terms of referencing Smart Specialisation, as was the second wave, but by the third round there was less emphasis on Smart Specialisation as an idea. Exacerbating this, the S3 for England has not been refreshed since 2015; it refers to documents and concepts that have been sidelined and superseded by the new domestic strategies that have since been launched.

In broader terms, the **lack of sufficient critical mass** (in terms of R&I development potential, density of business and research entities and networks, regional scale, peripherality etc.) may also constitute a significant barrier to dynamic Smart Specialisation implementation.

In contrast to the 2016 perceptions, most respondents do not consider lack of **clarity of the expected outcomes** of the Smart Specialisation process a major barrier to implementation, which may show that the priority-setting process has generally worked well and stakeholders might have further internalised the result-orientation logic.

Many of the above-mentioned challenges, along with further issues, are highlighted in the 2018 Evaluation of Smart Specialisation Process in Spain. Grouped into four categories (relating to management and administrative procedures, budget issues, Smart Specialisation processes, and broader R&I-related difficulties), they provide a concise but informative overview of some of the key issues hindering the implementation of Smart Specialisation Strategies in 2014-20 (see Box 5).
Box 5: Main Smart Specialisation implementation challenges in Spain

An evaluation of the smart specialisation process across all 17 Spanish regions identifies four types of implementation challenges relating to: (i) ERDF management and administrative procedures; (ii) budget issues; (iii) the procedure for developing and managing smart specialisation; and (iv) the R&I system.

**ERDF management and administrative procedures**

- Overlap between 2007-2013 closure and 2014-2020 launch has caused OP implementation delays and therefore in smart specialisation. In many regions there was not enough capacity to budget for actions of two different periods and funding for the years 2014 and 2015 have been absorbed at the end of the 2007-2013 programme period.
- Delay in approval of EU and national legislation: including EU delegated acts in 2015, which continued to impact the development of OPs. National legislation was also delayed, and the eligibility legislation was not published till 2016, and there has been a delay in the approval of OPs.
- The increasing complexity in the management and control of ERDF in this period. This relates to designation of the Intermediate Bodies, difficulties faced by beneficiaries when implementing actions, the lack of definition or changes in eligibility criteria, etc.
- Participatory governance for the preparation of the smart specialisation has led to the proposal of new instruments and actions in accordance with the new themes and objectives pursued. However, the implementation of these new instruments is restricted by the existing regulatory framework, the administrative procedures and inertia in the current systems.
- The slow administrative processing of procedures.

**Budget issues**

- The process of fiscal consolidation that Spain has gone through from 2010 to 2016 has led to the regions having serious difficulties in obtaining pre-financing to co-finance ERDF actions
- Fiscal consolidation has also reduced national and regional human resources, reducing the effectiveness in the preparation, implementation and monitoring of strategies.
- Private resources have also been reduced as a result of the crisis, which are important source of funding for smart specialisation actions
- Limited ERDF resources in the competitiveness regions, which limit the scope of smart specialisation.

**Smart specialisation processes**

- The RIS3 time frame overlapped with domestic regional strategies and R&I plans that were being implemented. This forced several regions to rethink their R&I strategy and adapt it to the smart specialisation requirements; others have had to align programs/schemes with the specialisation principles
- Governance complexity was generated by the requirement for participation and consultation of all the relevant actors involved. This lasted two years in general, but some regions were forced to elaborate action plans due to conditionality non-compliance (10 out of 17 regions) leading to further delays of 1-2 years.
- In the implementation phase, the coordination and participation of actors is also complex and causing difficulties in the regions to advance in the development of smart specialisation.
- Despite all the efforts made in many cases, the intervention logic is still not very precise, and there are still many horizontal actions, not focused on well-defined smart specialisation objectives, which leads to difficulties in establishing links between the major objectives over several years with the concrete measures needed to achieve them
- Given the ambition of the smart specialisation and the complexity in its preparation and implementation, strong communication is needed between the staff of the organisation implementing the strategy as well as the rest of the system actors as well as process of strategic internalisation by these actors
- The definition and monitoring of the indicators associated with smart specialisation is complex. It has been necessary to define indicators associated with the themes and official data sources are not always available for measuring them.
The required coordination between the national and regional S3s makes a clear definition of a common space necessary. This is a critical and difficult point, but essential to ensure coherence and maximisation of synergies.

**Difficulties related to R&I**
- In some regions smart specialisation boost the research phases closer to the market, which implies a complex reprioritisation of resources from more basic research to experimental development.
- The distribution of R&I competencies among different bodies, both at the regional and national level, requires strong coordination to avoid overlaps and achieve synergies.
- State aid rules restrict the implementation of actions that are closer to the market.

Difficulties related to R&I

State aid rules restrict the implementation of actions that are closer to the market.


### 2.2 Entrepreneurial discovery: a continuing process?

A key element of Smart Specialisation Strategies is that they should rest on an Entrepreneurial Discovery Process (EDP), as already noted. A crucial tenet of the Smart Specialisation approach is that Entrepreneurial Discovery should characterise the implementation stage just as much the strategy-setting one, as underlined by Foray (2016), McCann P and Ortega-Argilés R (2016), amongst others. Based on a self-assessment of programme authorities, this appears to be the case in almost all IQ-Net partner countries and regions, as shown in Figure 8 and Figure 9 below.

**Figure 8: EDP cont. into implementation phase  Figure 9: EDP cont. during Implementation**

In many cases, continued interaction with stakeholders is anchored both on formal, institutionalised bodies and more informal, organic discussions that develop naturally amongst actors. In Wales, for example, an Innovation Advisory Council for Wales was set up based on triple helix principles, involving large and small business, public sector innovation bodies, the universities funding council, local government, and funding bodies. The council meets 3-4 times per year and gives advice on the progress of the strategy and projects being submitted under the ERDF programmes' research/innovation priorities (for which the council presents a view to the MA on strategic fit).

43 Foray D (2016) op. cit., McCann P and Ortega-Argilés op. cit.
However, more informal interactions have also developed in a more organic way among the actors that take part in the Council and projects. Other formal bodies by which the active and ongoing engagement of relevant stakeholders is fostered are:

- the work of **innovation platforms** (e.g. in Czech Republic, Greece, in the Centro and Algarve regions of Portugal);
- the organisation of **seminars and workshops** dedicated to the themes/priorities of the S3s (e.g. in Croatia, Warminsko-Mazurskie);
- the creation of **Working/Steering Groups** (e.g. Pais Vasco, Greece) or **Partnerships** (Slovenia and Pomorskie, discussed in more detail in Section 2.3); and even the
- varied composition of the **juries charged with selecting projects** in the competitive calls related to TO1 (Nordrhein-Westfalen).

**Box 6: Examples of EDP continuation during implementation**

In **Portugal**, the ongoing nature of entrepreneurial discovery is sought to be ensured by the governance model established for Smart Specialisation. At regional level, the RIS3 governance model foresees further increase in the role of regional innovation actors – including through the creation and operationalisation of Regional Innovation Councils, which might further boost the formation of regional innovation systems, and Innovation Platforms. The Councils, engaging companies, technology producers, scientific and technological entities, universities, business associations, ‘clusters’ and inter-municipal entities, are intended to act as boosters of Regional Platforms of Smart Specialisation (Innovation Platforms), instrumental towards enhancing the regional dimension of the innovation system and promoting regionally-based innovation support measures. Councils, assisting the Regional Coordination and Development Commissions (CCDR) in the mainland Portugal, are expected to have an important role in helping to adjust the project calls to the demand, overall facilitating the operationalisation of the RIS3 approach in regions. The Platforms aim to ensure a multi-institutional and multi-sectoral regional response to the monitoring, evaluation and evolution of the strategies, seeking to boost cooperation and networks, innovation and internationalisation. They are intended to constitute, in practice, spaces of continuous entrepreneurial discovery.

The governance model foreseen for Smart Specialisation in Portugal has so far been implemented in the **Centro** and Algarve regions. In Centro, it has functioned particularly successfully, and the region may be called a leader of the RIS3 approach in Portugal. Among other things, in November 2016, the Centro Region Coordination Commission launched a public consultation on RIS3, aimed at ‘stimulating an increased citizen participation in the process of strategy design as well as at inviting specialists to become involved in the working groups on the four Innovation Platforms’ of the regional RIS3. This public consultation exercise provided a useful precedent, especially on the role to be played by the Innovation Platforms working groups in stimulating opportunities for entrepreneurial discovery.\(^{44}\) Wider stakeholder engagement has continued into the implementation phase, including through processes dynamised by the University of Aveiro, the inter-municipal communities and other relevant actors, and endogenous products associated with the region’s Smart Specialisation priority areas can already be seen emerging, in line with the proposed cross-sectoral synergies.

In Greece, the continuation of the EDP is carried out in the framework of innovation platforms, at the national level, and via meetings, workshops and round tables, in the regions. At the national level, innovation platforms bring together relevant actors in a consultation process which results in calls for projects. Such consultations and calls are ongoing, reflecting the cycle of call issuance foreseen by the PA. Within the regions, the MAs are charged with coordinating the dialogue with businesses, research centres, universities and other stakeholders.

In Warmińsko-Mazurskie, the entrepreneurial discovery process is ongoing. In February 2018, a workshop meeting for the specialisation ‘High Quality Food’ was held, in cooperation with the Commission’s Joint Research Centre, addressed to entrepreneurs, the science sector, business environment institutions and administration. The meeting resulted in cooperation on the development of an Action Plan dedicated to initiatives under this specialisation. Similar steps are also planned for specialisations in ‘Wood and Furniture’ (probably in December 2018) and ‘Water Economy’ (in early 2019).

Source: IQ-Net research.

Entrepreneurial discovery at the stage of implementation has tended to **shift from a focus on brainstorming and knowledge creation to more targeted discussions** on, on the one hand, the fine-tuning and operationalisation of the themes contained within the strategies, and, on the other, consideration of additional domains and priorities that might be useful in fostering the economic transformation of the region and which may have been overlooked at the time of development of the strategies. In many cases, annually or regularly updated Action Plans result from these activities.

The process has not been always straightforward. **Retaining a high level of continued stakeholder engagement has been challenging** in some cases. Some interviewees found that the motivation of different types of actors to engage varies considerably, for example depending on professional backgrounds, financial and human capacities available, and even rules established within the programmes that may prevent some actors, key actors even, from participating in the process (e.g. national-level actors in regional OPs). The involvement of the business sector has in some cases not been as consistent or as strong as desired, particularly in relation to small and medium-sized firms (e.g. País Vasco, Portugal), and even within the same regions/programmes there can be significant variations in the levels of engagement between actors across different fields. For example, in Pomorskie the maritime/ICT sector is performing better in terms of continued entrepreneurial discovery than the energy sector, thanks to a longer-standing institutionalisation and more significant endowment.

In Portugal, engaging the many micro and small businesses that form the country’s entrepreneurial fabric was not easy, since they do not possess the necessary technological, HR and financial capabilities. Micro, small and medium-sized firms typically contract out any innovation-related production function which, of course, discourages the creative and engaged process that can lead to entrepreneurial discovery. The inability of these actors to systematically attend meetings, moreover, is a cause of demoralisation, which has a negative longer-term effect on the EDP. To quote an interviewee,

> ‘A Portuguese businessman, in the Smart Specialisation areas, is normally responsible for most things in the company at the same time. If he/she has to be present at all Smart Specialisation-related meetings to pursue strategic thinking, the company stops working …. He/she cannot be
expected to attend all the meetings and can get de-motivated. So in the end, the risk is one of having only universities and the public administration attending these meetings, while the conversation is about the market but the market isn’t there!’. (interview)

Another weakness in this specific case has been the excessive size of the working groups (100-120 participants), which has hindered the ability to conduct ‘real’ discussions. The outcome of such an arrangement tends to be a form of self-selection, whereby those more interested and/or able to participate do so, and others are left behind, to the detriment of the whole process.

In the United Kingdom (Wales), on the other hand, a challenge was represented by the double effect of the impending exit from the European Union and an increase in domestic funding opportunities, which have made actors less interested in engaging with EU-funded programmes (ERDF OP and Horizon 2020).

But there are also positive reported experiences. In Finland, for example, an increasing involvement of the private sector was noticed, while in Sweden the strategies are considered to have increased the collaboration with universities. While in País Vasco, the EDP was implemented at different governance levels – regional, provincial and municipal – leading to local S3s fitting into the wider regional Smart Specialisation framework (Box 7).

Box 7: Smart Specialisation in a multi-level governance setting – Alignment of Bilbao city smart specialisation with regional Basque smart specialisation.

Bilbao represents a good practice case within Spain in terms of city-led efforts to build bridges between local S3s and the wider regional Smart Specialisation Strategy (Rivas 2018). The initiative was supported by the URBACT III ‘In Focus’ network project on smart specialisation at local level, which aimed to support a multilevel governance approach to smart specialisation in 10 European cities. Led by Bilbao City Council, the other cities included Frankfurt (Germany), Bucharest (Romania), Bordeaux and Grenoble (France), Turin (Italy), Porto (Portugal), Ostrava (Czech Republic), Bielsko-Biała (Poland), and Plasencia (Spain): http://urbact.eu/role-cities-smart-specialisation-urbact-focus-final-conference

In 2014, Bilbao Ekintza, the local development agency, organised a cluster prioritization exercise at city level in the context of the emerging País Vasco smart specialisation at regional level. The main challenges were the need to adopt a policy-learning process and a multilevel governance perspective given that Bilbao’s priorities were not included in the regional S3. The resulting “Innovation and smart specialisation strategy for Bilbao” led to 6 domains being identified: Knowledge Intensive Business Services (KIBS), Tourism, Urban Solutions, Arts & Culture, Ecotechnology and Technologies applied to Health. In parallel, the city’s economic development policy-mix was revised, emphasizing a number of working areas such as business cooperation and clustering, entrepreneurship and attraction of investment and knowledge.

Bilbao city undertook further work in: promoting more fluid and in-depth interaction with Basque smart specialisation themes, focusing on three domains out of the six identified: advanced tertiary (KIBS), creative economy and digital economy. The connections between them were also explored, i.e. turning Bilbaobased KIBS sector into an engine force for the digital transformation, in particular

http://urbact.eu/sites/default/files/media/in_focus_tw01_thematic_report_connecting_ris3_to_the_city.pdf.
regarding advanced manufacturing (industry 4.0 paradigm) which is the most significant priority of the Basque smart specialisation. In practical terms, the aim is to promote and facilitate a pipeline of projects in those domains and in close alignment with the smart specialisation at regional level.

To achieve this objective, Bilbao Ekintza set up a new collaborative platform by bringing together the following actors: public sector (País Vasco smart specialisation management team and Diputación Foral de Bizkaia), Research centres and think tanks (Tecnalia-Technology Corporation and Orkestra-Basque Institute of Competitiveness), private sector and cluster organisations (Chamber of Commerce, GAIA ICT, EIKEN audiovisual and AVIC engineering and consultancy) and public and private Universities (UPV/EHU, University of Deusto and Mondragón University).


Having recognised the variation of experience and the limitations faced by programme authorities in pursuing a continued process of entrepreneurial discovery, the composition of partnerships and stakeholder groups involved has largely remained the same as during the stage of S3 design (as illustrated in Figure 10), with the exclusion in a few cases of specific types of actors (particularly research institutions other than universities) but also the involvement of new actors, such as in the Finnish region of Helskinki-Uusimaa, where a new Regional Cooperation Group (Maakunnan Vhteistöryhmä, MYR) brings together the most relevant regional development actors in the region and has been very active in promoting the cooperative and entrepreneurial approach. Other exceptions relate for example to the increased involvement of firms (which, in Greece, have become more engaged and interested as the process unfolded) or the increased selectivity/focus in Croatia.

The actors involved in the implementation of Smart Specialisation under the ESIF OPs are those typically expected based on the triple helix paradigm:

- universities, HE and other types of public research institutions;
- firms and/or their organisations;
- local authorities and other public administrations;
- private research providers (in about three-quarters of cases);
- trade unions.
2.3 Embedding Smart Specialisation in project selection

Of course, beyond the engagement of actors in entrepreneurial discovery, it is the actual selection and implementation of projects driving the Smart Specialisation approach that is key to the success of this new approach to innovation and innovation-led growth. IQ-Net partner authorities are rather
confident that the programmes that they implement have successfully managed to embed the Smart Specialisation in their project selection systems (Figure 13).

**Figure 13: Smart Specialisation Strategy successfully embedded**

Source: IQ-Net research.

The implementation of the S3s is being carried out in different ways in the ESIF programmes of IQ-Net partner countries/regions, but it entails a mix of the following:

- **Clusters** (Denmark), **Innovation Hubs** (Vlaanderen), **Working Groups** (Pais Vasco), **Thematic Networks** (Fin/Helsinki-Uuisma – see Box 8) and dedicated **Partnerships** (Pomorskie and Slovenia), see Box 8.

- Smart-Specialisation-related targets/requirements as conditions for project selection in **calls for projects** under the programmes’ TO1 (Croatia, England, Finland, Nordrhein-Westfalen, Portugal – see Box 9) and including Smart-Specialisation-related criteria in project selection under other TOs of programmes. For example, the S3 implementation process in Croatia is carried out through the operationalisation of a defined set of criteria for project selection and via conditionalities in all published calls for projects, so that they are aligned with the Pre-selection of projects that are in line with the strategy at the stage of programme design (e.g. Pais Vasco, Biskaia Aeronautics Advanced Manufacturing Center project – see Box 8).

- **Action Plans** or **Roadmaps** developed for each domain (e.g. in the French region Franche Comté and in the Polish region Warminsko-Mazurskie, in Slovenia under each Strategic Research and Innovation Partnership established to pursue Smart Specialisation, and in Greece) – see Box 10.
Box 8: Examples of implementation of Smart Specialisation via Networks, Working Groups and Partnerships

In the Region of Helsinki-Uusimaa, the implementation of the S3 has involved establishment of **thematic cooperation networks**, funding of Smart Specialisation-relevant projects, and acknowledging Smart Specialisation in ESIF project selection criteria. The thematic networks play an important role in implementing Smart Specialisation. The Regional Council of Helsinki-Uusimaa does not bring together and manage the expert networks, but it has appointed expert organisations from the different thematic areas to facilitate their work. This bottom-up approach is seen to improve the commitment to network implementation. Second, the regional council has funded Smart Specialisation projects with ESIF and national innovation funding (the domestic scheme AIKO, Regional innovations and experiments scheme). Third, the council has disseminated information on Smart Specialisation and promoted the Smart Specialisation approach (as a way of thinking). Smart Specialisation is also acknowledged in project selection – contribution to Smart Specialisation is included in the selection criteria. Consequently, all project beneficiaries are contributing to the implementation of the S3.

In Pomorskie, based on the resolution of the Board of the Pomorskie Region, in which the Smart Specialisation areas of the region were selected (April 2015), negotiations were launched that led to the conclusion of **Agreements on the Pomorskie Smart Specialisations (PSS)**, signed between the Regional Government Board and the Partnerships representing PSS. The agreements clarify the scope of PSS, define the development directions on which public support should be concentrated, and specify the rules of support for the development of the PSS provided from public funds.

After defining smart specialisations, Pomorskie continued the collaboration with the Partnerships. Under the PSS Agreements, PSS Councils were chosen from among the signatories. They constitute a ‘channel of communication’ between Partnerships and the administration with regard to any activities within the given area of PSS. The councils determine the direction of specialisation development and take measures to strengthen the area of PSS. The negotiations between the Partnerships and the Regional Government of the Pomorskie Region also led to agreeing on specific projects (so-called horizontal projects) which are relevant for the development of the PSS as a whole and which may be given preference in access to finance within the framework of the Regional Operational Programme or support in applying for financing at the national level.

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After this, the steps in implementing PSS have included: (i) establishing the financial framework for the PSS projects under the ROP; (ii) the creation of consortia, incubators, accelerators; (iii) the activation of a consultancy service by Deloitte (activated in 2016 and concluded in June 2017); (iv) cooperation with OECD; (v) current cooperation with clusters; (vi) cooperation with the European Commission (AMI List Expert), and (vii) further consolidation of the environment around PSS (see Section 0).

Financially, the implementation of Smart Specialisation in Pomorskie rests on two types of funding:

- First, funds at the disposal of the Regional Government’s Department of Economic Development for managing the entrepreneurial discovery process: a departmental budget of approximately €30,000 per year plus resources from other institutions such as the European Commission (Taiex Regio Peer 2 Peer, AMI expert list), the OECD, and the Polish Government. The role of the Pomorskie Development Fund is also important in providing an incentive for the development of Smart Specialisation platforms and bringing stakeholders together to implement ideas.

- Second, the funds supporting projects included in the PSS areas under the Pomorskie ROP. A part of these funds is exclusively available to projects that fit into the areas of the PSS, while for some measures PSS projects receive preference in the selection. For the first type of projects, the ROP allocates c. €229 million, subdivided into grants (for expansion through innovation, knowledge transfer and profiled investments) and non-grant support (expansion through innovation – loans for innovation, micro/development/investment loans for basic investments). For the second type of projects (measures with preference for projects within the chosen PSS), the ROP has allocated c. €167 million, supporting the following measures: 2.3 Export activity – project Pomeranian Export Broker; 2.4.1. Specialised consulting services; 2.4.3. Support for business environment institutions; 2.5. External investors – project Invest in Pomerania; 3.3.1 Quality of vocational education; 4.1. Infrastructure of vocational schools; 4.2. Infrastructure of universities providing practical education.

In the Pais Vasco, pilot/working groups were created involving all key actors (companies, clusters, social agents, different public bodies and scientific-technological actors) to define and implement strategic initiatives in the three key regional Smart Specialisation priorities: advanced manufacturing, energy and health. The degree of involvement of the different actors in each of the stages and priority sectors is assessed positively. In the Bizkaia component of the ERDF OP under TO1, the EU co-funded Aeronautics Advanced Manufacturing Center (CFAA) project is fully in line with the Smart Specialisation Strategy (advanced manufacturing priority). The project was selected for inclusion at the programming stage and implementation is progressing according to expectations. The project aims to transfer basic and applied research to the business sector and to develop advanced manufacturing projects. Project partners include the public sector (Bizkaia provincial and Basque regional governments), businesses, the Hegan/Aeronautic Cluster, and a regional University (UPV) as a technological partner. In 2017, 91 projects were proposed, 27 launched, 11 finalised and 7 researchers were contracted. In 2018, a project of €4 million was approved, which is due to be certified to the Commission by the end of 2018.

Source: IQ-Net research.

In 2016, the regional government signed a contract with Deloitte for an advisory service, including the development of recommendations in the management of the process of Entrepreneurial Discovery and development of Pomorskie Smart Specialisation. This service was financed from Technical Support within the Regional Operational Programme. The advisory service was a one-off activity of the local government dictated by the need to increase the involvement of regional entities under the PSS and ended in June 2017.
Box 9: Examples of implementation of Smart Specialisation via calls for projects (Nordrhein-Westfalen)

In Nordrhein-Westfalen, the Land’s Regional Innovation Strategy underpins the NRW ERDF OP’s Priority 1 (Strengthening research, technological development and innovation) and also informs Priority 2 (Raising the competitiveness of SMEs) to some degree. Both priorities are proceeding well in terms of financial absorption and project applications/approvals/implementation. Implementation rests on public competitive calls. Priority 1 entails c. 43.3% of OP funding (excluding Technical Assistance) and is delivered via competitive calls targeting the eight future markets (Leitmärkte) which are identified in the Land’s domestic innovation strategy. These calls are delivered by the intermediate body for innovation, the Future Markets Agency (Leitmarktagentur, https://www.leitmarktagentur.nrw/) and have multiple closing dates. The text of the call is published on the NRW ERDF OP website, and a series of communication events are held for each call. Each call text sets out eligibility criteria and selection/implementation procedures, as well as a description of the project selection criteria (including weighting). There is a selection jury of external experts for each call; the names of the jury members are published on the OP website. In addition, Priority 1 is funding a call on ‘NRW Research infrastructure’, which funds: (i) applied research infrastructure and research capacity in universities and non-university research institutes; (ii) skills and innovation centres oriented towards cooperation with enterprises; and (iii) the establishment and expansion of businesses’ R&D facilities.49

Source: IQ-Net research.

Box 10: Examples of implementation of Smart Specialisation via Action Plans and Road Maps

In Slovenia50 the Government set up a number of Strategic Research and Innovation Partnerships (SRIPs) that bring together companies, knowledge institutions, the government and other relevant stakeholders (e.g. NGOs). There is one SRIP for each priority domain, i.e. nine in total, bringing together stakeholders that operate in the given area. The SRIPs prepared roadmaps or action plans, essentially business-development strategies, in which they set out:

- Precise strategic goals
- A roadmap for joint development activities
- An internationalisation roadmap
- A human resources development roadmap
- A roadmap for entrepreneurship and the promotion of joint services
- Proposals to the government for the optimisation of the regulatory framework (for example with permits for investments and ‘start-up visas’).

These action plans/roadmaps are updated regularly, so as to guarantee that innovation policy retains its focus and concentration on the selected key areas.

Financially, as of June 2018, €817 million were committed under the approved calls for proposals and investment programmes, subdivided as follows:

49 For further information, see: https://www.efre.nrw.de/wege-zur-foerderung/projektaufrufe/umsetzungsorientierte-forschungsinfrastrukturen/.
50 The last version of the Slovenian Smart Specialisation Strategy was approved in July 2017 and is available from this link: http://www.svrk.gov.si/fileadmin/svrk.gov.si/pageuploads/Dokumenti_za_objavo_na_vstopni_strani/S4_dokument_V_2017EN.pdf. For a more detailed overview of the Slovenian approach to implementing Smart Specialisation, see Wostner P (2017) From Projects to Transformations: Why Do Only Some Countries and Regions Advance? The Case of the Slovenian S4, European Structural and Investment Funds Journal ESTIF, 1/2017, 84-96.
375 million of the above are directly linked to the implementation of the Slovenian Smart Specialisation Strategy, which is only €2 million below the target for this time anticipated in the 2015 version of the strategy (€377 million).

In Greece, the GSRT drafted in December 2014 a National Road Map for Research Infrastructure. Based on the Road Map, a high level committee of experts prioritised, in the first instance, 26 research infrastructures that are fully harmonised with the national S3 objectives. Twenty proposals were selected in 2017 and implementation is ongoing. A call for further proposals was issued in June 2016 for research infrastructure proposals to complete the mapping of research infrastructure and fulfill conditionality 1.2. “Research and Innovation Infrastructure”. The call resulted in the selection of further eight proposals.

Source: IQ-Net research.

2.4 Funding streams

2.4.1 A mix of different EU and domestic funds

In addition to the ERDF, a variety of funding sources are utilised in IQ-Net partner countries and regions to support Smart Specialisation. This includes not only the EAFRD (as shown in Table 1 at the beginning of this paper), but also domestic funding in most cases: for example, in Sweden, where the national agency Tillväxtverket has been allocated a budget by the national government to support Smart Specialisation, as well as in Vlaanderen, in the two Polish regions, in the Czech South Moravian Region, Wales and others.

The European Territorial Cooperation strand of ERDF has also been mobilised in support of the S3s in some cases, as has the European Social Fund (Figure 14), given the awareness in many cases that the competences in the field of innovation are low and actions supporting the development of human capital are fundamental for the development of Smart Specialisations. The ESG clearly does not fund TO1 but supports this TO and Smart Specialisation in different ways – so much so that one of the interviewees remarked that, for the future, ‘ESF should be part of the Smarter Europe Priority Objective’ and another observed that ‘without ESF, there would be no national Smart Specialisation Strategy’. In practical terms, the ESF has been supporting measures for:

- the establishment and continuous updating and implementation of the S3 (e.g. a dedicated ‘Advisory Service’ in Pomorskie);
- the creation of smart skills and the realisation of training and vocational training in areas that are the focus of the S3 – upgrading the qualifications of the existing and new workforce for Smart Specialisation (e.g. in Croatia, Warmińsko-Mazurskie, Portugal);
- education programmes in fields (e.g. energy in Denmark) that represent areas of focus in the S3, without which the demand for skilled labour would not have been met;
- the integration of foreign labour force and attraction of foreign talent (e.g. in Finland);
• the support of young entrepreneurs operating in the domains of the S3 (e.g. in the Paris region);
• international mobility of researchers (e.g. in Slovenia);
• career platforms (e.g. in Slovenia);
• horizontal measures in the educational system to foster creativity and entrepreneurship (in Slovenia).

Figure 14: Use of ESF as a funding source

Source: IQ-Net research.

While those programmes that utilise the ESF to support Smart Specialisation, and also others in some cases, acknowledge the utility of achieving synergies between the two Structural Funds (ERDF and ESF), there is also awareness that this was not easy to achieve. In particular, reconciling the different perspectives of entrepreneurs and HE institutions can be challenging: enterprises, particularly smaller firms, do not always appreciate what a highly qualified person can do in an entrepreneurial context; on the other hand, Higher Education, particularly in some countries, is not focused on the market but rather on fundamental education. In their efforts to build bridges between these two types of actors, the ESIF programmes and Smart Specialisation Strategies need to overcome entrenched attitudes, and this is a long-term process.

2.4.2 Allocations not always earmarked

Although some countries and programmes have earmarked amounts specifically to support Smart Specialisation, and/or the Smart Specialisation Strategies include the financial table required by the ex-ante conditionality (e.g. in Croatia, the Czech Republic and Slovenia), this is not always the case, and thus the overall amount that is mobilised to support Smart Specialisation would have to be reconstructed ex post (examples of this approach are Denmark, England, Sweden, Wales and Vlaanderen).

• In Vlaanderen, for example, there are a number of policy choices and instruments that operationalise Smart Specialisation, but they are not identified as directly contributing to a single overarching strategy and therefore there is not a specific predetermined budget for S3 in this region. Both the ERDF and national schemes for enterprises, innovation and cluster policy contribute to Smart Specialisation - the latter overwhelmingly: c. €3.27 million
In some cases, such as Wales, not earmarking funds ex ante was a deliberate choice to guarantee a more strategic approach and prevent stakeholders from seeing the strategy purely as a ‘funding process’. Here, Smart Specialisation is built into the programmes via a **portfolio approach**: S3 areas are mapped and support schemes (some EU-funded, others domestic) target different stages from capacity-building to commercialisation – some organisations seeking funding will still be at the level of needing to build capacity, others will be closer to commercialisation, so the **stairway to excellence** approach offers a funding ladder targeting funding at the level appropriate to the applicant. Organisations can then move up this stairway/ladder as they gain experience/expertise and get closer to being able to apply for H2020-type funding. An example of how this is done is presented in Box 11 below.

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Box 11: Integrating different funding sources (ERDF and domestic) at project level in Wales

Bangor University’s BioComposites Centre\(^{53}\) provides an example of how synergies in the implementation of research and innovation funds from different sources are delivering the ‘Stairway to Excellence’ effect in Wales. The BioComposites Centre (established in 1989) undertakes collaborative research to develop sustainable biobased technologies that minimise the impact of materials on the environment. The BioComposites Centre is a key partner in the BEACON project\(^{54}\) which was established with c. £8 million from the ERDF in 2007-13. The BioComposites Centre’s participation in BEACON used ERDF funding to strengthen the Centre’s research and innovation capacity, including infrastructure and equipment in pilot scale processing and increased R&I collaboration between academia and industry. In 2014 the BEACON project won the RegioStars Award in the “Sustainable growth: Green growth and jobs through Bio-economy” category.\(^{55}\)

Improvements in R&I capacities via BEACON have acted as a stepping stone to leverage further funding from a variety of sources comprising Welsh Government, InnovateUK, UK Research Councils, and other EU-funded schemes, including a series of investments from the ERDF-funded SMART Expertise programme\(^{56}\) administered by the Welsh Government.

The BioComposite Centre’s expertise has also led to their engagement in European networks and increased international cooperation, including: as part of COST (European Cooperation in Science & Technology); the Vanguard Initiative; as well as being registered on the list of EU Key Enabling Technology Centres\(^{57}\) and a European database of pilot scale facilities through the EU funded project Pilots4U.\(^{58}\) Part of the BioComposites Centre’s progression has involved actively exploring opportunities to secure additional R&D funding through Horizon 2020 and the Centre collaborated on a number of applications to the Bio-Based Industries Joint Undertaking (BBI JU)\(^{59}\) which were not funded. A series of awards from the Welsh Government's scheme SCoRE Cymru\(^{60}\) helped further facilitate targeted engagement with BBI JU. In December 2017 the BioComposites Centre’s secured BBI JU funding via participation in the PRO-ENRICH\(^{61}\) project.

A further £8 million of ERDF funding under the 2014-20 Programme has been awarded to support BEACON Plus. The Beacon Plus project builds on the success and clear smart specialisation of BEACON and will support further R&D collaboration with Welsh businesses to translate the academic excellence into commercial products. The strategic delivery of Beacon Plus will ensure that the BioComposite Centre’s European engagement and BBI funded activity delivers maximum downstream benefits to the Welsh regional ecosystem.

\(^{53}\) [http://www.bc.bangor.ac.uk/](http://www.bc.bangor.ac.uk/)


\(^{58}\) Pilots4U [https://www.biopilots4u.eu/node/400](https://www.biopilots4u.eu/node/400)

\(^{59}\) BBI JU [https://www.bbi-europe.eu/](https://www.bbi-europe.eu/)

\(^{60}\) Welsh Government SCoRE Cymru programme [https://gov.wales/funding/eu-funds/horizon2020/score-cymru/?lang=en](https://gov.wales/funding/eu-funds/horizon2020/score-cymru/?lang=en)

Figure 15: Stairway to Excellence: Bangor University’s BioComposite Centre, Wales

Source: European Commission JRC case study: Synergies with Research and Innovation Funds, BioComposites Centre, Bangor University, Wales.

Figure 16: Sources of funding (2016 & 2018)

Source: IQ-Net research.
Where funding has been earmarked, this sometimes presents issues in terms of reduced flexibility. By and large, this does not seem to hinder the process unduly. In Slovenia, for example, there is a defined allocation to the S4 in the programme, and the S4 team subsequently decided also to mobilise funding under TO3 and partly TO10 to support the strategy, so a financial plan was created by the OP’s MA. This has been successful thus far, but now the MA would now like to move more funding to TO1 in the Western Region (Slovenia is divided into 2 CP regions, the west being MDR and the east LDR). However, in general, even where specific sums are earmarked for Smart Specialisation, they are considered in indicative terms. For example, in Warmińsko-Mazurskie specific allocations for particular sub-measures are established in the Regional Operational Programme (e.g. for TO1 dedicated to R&D support within the specialisation, €92 million). However, such allocations may change depending on the level of need and demand (as part of a reprogramming process). However, all projects implemented under Thematic Objective 1 are expected to contribute to the region’s Smart Specialisation. In the remaining ERDF-related TOs, preference will be accorded to projects that fit within the Smart Specialisation Strategy, however, the actual amount of projects meeting this criterion will have to be reconstructed ex post.

### 2.4.3 Horizon 2020 only utilised to a limited degree

Horizon 2020 has been mobilised only in about 40 percent of cases. It is indicative that while in Denmark, for example, the MA has included Horizon 2020 in the account plan in the application forms to allow for synergies, no one has used the opportunity. This limited uptake of Horizon 2020 is due to a number of reasons that relate to the difficulty of reconciling the different logics, but also the different implementing rules, associated with the two sets of funds (Horizon 2020 and ESIF):

- the weakness of the research institutes in certain less-developed regions, which prevents them from entering international consortia;
- the preference for national funds by universities and HE/research institutions, when these are easier to obtain and do not present any language barrier (e.g. funding from the Polish National Science Centre or National Centre for Research and Development);
- the difference in focus/goals of Horizon 2020 and ESIF;
- the different operational rules of Horizon 2020 compared to ESIF, ‘two mechanisms running on different voltages’, which makes integrating the two funding sources very difficult; and, related
- the unpredictability and timetable of Horizon 2020 compared to ESIF;
- limited coordination domestically, whether at national or regional levels, between the institutions charged with ESIF, on the one hand, and Horizon 2020 on the other.

All these difficulties mean that integrating Horizon 2020 and ESIF often remains ‘a nice aspiration … but once you get under way with implementation of the programmes the difficulties emerge’.

Sometimes, however, ESIF support can be a way to raise expertise in the regions towards more active mobilisation in Horizon 2020. In Finland, for example, ESIF programmes support capacity-building and network promotion in the regions. These networks might mature and develop a successful Horizon 2020 project proposal. One such example is the ‘SOHJOA’ robot bus experiment funded through the ITI-instrument. The SOHJOA project has increased the capacity of participating actors, who are now contributing to a H2020 project. Although such examples exist, it was viewed that H2020 and ESIF have a different focus: H2020 focuses on high-impact international research.
activities, whereas ESIF focuses on practical regional development activities. The success rate of H2020 projects is so low, that relying on it as a funding source for advancing regional development goals remains risky. In other cases, however, deliberate attempts to improve Horizon 2020 uptake via ESIF have been deemed ineffectual in relation to the goals of the OP: the region of Satakunta (part of West Finland) has financed projects in which the main aim is to prepare a H2020 project application. However, such financing was not perceived as effective, because it does not contribute to any indicators monitored in the OP. The project preparation financing in Satakunta has, thus, been discontinued.

Figure 17: Cohesion/H2020 reconciled well

Figure 18: H2020 hindered by different regs.

Source: IQ-Net research.

Leaving aside the difficulties due to the different underlying logics and rules between the two funds, some interviewees suggested that increasing the joint mobilisation of these funds could be ensured by improving the practical coordination between the programmes’ MAs and the authorities dedicated to Horizon 2020, e.g. via co-location or strengthening networking, and leveraging more on ‘policy entrepreneurs’, i.e. individuals, rather than institutions, who have the interest and capacity to bring a specific innovation-related agenda forward. The creation of a Horizon 2020 Unit within the Welsh MA has been useful in this respect (Box 12).

Box 12: Supporting synergies between ESIF and Horizon 2020 via a single Unit

The creation of a Horizon 2020 Unit within the MA in Wales has allowed the Horizon 2020 Unit staff to have ‘feet in both camps’, so that the whole branch of the MA dealing with the portfolio of investments is actively thinking about H2020/towards H2020 ambitions at the same time. This has worked very well, providing an opportunity and fostering the culture of looking wider than just securing commitments under the R&I priority. The ‘innovation conversation’ has been boosted, and there has also been cultural change. The HE sector in particular has been open to this development. On the innovation side, the UK innovation agencies (Innovate UK, UKRI) have also been involved; on the business side, however, there is no strong ecosystem in place, and therefore submitting applications to H2020 has not yet been relevant for many businesses.

Source: IQ-Net research.

Other cases where synergies with H2020 are being actively pursued, so far quite successfully, are:
• **Croatia**, where the Ministry of Science and Education has published the Call for Proposals for the ‘Development and Strengthening of Synergies with Horizontal Activities of the HORIZON 2020 Programme: Twinning and ERA Chairs’. The aim of the Call is to provide synergy with the horizontal activities of the HORIZON 2020 programme with Cohesion policy and Croatia’s S3 in the direction of capacity-building, sustainability and the excellence of RDI activities. Applicants who can submit a project proposal to this call have been established in advance (via the horizontal activities of the HORIZON 2020 programme ‘Expansion of Excellence and Participation’ – Twinning and ERA Chairs and ERA Chairs pilot project. Six grant agreements have been signed to date).

• **Slovenia**, where the Seal of Excellence (see below) has been used for projects supported by the SME Instrument and a ‘Teaming Initiative’ is funded by Horizon 2020 (research part) and ERDF (infrastructures).

Beyond the specific Slovenian case, the Seal of excellence has not been useful – most IQ-Net partner programmes have not used this opportunity or, where they have tried, the approach ‘has not worked well’, confirming early impressions of two years ago. Besides, interviewees noted a contradiction in terms in the approach: ‘Why should unsuccessful H2020 projects be provided with a fast track in a competition with top-notch ESIF projects implementing regional priorities?’ (interview)

**Figure 19: Use of seal of excellence**

Source: IQ-Net research.

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2.5 Capacities and capacity-building

2.5.1 Capacity-building initiatives

Even though, as highlighted before, the introduction of the Smart Specialisation approach has not involved preparation of ‘brand new’ strategies in all cases, and a number of IQ-Net authorities already had substantial relevant experience, in particular with regard to participatory strategy design, EDP and business-science dialogue, most interviewees agreed that investing in skills and capacity-building has been necessary to support the S3 implementation (Figure 20).

Figure 20: To support the implementation of the Smart Specialisation Strategy, it has been necessary to invest in skills and capacity-building

![Bar chart showing responses to capacity-building initiative]

The gaps that the capacity-building measures have sought to address relate to both operational and strategic aspects of Smart Specialisation implementation.

Establishing effective monitoring systems for S3s and ensuring proper mechanisms are in place for sound monitoring of the associated processes has been an important concern for some partners (e.g. Croatia – see Box 13, Pomorskie, Warminsko-Mazurskie).

Box 13: Setting-up the new S3 monitoring system in Croatia

The lack of an effective monitoring system for the Croatian S3 was addressed with the support of an independent policy expert using assistance provided by the European Commission. The existing framework did not provide the necessary evidence base to make decisions about changes in the S3 policy mix and for the fine-tuning and revision of S3. The new S3 monitoring system, endorsed at the highest level by the main Ministries driving S3 implementation (Ministry of Regional Development and EU Funds, Ministry of Economy, Entrepreneurship and Crafts, and Ministry of Science and Education), is expected to address these gaps. It will be a policy-learning tool expected to perform three functions: (i) provide robust evidence for policy-learning, (ii) create relevant data for policy evaluation, and (iii) provide information underpinning communication on S3. It is expected to help raise the status of innovation within the national policy agenda and encourage the commitment and involvement of all S3 stakeholders.

Source: IQ-Net research.
Capacity-building has also been required to address more strategic needs, for instance to inform a new type of strategic thinking required by the implementation of S3s or to provide a strategic lead on Smart Specialisation. For example, the Regional Council of Helsinki-Uusimaa performed a Smart Specialisation benchmarking exercise to support the regional strategic thinking process. In England, the so-called Smart Specialisation Advisory Hub was set up to give a strategic lead on Smart Specialisation, namely by providing support, advice and evidence to develop more coordinated, collaborative and evidence-based approaches to local investment plans for R&I (for more detail see Polverari 2016).

Ensuring continuous EDP has also been one of the priorities for capacity-building measures. For instance in Pomorskie, the regional government has been responding to the need to animate the entrepreneurial process of discovering and implementing Smart Specialisation by introducing targeted measures at various points during the programming period (see Box 14).

Box 14: Animating entrepreneurial discovery in Pomorskie

During the bottom-up process of selecting smart specialisations, a number of meetings and consultations with regional entities involved in the process took place. At the end of this process, the frequency of these meetings dropped slightly and it was necessary to make additional efforts to maintain the involvement of the participants in the process. The councils also pointed to the need for animation within the PSS. Responding to the needs of the PSS, the regional government provided a budget of €30,000 each year for the needs of each specialisation. In addition, in 2016, the regional government signed a contract with Deloitte for an advisory service, including the development of recommendations for the management of the process of entrepreneurial discovery and development of Pomorskie Smart Specialisation. This service ended in mid-2017.

Recognising the need for further animation of the entrepreneurial process of discovering and implementing S3s, the regional government has decided to launch the ‘Smart Progress’ project, which will be supported by the ROP. The project provides various animation activities for the development of the four PSSs: support for the entrepreneurial discovery process, internationalisation of PSS areas, development of personnel, PSS monitoring and management of the process of identifying further design concepts and joint initiatives. The planned date of project implementation is 2019-2021.

Source: IQ-Net research.

Capacity-building activities have also sought to enhance policy coordination and synergies. In Greece, the coordination network for Smart Specialisation Strategies, coordinated by EYSSA, is the main capacity-development tool, where problems are discussed and solutions offered. In the País Vasco, some funding is allocated to the opportunity niches directly from the Department of the President to support the initial process of identifying synergies with the priority areas and in strengthening capacity to attract European funding. Some of the ESIF-funded measures, while building Smart Specialisation-implementing capacity and promoting networks in regions, can, albeit indirectly, contribute to strengthening synergies with other policy instruments. For instance, the Finnish ‘SOHJOA’ robot bus experiment, funded through the ITI-instrument, increased the capacity of participating actors, who subsequently developed a successful H2020 project proposal and are now contributing to a H2020 project.

A large number of activities seek to promote knowledge and experience exchange among regions and actors involved in S3 implementation, encouraging dialogue and cooperation at regional, national and international levels. This is often pursued through the organisation of events,
conferences and workshops covering various topics of relevance, or running specific platforms offering training and networking opportunities. For instance, in Warminsko-Mazurskie, employees take part in meetings at the national and regional levels, including the Regional Smart Specialisation Forum in the Convention of Polish Regional Marshals. In Greece, initial lack of knowledge on the application of State aid rules during the implementation of the S3s was addressed through the exchange of knowledge and experience among the regions. In Sweden, Tillväxtverket also actively promotes knowledge exchange and inter-regional cooperation (see Box 15).

**Box 15: Tillväxtverket’s role in capacity-building through knowledge exchange and inter-regional cooperation in Sweden**

In 2016, Tillväxtverket was assigned by the Government to support Smart Specialisation in the regions. This has involved disseminating knowledge and exchanging experience through the organisation of conferences and various meetings focused on the theme of Smart Specialisation. Three national conferences were organised with a specific focus on Smart Specialisation. For instance, the third conference on Smart Specialisation was held in Luleå on 31 January 2018. It brought together around 130 individuals from regional and national agencies, universities and companies, along with international guests and the European Commission. The conference reviewed experiences with Smart Specialisation implementation in Sweden, País Vasco, Finnish Lapland and Southern Denmark, highlighting key lessons and challenges to address in the future. It specifically focused on Smart Specialisation particularities in sparsely populated areas and how to develop attractive places.

Another example is the S3 dialogue meeting, which was held on 18 April 2018 bringing together the regional development actors, as well as representatives from DG Regio, the Ministry of Enterprise and Innovation and the Swedish Innovation Agency Vinnova. At the dialogue meeting, the regional representatives presented how they work with S3 in their respective regions, with a specific focus on the pilot on industrial renewal in the region of Norra Mellansverige.

Following the evaluation of TO1, Tillväxtverket expects to organise a discussion with the regions on Smart Specialisation, focusing on the meaning of the approach, main weaknesses and ways to achieve better results.

Tillväxtverket also promotes cooperation between regions with complementary areas of strength and supports clusters within the framework of Smart Specialisation. Tillväxtverket has selected 22 clusters to form a cluster platform (S3 pilot). The clusters are offered training, networking and international contacts, and they can seek financial support for business development.

Capacity-building measures also sought to address specific training needs. For instance, interviewees in Slovenia highlighted the provision of training for cluster managers, while Warminsko-Mazurskie respondents mentioned the participation of employees in various thematic training opportunities, including a qualification of two staff members for the Baltic Leadership Programme on building competences for the development of smart specialisations in October 2018.

All this said, capacity-building needs vary greatly, not only across regions and countries, but also across programme areas (e.g. in Sweden, capacity-building has been necessary in some programme areas but not in others) and across the same country (e.g. in England some LEPs, having their own TA-funded compliance function, prefer not to interact with the Smart Specialisation Advisory Hub).
Significant variation in terms of relevance and intensity of capacity-building activity at regional and national levels can also be found in some cases. For example, in the Czech Republic, while such activities have not yet been implemented at the level of the national RIS3, each region has seen the introduction of a large capacity-building project, aiming to assist the development of capacity for RIS3 implementation at regional level (see Box 16).

**Box 16: ‘Smart Accelerator’ project supporting capacity-building in Czech regions**

Each Czech region has at its disposal a project **Smart Accelerator** funded from the OP Science, Research and Education 2014-20 that enables the funding of activities that a particular region considers as crucial for developing its innovation ecosystem. Currently, a second generation of the project is being prepared. The objective is to assist capacity-building for implementation of the S3 at regional level. The pre-defined activities include: building of the core team, training, twinning, mapping the strategy, pilot-verification, publicity, and project management. Among other things, the project can support the setting of the basic structures, knowledge exchange with foreign innovation centres, training, marketing, analytical tools development etc, with the precise activities depending on the maturity of the region and its implementation team.

In case of the South Moravian Region, the total project budget reaches €2.6 million, and the project has enlarged possibilities of activities that the region can dedicate itself to. The recipient of the project is the regional government and the co-beneficiary is the South Moravian Innovation Centre (the coordinator of the regional S3), although users are actors across the entire regional innovation ecosystem.

One of the funded activities was the so-called **Inspirational Journey** in September 2018 of 17 stakeholders from the innovation ecosystem from the South Moravian Region to the USA for one week (to the ‘Research Triangle’ in North Carolina). Some of the participated representatives are members of the Steering Committee of the regional S3. The effect of the Journey has been at least twofold: first, it provided inspiration from a developed innovative region, and second, it encouraged deeper networking among the participating stakeholders. This activity is highly scored by the RIS3 manager, particularly from the point of view of the long-term effects that it is expected to bring.

Another activity supported by the Smart Accelerator in the South Moravian Region is the **mapping of the S3**. It consists of (i) regular interviews with companies operating in the region (in order to keep informed about the environment and the main challenges, and propose relevant actions) and (ii) external evaluation of the RIS (without the Smart Accelerator project, the evaluation would not have been so extensive). Furthermore, the project helps to build capacities in regional marketing/branding.

Source: IQ-Net research.

These and other Smart Specialisation-related **capacity-building measures have targeted different types of recipients**. While in some cases they have been more **targeted and selective**, most activities have had a relatively **wide coverage**, seeking to benefit all regional entities and stakeholders relevant for Smart Specialisation implementation. In such cases, those targeted have mostly been triple helix actors – including the regional government, municipalities, companies, universities, and research institutions. At the same time, elements of the quadruple helix approach are apparent in some cases, with capacity-building measures also being directed at NGOs (e.g. under the partnership approaches in Pomorskie and Slovenia) or individual civil society members (e.g. artists, as in Slovenia). Where the activities have not been explicitly targeted, they have often been open to all regional development actors across programmes or all relevant stakeholders in charge of implementing and supporting the S3 policy mix (e.g. Sweden, Croatia). In some cases, however, the
main recipients of support have been mostly the MAs / regional administrations (e.g. Greece, Warminsko-Mazurskie, Finland).

Not all cases had a need for capacity-building measures. For instance, in Vlaanderen, there is no structural action or methodology for capacity-building activities, and no such needs generally exist in Denmark. In other cases, such activities appear limited (e.g. in Scotland, the ongoing work with Lead Partners focuses mainly on making them aware of compliance requirements) or are being indirectly targeted by an ongoing evaluation exercise (e.g. in Nordrhein-Westfalen).

2.5.2 Further capacity development needs

Where the lack of adequate capacity-building activities has been noted, clear needs in such activities have been identified in some cases. For instance, while capacity-activities have not been implemented as yet at the level of the national S3 in the Czech Republic, they would be desirable. For this reason, there is currently an aim to prepare a project to help capacity-building (e.g. to enlarge the coordinating team) to support the principal coordinator of the national RIS3 and to assist a revision of the EDP process at national level. Swedish interviewees noted that although various forms of capacity development have taken place and the quality of the projects has improved in the course of the programme period, more capacity-building is needed and so more work will be planned on the basis of the evaluation findings. The Portuguese interviewees referred to broader capacity-building needs, existing at various levels: within the administration; within the Smart Specialisation sectors; along with capacity-building targeting other domains, not covered by the ESIF but where significant structural changes are needed in order to create adequate ecosystems to facilitate the Smart Specialisation-related processes; as well as work within the business domain. One of the most pertinent needs to be addressed by capacity-building measures is that of building bridges between the business and science/academia domains. Currently, these are ‘two parallel worlds that do not talk to each other’. Encouraging researchers to work with businesses (including through career-related incentives), as well as providing entrepreneurs with intermediaries that would have entrepreneurial expertise but also the scientific knowledge necessary to liaise with the research side in order to resolve specific Smart Specialisation-related problems are seen as crucial for bridging the existing business-science gap. Overall, strengthening the capacity of all elements of the policy-mix identified in the national and regional Smart Specialisation, not leaving behind any of the sectors and dimensions fundamental for the innovation ecosystem and for giving it a qualitative leap (including those that function ‘outside’ the ESI Funds), is seen as necessary. Further gaps to be addressed by capacity-building measures, as highlighted by the Portuguese partners, relate to better articulation between Smart Specialisation and clusters (in terms of building a bridge between the focus of Smart Specialisation and the value chains associated with clusters), as well as overcoming the divide between fundamental and applied research. A number of other areas have also been identified by IQ-Net partners as requiring further support, related for example to the management of systems, skills and knowledge of companies, availability of finance for companies, availability of training and consulting on the market, and quality and efficiency of implementing institutions.

2.5.3 Support from the European Commission Joint Research Centre

In order to assist Member States and regions in designing and implementing their S3s, a dedicated Smart Specialisation Platform was established in 2011, located in the Commission Joint Research Centre in Seville. The Platform currently counts 179 registered EU regions and 18
registered EU Member States, in addition to six and 16 registered non-EU countries and regions respectively – the membership thus having grown significantly since the last review period.

At the same time, not all IQ-Net partners have taken advantage of the support provided by the S3 Platform (e.g. Pirkanmaa Regional Council in Finland, País Vasco, Sweden), although seeking JRC support is currently being considered by some (e.g. Croatia). In some cases, the interaction with the Platform has been relatively limited (e.g. Vlaanderen has had one major exchange with it, delivering a review paper at the S3 Platform in Seville in June 2018, in cooperation with the province of West-Vlaanderen; the coordinating manager of the national Czech RIS participated in the last conference). Other IQ-Net partners have noted more active interaction with the Platform. For instance, Greek respondents mentioned systematic cooperation with the JRC, involving the organisation of seminars on implementation/specialisation problems of S3s and participation in conferences. Other partners have also taken part in meetings organised by the S3 Platform (e.g. Slovenia, Warminsko-Mazurskie, Pomorskie) and exploited its peer review tool (e.g. South Moravian Region, Warminsko-Mazurskie).

Where the IQ-Net authorities have taken advantage of the S3 Platform support, their views have been overwhelmingly positive. The international networking is viewed as beneficial (e.g. Helsinki-Uusimaa), and the Platform is seen as a good source of both more strategic and more practical information (e.g. through the provision of guidelines, statistics, best practices) (e.g. Czech Republic). At the same time, some partners have noted that discussions can be generic and difficulties in terms of the applicability of findings to specific regional contexts. The workshops and peer review meetings model is very broad and general, which makes it difficult to adapt and implement the tools discussed in specific regional situations, and it is important to make the support more tailored to specific needs. The approach taken under the ‘Lagging Regions’ project has been mentioned as a good practice example in this respect, and it has been suggested that other initiatives follow this model, while tailoring it even more to the participating MS and regions’ needs.

IQ-Net partners’ views on the overall success of the capacity-development process differ but are in most cases positive. While weaknesses of the existing capacity-building measures or absence of any such measures (despite the existence of clear needs) have been highlighted in some cases, in others capacity development appears to be carried out according to the needs and generally working well. Looking into the future, some partners have expectations that the recently introduced measures (e.g. the new S3 monitoring system in Croatia) will bring significant benefits for Smart Specialisation implementation.
3. SUMMATIVE ASSESSMENT OF IMPLEMENTATION AND POLICY OUTCOMES SO FAR

Previous sections of this report have reviewed a variety of aspects related to the implementation of Smart Specialisation within the IQ-Net partners’ programmes. Figure 21 provides a summative overview, which indicates a number of key messages:

- First of all, **implementation is considered satisfactory**, and programmes are considered to be progressing by and large according to plan in delivering Smart Specialisation.

- Second, IQ-Net authorities consider that the **entrepreneurial discovery process is indeed continuing during implementation** and that the **S3s are successfully embedded in the programmes' project selection procedures** (interestingly, on this latter issue, the view is not only overwhelmingly positive but also significantly more positive than in 2016, when some programme authorities had not finalised their delivery arrangements).

- The vast majority of programmes indicate that to implement Smart Specialisation there has been a **need to put in place capacity-building initiatives** (discussed in Section 2.5).

- On the other hand, reconciling the place-based logic of Cohesion policy with the place-blind approach of Horizon 2020 and, more generally, **making synergic use of ESIF and H2020**, have **not worked well** and, in addition, the utility of the **seal of excellence has proven limited** (this latter view is more negative than two years ago).
**Figure 21: Summative overview of implementation**

![Bar chart showing summative overview of implementation with data from 2018 and 2016.](chart.png)

Source: IQ-Net research. *Note: 2016 data unavailable for four series in this Figure.*
At this stage, it is difficult to discuss the impacts of the measures implemented under the OPs towards Smart Specialisation and, particularly, whether real economic transformations are being achieved. Implementation is still at an early stage in some cases (e.g. in Croatia) and only few evaluations have been carried out on this topic. When they have, they have tended to focus on implementation rather than outcomes, for example: in the South Moravian Region (evaluation of the regional S3); in Sweden (evaluation of TO1 in all Swedish programmes – see Box 17) and in Spain (Evaluation of Smart Specialisation Process in Spain, described in previous sections of this paper). More evaluations are underway, for example in Nordrhein-Westfalen and Portugal, or are being planned (e.g. in Helsinkiki Uusimaa), and various IQ-Net partners are investing efforts to set-up or improve the data available on the S3s (e.g. in Croatia, the Czech Republic, Finland, in the two Polish regions, and in País Vasco). Thus more evidence on actual outcomes will become available in forthcoming years.

**Box 17: Implementation of Smart Specialisation in Sweden – first evaluative insights**

A recent evaluation on Thematic Objective 1 in Swedish ESIF programmes provides some insights into the implementation of Smart Specialisation in Sweden. The evaluation contains a short chapter on the programmes’ contribution to Smart Specialisation, which is summarised below:

(i) The Swedish PA did not include any priority domains. Instead, the basis for Smart Specialisation priorities was set out in the Swedish national innovation strategy and in the research and innovation proposition of the Government (prop. 2013/13:30). However, in terms of implementation, the programmes are contributing to the goals of the Smart Specialisation Strategies, and the implementation of measures related to Smart Specialisation are progressing fairly steadily and work with Smart Specialisation has progressed since the start of the programme period.

(ii) Although the regions' work with Smart Specialisation has progressed, it remains fragmented. Today, all counties work to some degree with Smart Specialisation. Most have strategies in place, which set out priority areas for Smart Specialisation. Programmes have faced different conditions to develop the common priorities for Smart Specialisation, as the strategies have been developed at the county level (NUTS III). For instance, in some programme areas, priorities for Smart Specialisation have been developed for five counties. Some programmes have even adopted specific programme-wide projects that pursue Smart Specialisation across the counties in the programme area.

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63 The are: the impact evaluation of projects under the 'Leading market competitive calls', under Priority 1, Strengthening research, technological development and innovation, Measure 2.1 Support for innovation cooperative and transfer projects, combined with relevant measures from the 2007-13 period; and the process evaluation of projects under Priority 5, Technical assistance, Measure 2.1 Support for innovative cooperation and transfer projects (Leading market competitive calls), together with relevant measures from 2007-13 and potentially other projects.

64 'Evaluation of the implementation of the National and Regional Research Strategy for Smart Specialisation (RIS 3): Network, Outputs and Expected results’ (Process-related). By now, the initial report has been produced, first version of the Theory of Change has been stabilised. It aims to: (i) evaluate the integration of the National and Regional RIS3 into the implementation of Portugal 2020 from the point of view of achieving the expected objectives or creating the conditions to achieve them, (ii) evaluate the adequacy of the architecture and dynamics of permanent construction of the National and Regional RIS3, namely from the point of view of the creation of innovation ecosystems, (iii) assess the implementation process, adequacy and effectiveness of the multilevel governance model, (iv) explain the expected production of effects of RIS3-associated interventions, with identification of circumstances, contexts, and critical factors, and (v) provide recommendations to improve the effectiveness of processes leading to smart specialisation.

From Smart Growth to Smarter Europe: Learning from Smart Specialisation Delivery

(iii) The analyses carried out in the programme documents are largely based on existing strengths and areas where the actors in the programme area have an ambition to develop the region. There is less focus on what the programme area’s strengths are in relation to other regions or countries, and on future areas of strength. There are differences between the counties concerning the strengths that have been identified. Smart Specialisation has been interpreted in different ways: some regions have worked on the basis of a number of prioritised branches or sectors while others have focussed on a theme or a domain, such as smart cities or smart energy.

(iii) A large number of projects with greater analysis by Ramboll are linked to the region’s prioritised areas. Those projects that are not clearly linked to, for instance, the priorities of the S3s, regional development strategies or innovation strategies, are instead linked to other priorities such as those of the university or college delivering the project. Therefore, all projects are somehow linked to the region’s priorities.

(iv) Ramboll has previously concluded that Smart Specialisation had not played a prominent role at the time the programmes were drafted or implemented. There are, however, some exceptions to this. For instance, in the Östra Mellansverige OP and Norra Mellansverige OP many projects are clearly Smart Specialisation. However, more generally projects do not reflect on Smart Specialisation.

Source: IQ-Net research.

Where some evidence of outcomes is already available, it relates to the softer outcomes of the process of implementing Smart Specialisation. In Pomorskie, for instance, the implementation of the Smart Specialisation Strategy, and the various support and capacity-building activities that accompanied it, have led to the creation of new capacities and capacity spillovers amongst all actors involved in terms of the creation of:

- New skills and knowledge within firms;
- Improved quality and efficiency of implementing institutions;
- Increased availability of consultancy and training on the regional market;
- A more developed business environment at the regional level.

The implementation of the S3 in Pomorskie has led to: improved understanding of the longer-term perspective of development; clarification of the roles of different actors (including the public administration) and of the different remits of formal and informal institutions; better appreciation of the linkages between policy inputs and policy outputs; the creation of trust and of a culture of cooperation and synergy, which are essential to foster innovation; a more open approach to risk-taking among individuals, firms and institutions; and a better ability to think ahead. In other words, the implementation of Smart Specialisation has led to actual diffused learning, the by-products of which have been increased ownership and better absorption capacity.

Another example of softer outcomes is represented by the South Moravian region, where the EDP and the preparation of the S3 included, amongst other, reflection on regional branding around the key

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Smart Specialisation domains (electron microscopy, biotechnology, nanotechnology). The result was a new concept - '#brnoregion – Just a perfect place' - which is now utilised for territorial marketing and to attract human resources and capital to the region. The ERDF OP sponsored also the realisation of a video promoting the region according to the new ‘brand’ and specialisation domains (available via this link: https://www.facebook.com/brnoregion/videos/154799662142227 and the following website http://www.brnoregion.com).

Having recognised that it is too soon to be able to talk about outcomes, it should also be acknowledged that programme authorities have a sense of how implementation is going and about whether the programmes are on track to deliver the associated Smart Specialisation goals.

As shown in Figure 22, IQ-Net partners overwhelmingly consider that the S3s are on the whole valuable, that they are indeed geared towards delivering economic transformation, and that they are improving prioritisation. These assessments are in line with those expressed two years ago, when the strategies were just being rolled out. The assessment is also positive relating to the fact that the S3s have contributed to a more joined-up way of working across different types of actors, albeit less so, and increasingly less so, within branches of the public administration (only half of respondents identified this, compared to almost 70 percent two years ago). However, the picture is less positive when one considers some substantive expected outcomes of the S3s, namely:

- the expected impact on economic transformation – less than one-third of respondents agreed that this is being delivered;
- the degree to which the S3s are delivering improved results-orientation – just half of our respondents thought this to be the case;
- the degree to which the S3s are in practice allowing improved cross-sectorality – less than 40 percent of respondents thought this to be the case; and, crucially,
- whether the strategies are improving the synergies with H2020 – only one-fifth of respondents expressed the view that this is the case, in line with the issues already discussed in Section 2.4.3 of this paper.
Figure 22: Overall assessment 2018 compared to 2016

Source: IQ-Net research. *Note: 2016 data unavailable for five series in this Figure.
4. THE DEBATE ON POST-2020 COHESION POLICY: FROM ‘SMART GROWTH’ TO ‘SMARTER EUROPE’

The Commission proposals for post-2020 Cohesion policy include a focus on five key objectives of (i) smarter, (ii) greener, (iii) more connected, (iv) more social Europe, and (v) Europe closer to citizens. In line with some of the key messages of the Seventh Cohesion Report and the Regional Innovation Scoreboard, highlighting the territorial polarisation of competitiveness and persistent innovation divide in Europe, in particular related to weaknesses in the diffusion of innovation beyond the ‘frontier regions’ and beyond leading firms, the new regulations suggest a strategy to support a ‘Smarter Europe’ focussed on the following key strands – innovation, digitalisation, SMEs, skills, and cooperation across and within functional areas. These are consolidated in four Specific Objectives of: (i) enhancing R&I capacities and the uptake of advanced technologies, (ii) reaping the benefits of digitalisation for citizens, companies and governments, (iii) enhancing growth and competitiveness of SMEs, and (iv) developing skills for smart specialisation, industrial transition and entrepreneurship.

Thematic concentration would continue to require the focus of spending on areas considered to have high added value, the majority of the ERDF/CF being concentrated on the first two objectives (Smarter and Greener Europe), applied at national level with varying flexibility for three country groups depending on GNI. The implications of the thematic concentration rules for spending patterns under the ERDF/CF are reflected in a further shift in funding from infrastructure towards innovation, broadband and SME support, with the overall increase of 16 percent – the relative share for support to these three headings going up from 30 percent of total ERDF/CF in 2014-20 to 46 percent in 2021-27.

‘Enabling conditions’ would continue the approach of the 2014-20 ex-ante conditionalities, which would cover similar thematic and horizontal areas, although more precise conditions and a reduction of their number are proposed. In contrast with the current programming period, action plans would not need to be submitted in cases of non-fulfilment, however the fulfilment of the conditions would need to be respected throughout the programming period. The main enabling conditions linked to the Smarter Europe policy objective include ‘good governance of national or regional Smart Specialisation Strategy’, supported by: (i) up-to-date analysis of bottlenecks for innovation diffusion, including digitalisation, (ii) existence of a competent regional / national institution or body responsible for S3 management, (iii) monitoring and evaluation tools to measure performance towards the objectives of the strategy, (iv) effective functioning of entrepreneurial discovery process, (v) actions necessary to
improve national or regional research and innovation systems, (vi) actions to manage industrial transition, and (vii) measures for international collaboration. With the core European institutions highlighting the need to further build on the S3 approach as the basis for R&I investment under the ERDF pursued in 2014-20, Smart Specialisation Strategies are seen as a cornerstone to the ‘Smarter Europe’ goals and a crucial tool to raise competitiveness and adapt to globalisation and crises in all regions.

Furthermore, the Commission highlights the need for additional EU support to strengthen interregional cooperation in new value chains across borders, including through linking regional R&I actors to industrial stakeholders from different MS and promoting interregional initiatives in the framework of Smart Specialisation. Capitalising on the S3 progress up to date, the Commission proposes a new inter-regional cooperation instrument in the field of innovation, supporting clustering of S3 actors to scale up innovation and take innovative products and processes to the European market. More specifically, the 2021-27 Cohesion policy rules create the ‘Interregional Innovation Investments’, allowing regions with matching S3 assets to receive more financial support to work together and involve further policymakers, researchers, businesses and other innovation actors, in order to scale up ‘bankable’ interregional projects that can create European value chains in priority sectors.

There are marked variations across countries in terms of views with regards to the Commission approach to ‘Smarter Europe’. While some MSs and organisations have issued official position papers on the issues concerned (e.g. on Smart Specialisation), other reactions to date have been less formal. Formal views on issues such as thematic concentration and flexibility, the nature of the new conditionality, S3 interregional cooperation opportunities or synergies among relevant instruments vary, but they are summarised in the box below.

Box 18: Overview of formal positions on some elements of the post-2020 approach to ‘Smarter Europe’ (selected)

1. Overall assessment of the S3 approach
   - Smart specialisation approach is generally seen as positive and should be maintained. It is considered essential for future EU policies for economic growth – notwithstanding a number of challenges that need to be addressed in future Cohesion policy cycles.
   - The paradigm shift in innovation policy design through S3 (i.e. focusing on the unique areas of regional competitive advantage as opposed to one-size-fits-all solutions) is largely embraced.

75 Ibid.
- Wide stakeholder mobilisation as part of S3 design and implementation (through the EDP) is widely welcomed, but the complex multi-level governance of S3 requires continuous policy support.

- There is need in the evolution of S3s along the implementation period, including the need to make the EDP a continuous process, with a possibility for adjustments over time.

- Innovative ways of monitoring and capturing short- and long-term effects of the Smart Specialisation approach application is advocated by some.\textsuperscript{77}

2. Thematic concentration and flexibility

- There are clear variations in anticipated shifts in thematic concentration: while in some countries the current levels of concentration on the 'Smarter Europe' policy objective already meet the new thresholds and so no adjustments would be needed, radical shifts in funding prioritisation would be required in some others, which may pose absorption capacity challenges.\textsuperscript{78}

- Some MS oppose the strictness of the thematic concentration requirements, arguing for a more flexible approach, particularly for economically weaker regions.

3. Conditionality

- While streamlined conditions and decision-making are generally welcomed, there is lack of clarity on the impact of the new requirements for ongoing monitoring throughout the period, including in terms of potential bureaucratic burden.\textsuperscript{79}

- Some MS call for a non-punitive approach to non-compliance, which is seen as a handicap e.g. for less developed regions, or a voluntary nature of the conditionality.

4. Synergies – There is need to strengthen synergies, complementarities and combination of different sources of support, including:

- Ensure better synergies and coherence between the different Funds and EU programmes providing support for R&I

- Develop new and flexible management and financial rules to allow mixed funding of innovative projects from different sources, domains and regions

- Harmonise State aid provisions between research funding and Cohesion funding (possibly making ESIF benefit from the same State aid rules as directly managed EU funds)

5. Interregional R&I cooperation

- The new interregional cooperation opportunities offered by Smart Specialisation are generally welcomed, and they should be further exploited and supported

- Smart Specialisation is seen as a good opportunity for interregional cooperation, and INTERREG should have the capacity to support joint projects, demonstration activities, new pilot lines, etc. linked to the regions' strategic Smart Specialisation areas\textsuperscript{80}

- While Smart Specialisation partnerships should keep their bottom-up and voluntary approach, more support is needed from the Commission, the TA budget and the JRC to facilitate the preparation of strategic interregional projects\textsuperscript{81}

- EU policies should reflect the role that clusters can play as bridges between actors and as channels for business support.\textsuperscript{82}

Source: Various documents (quoted in text).

\textsuperscript{77} Ibid.


\textsuperscript{79} Ibid.


\textsuperscript{81} Ibid.

The views of IQ-Net partners are also varied and, in part, echo those summarised above. A number of IQ-Net partners have expressed satisfaction with the Commission's intentions and proposed approach towards a Smarter Europe (e.g. in Croatia, Finland, Nordrhein-Westfalen, Slovenia and Greece). It has been noted that the specific objectives of the proposal are well shaped (HR) and can boost the provision of integrated support (Pomorskie). In some cases, the proposed approach has been favoured, because it does not entail a significant change to the ESIF Programmes (e.g. in Finland, where the OP already has a strong focus on Smart Specialisation), or because it meets the regional needs well (e.g. Nordrhein-Westfalen). Some of the proposed elements of the Smarter Europe approach are particularly welcomed by some IQ-Net authorities (e.g. Croatia is particularly interested in developing skills for Smart Specialisation, industrial transition and entrepreneurship).

At the same time, some interviewees have noted that, so far, the proposals remain rather generic and the details, including what they involve in terms of practical implementation, remain to be seen. A range of unanswered questions remain, requiring further reflection (see e.g. Box 19).

**Box 19: What should a Smarter Europe imply? Questions for reflection raised by the English IQ-Net partners**

- Does ‘smart growth’ imply smart in the sense of knowledge transfer, or perhaps in energy efficiency and low carbon outputs or simply good value for money in terms of the outputs and results a project produces?
- Should smart, sustainable growth be focused on building on a country’s competitive advantages or at improving less developed areas, targeting barriers to growth and areas of market failure? Can it cover both?
- Should ESIF-supported smart growth be developed and delivered at a strategic national level or should it be more locally led, as it currently is in England through the ESIF strategies implemented by Local Enterprise Partnerships?
- Should a smart growth strategy involve the participation of a wide range of thematic and geographically based partners, without exposing them to undue financial risks, or should it be centrally managed by Government?
- Is smart growth considered to be a wider strategic policy or can it be achieved by small scale geographically targeted programming, such as community-led local development and sustainable urban development?
- ESIFs represent a small proportion of the funding (public and private) available to most Member States to develop economic growth. Wouldn’t it be putting the cart before the horse allowing ESIF to steer Government policy in this area?
- Should smart growth be mainly focussed on cities, which traditionally generate wealth and employment and are the main drivers of economic growth? How should it be delivered in more rural or isolated areas to combat the migration of people to urban areas?
- Should smart growth include capital investment, such as the development of innovative infrastructure in supporting commercial innovation and business-research engagement and contributing towards economic growth?
- Access to finance is a particular barrier for businesses, in particular SMEs, to innovate and expand. The Commission has indicated an increased use of financial instruments during the 2021-27 programming period. How can these best contribute towards smart growth?
- Smart Specialisation Strategies can be a powerful instrument to help address other objectives such as meeting social, environmental, climate and energy challenges. How can this best feed into smart growth?

Source: IQ-Net research.
Views on the approach to Smart Specialisation specifically, as the cornerstone to the Smarter Europe goals, also vary. Most interviewees hold an overwhelmingly positive view on Smart Specialisation as a mechanism that responds to the necessities of a place-based policy, helps to improve policy definition and prioritisation, and encourages wide stakeholder mobilisation. Many partners are therefore in favour of a strong role for Smart Specialisation in post-2020 Cohesion policy. Some of them emphasised that it would be desirable to maintain the Smart Specialisation logic even if/when the contextual or regulatory conditions changed – for instance, if it were no longer an ex-ante conditionality (e.g. some Spanish regions) or following Brexit (English interviewees suggesting that S3 would be a good methodology for articulating local assets in a bottom-up EDP way, even though the terminology would need to change).

At the same time, a lot of questions still remain unanswered, and further details would be welcome. Among other things, the Seville platform has not yet progressed on the new guidelines on Smart Specialisation, and it is not clear whether the Commission will find ways to address some of the challenges inherent in the Smart Specialisation implementation process, as became evident during the current period. Such challenges include, among others, the long period of time required to develop the EDP processes, often requiring profound changes in the national and regional innovation and entrepreneurial systems, as well as the clear Europe-wide centre-periphery divide, hindering the success of the Smart Specialisation implementation in the MSs and regions disadvantaged by peripherality. Although the Seville platform showcases good practice examples, regional contexts vary greatly, and the challenge is to find ways to accommodate the needs and tackle the barriers to the development of the innovation ecosystems of each region while offering a common Smart Specialisation logic for the prioritisation of policy support.

While a number of MSs and regions support the continuation of the ex-ante conditionality on Smart Specialisation in 2021-27, some call for a non-punitive approach to non-compliance, seen as a handicap e.g. for less-developed regions (e.g. Greece, Portugal), or for a voluntary nature of the conditionality (e.g. some Spanish regions suggest that it could be a voluntary requirement or only require the existence of a regional innovation strategy without further criteria). Further reduction and limitation of the enabling conditions and the continued use of universal criteria that can be met irrespective of the level of economic development of the region – as opposed to the ‘subjective’ conditions (including those related to governance approaches or the ‘effective functioning of the EDP’) is proposed by some partners (e.g. Warminsko-Mazurskie, Greece). It is further proposed that the Smart Specialisation-enabling condition should be adapted to the advances achieved in the current period (at the level of value chains, in an international and interregional framework), and should involve less bureaucracy, along with more flexibility (e.g. Spain). The fact that the enabling conditions present a set of ongoing requirements is a matter of concern for some partners. It could shift the focus of the remaining years of implementation towards efforts to collect evidence on compliance by 2020 (e.g. with the relevant partnership requirements etc.) and complicate future (i.e. post-2020) implementation where formal evidence of this kind is not available.

There are marked variations in terms of views on the new thematic concentration requirements. While generally agreeing that a clear definition of priorities should be established in Smart Specialisation with ongoing monitoring of regional specialisation in these priorities, and deepening analysis of regional strengths (including through benchmarking), in order to better inform investment priorities, is important, some partners oppose the strictness of the thematic concentration rules, calling for a more flexible approach, particularly for economically weaker regions. Some regions
point out that it is not easy to apply a strict concentration in some technological or innovative areas (e.g. Spain), while the overall approach to thematic concentration is seen as very demanding and limiting the flexibility to tailor funding to policy priorities (e.g. Portugal, Warminsko-Mazurskie, Greece). There are clear variations in anticipated shifts required by the new thematic concentration rules. In some countries/regions the current levels of concentration on the ‘Smarter Europe’ objective already comply with the new thresholds, and accordingly no major adjustments would be needed. The new requirements are therefore seen as suiting the national/regional context well in some cases (e.g. Vlaanderen), as they mirror the 2014-20 programme period approach. At the same time, others, although having current levels of concentration on Priority Objective 1 already above the new thresholds, consider that the new requirements overall imply a loss of flexibility for MSs, which is opposed (e.g. Portugal). In other countries/regions, the resistance to the new rules relates to the fact that they would require radical shifts in funding prioritisation, which, apart from limiting the flexibility required for the planning of programmes, may pose absorption capacity challenges.83

Recognising the value of the Smart Specialisation approach for mobilising territorial actors in pursuit of common strategic objectives, some partners have highlighted the need to further strengthen the partnership both at national and regional levels, including in order to promote greater synergies between the S3s and national ESIF OPs (e.g. Croatia), and mobilise more actors who can deliver projects, taking into account the entire region’s innovation potential (e.g. Sweden). While wide stakeholder mobilisation as part of S3 design and implementation is widely welcomed, efficient coordination of the different levels of governance appears crucial.

Ensuring that there are sufficient financial incentives and sufficient simplification to guarantee continued engagement of stakeholders in the Smart Specialisation process has also been highlighted as important (e.g. Pomorskie). Given that some beneficiaries withdraw from projects due to financial constraints and the limited scope to provide co-financing from their own resources, strengthening the complementarity and diversity of the financial offer appears pertinent.

On a related note, the necessity of strengthening synergies and complementarities across various sources of support has been highlighted. Better synergies and coherence should be ensured not only between the various EU Funds and programmes providing support for R&I, but also between the different ESI Funds. Among other things, harmonisation of ESIF rules with those of H2020, including in terms of State aid, is seen as potentially beneficial (e.g. Greece), as is the integration of the ESF as part of the Smarter Europe policy objective (e.g. Slovenia). Addressing the incompatibilities of support under the ERDF, on the one hand, and EAFRD/EMFF, on the other, is also seen as crucial for pursuing integrated projects and stimulating cross-fertilisation across thematic domains with relevance for regional Smart Specialisation priorities, innovation dynamics and economic growth (e.g. Portugal).

The new interregional cooperation opportunities offered by Smart Specialisation are generally welcomed, with a number of partners arguing for the need to increase cooperation across regional borders and acknowledge its positive contribution to promoting shared strategic interest and common priorities (e.g. Czech Republic, Sweden). At the same time, it has been noted that while the rationale behind the new proposals is clear, the necessary tools have not yet been created, and it would not be

easy to reorient the existing Smart Specialisation focus towards reinforcing the cooperation dimension (including due to restrictions on the total amount that can be allocated to operations located outside the programme area).

Furthermore, greater restrictions on the eligibility of large companies, proposed for 2021-27, is an area of concern for some partners. For instance, Portugal argues that large companies have an important haul effect on SMEs and on the productive structure in some sectors, and innovative large companies are often those that have greater R&I capacity, therefore the proposed restrictions are not favourable for the country's competitiveness. It has further been emphasised that, in regions such as Warmsko-Mazurskie, any investment in R&D is important and is of great value to economic development, and the size of the entity undertaking it is irrelevant.

Other issues raised by the IQ-Net partners with regard to the Smart Specialisation approach post-2020 included its proportionality (which remains a key issue for smaller programmes, e.g. Vlaanderen, where the formulation of Smart Specialisation approaches requires considerable resources with often little practical return), as well as harmonisation between the Smart Specialisation and ESIF monitoring systems (with the necessity to fit the Smart Specialisation indicators to the TOs, e.g. in Finland). More broadly, the need to ensure that Smart Specialisation is perceived as the process that validates smart choices based on actual regional strengths and needs, rather than as a process which simply complies with regulatory requirements through mere application of selection criteria, has been highlighted (e.g. Portugal).
5. CONCLUSIONS

Although the process of designing Smart Specialisation Strategies has often been laborious and lengthy, two years down the line the implementation is fully underway. Progress achieved towards implementing the S3s is considered satisfactory by the vast majority of IQ-Net partner authorities and, moreover, the goals and thematic foci of the S3s are considered to be well embedded in the programmes’ project selection procedures.

The implementation of Smart Specialisation across IQ-Net partner programmes takes different shapes and approaches. Whereas some IQ-Net countries and regions have mainly continued along the path of already established and well-functioning instruments for the support of regional innovation, others have engaged with the process in novel and creative ways, developing and sustaining the entrepreneurial discovery as an ongoing process. The many capacity-building and actor mobilisation activities discussed in Section Capacities and capacity-building2.5 are indeed evidence of the commitment to Smart Specialisation that is evident in many IQ-Net countries and regions.

While actual impacts in terms of regional economic transformation and increased regional specialisation cannot yet be evidenced, softer impacts are already becoming visible. They include, for example: improved mutual understanding, trust and cooperation among different types of actors; improved business environments; upgraded knowledge and skills among firms; a more generalised attitude of stakeholders towards thinking strategically about their region’s strength and opportunities; and diffused learning, which in some cases are having positive spillovers on the absorption of the programme as well.

The extensive efforts realised to implement the Smart Specialisation approach nevertheless show that the process requires constant commitment and investment of time and effort. Various interviewees cited unfulfilled capacity needs and the intention to invest further in capacity-building activities in order address a number of outstanding weaknesses.

The research carried out highlights a number of outstanding shortcomings in the process of S3 implementation in the ESIF programmes of IQ-Net partners’ countries and regions:

- First, the implementation of Smart Specialisation seems to confirm the ‘innovation paradox’ argument, whereby less innovative regions with greater need for investments in innovation have lower absorption capacity and find it harder to overcome the limitations of their productive and HE systems, to bring firms, research institutions and other stakeholders to the table.

- Second, almost everywhere, the programmes have tended to implement Smart Specialisation according to a triple rather than a quadruple helix concept. The generalised unwillingness or, most likely, inability to mobilise those actors that are apparently more far removed from the production and commercial exploitation of knowledge, appears as a missed opportunity. In-depth reflection on the experience of those who are directly engaging NGOs and civil society in the process (e.g. Slovenia), and on the utility and practice of so doing, may encourage others to attempt this. Such reflection should include a frank assessment of the barriers faced and how they have been/can be overcome.
Third, S3s are supposed to leverage on a multiplicity of funding sources beyond the ESIF and, in the case of IQ-Net partner programmes, they do: the ERDF is matched by a variety of domestic funding streams, whether national or regional or both. However, these resources are not always spelt out at the outset. This makes the actual volume of financial commitment to the S3s sometimes opaque (as opposed to the programmes' TO1 allocations, which are always clear). And while interviewees feel that the S3s are geared towards delivering economic transformation, views about whether they are actually achieving it are more cautious; besides, in the absence of a clear picture of the resources mobilised, this may be difficult to estimate. Similarly, while the process of implementing the S3s (or the Smart Specialisation approach more widely, in some cases) is considered to have been useful in facilitating more joined-up policymaking (across different types of actors), the actual extent to which cross-sectorality has been achieved appears less evident.

Fourth, while, as just observed, the desired integration of different financing sources, particularly between the ERDF and domestic funding streams, has been largely achieved, the synergy with Horizon 2020 leaves much to be desired. This appears to be the case especially in those countries and regions that are less endowed with research institutions, facilities and human capital to start with, reinforcing the innovation paradox above. Similarly, while various IQ-Net partners utilise the European Social Fund to support the implementation of the strategies (as discussed in Section 2.4.1), many do not seize this opportunity.

These shortcomings cannot be fully addressed in the current programming period. However, if Smart Specialisation continues as a cornerstone of future Cohesion policy, to support the creation of innovation-oriented eco-systems and the achievement of a ‘Smarter Europe’, the new regulations will have to find ways of tackling these issues. Whether the experience gained so far, as summarised in Section 4, offers insights on the way forward is an open question.
6. ANNEX I – INSTITUTIONAL RESPONSIBILITIES FOR THE IMPLEMENTATION OF SMART SPECIALISATION IN IQ-NET PARTNER COUNTRIES AND REGIONS
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<th>Other policy platforms</th>
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<td>AT</td>
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<td>Ministries and agencies (FWF, FFG, AWS); ÖROK (MA) Subcommittee for Regional Economy, dealing with regional policy in the context of RTI</td>
<td>Bundesländerdialog (policy platform for national and regional governments and agencies / stakeholder organisations in science and R&amp;I, for information exchange)</td>
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<td></td>
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<tr>
<td>BE (Vla)</td>
<td>The OPs MAs; Ministry of Science &amp; Education; Ministry of Economy, Entrepreneurship &amp; Crafts, Ministry of Regional Development &amp; EU Funds (main implementing IBs)</td>
<td>Steering committee of the national RIS3 (incl. deputy ministries of involved OPs and the principal coordinator, representative of the National Coordination Authority from the Ministry of Regional Development, representatives of the National Technology Agency and of the Governmental Committee for Science, Research &amp; Innovations, representatives of regions).</td>
<td>National innovation platforms</td>
<td>Flemish government, Flemish Agency for Innovation &amp; Enterprise (MA)</td>
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<td>HR</td>
<td>The OPs MAs; Ministry of Science &amp; Education; Ministry of Economy, Entrepreneurship &amp; Crafts, Ministry of Regional Development &amp; EU Funds (main implementing IBs); Technical Secretariat for S3 (Croatian Agency for SMEs, Innovations &amp; Investments - HAMAG BICRO)</td>
<td>Steering committee of the national RIS3</td>
<td>National Innovation Platforms</td>
<td>Regional representation (Regional Government) + South Moravian Innovation Centre (in South Moravian Region)</td>
<td>Steering Committee of the Regional Innovation Strategy of South Moravian Region (and similarly, in the other regions)</td>
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<td>CZ</td>
<td>Ministry of Industry and Trade (principal strategy coordinator)</td>
<td>Steering committee of the national RIS3</td>
<td>National Innovation Platforms</td>
<td>Regional representation (Regional Government) + South Moravian Innovation Centre (in South Moravian Region)</td>
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<td>DK</td>
<td>Danish Business Authority (MA)</td>
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<td>Regional Growth For a</td>
<td>Steering Committee of the Regional Innovation Strategy of South Moravian Region (and similarly, in the other regions)</td>
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<td>National Level</td>
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<td><strong>Lead</strong></td>
<td><strong>Support / operational lead</strong></td>
<td><strong>Other policy platforms</strong></td>
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<tr>
<td>FI</td>
<td>Ministry of Economic Affairs and Employment (MA)</td>
<td>Varies. Helsinki-Uusimaa: Regional Council</td>
<td>Thematic expert networks; Regional Cooperation Group</td>
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<tr>
<td>FR</td>
<td>General Commissariat for Territorial Equality, CGET (coordination and support)</td>
<td>Regional Councils (Conseils Régionaux), as the MA of regional OPs</td>
<td>Regional stakeholders depending on the region</td>
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<td>DE (NRW)</td>
<td>NRW Land Ministry for Innovation, Science and Research (MIWF)</td>
<td>In cooperation with other Land ministries (incl Ministry for Economic Affairs, Energy and Industry – accommodating ERDF OP MA)</td>
<td>Other ministries addressing specific elements of the regional innovation strategies (Ministry for Health, Equalities, Care &amp; Ageing; Ministry of Construction, Housing, Urban Development &amp; Transport; Ministry of Labour, Integration &amp; Social Affairs (ESF MA); Ministry for Environment &amp; the State Chancellery)</td>
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<tr>
<td><strong>EL</strong></td>
<td><strong>Regional Councils</strong></td>
<td><strong>National Coordination Authority in the Ministry of Economy supports Smart Specialisation Strategy Council. General Secretariat of Research &amp; Technology (GSRT) in the Ministry of Education and the Special Service for the Management &amp; Implementation of Research, Technological Development &amp; Innovation Actions (EYDE/ETAK) – MA</strong></td>
<td><strong>National Smart Specialisation Platforms hosted by GSRT consist of steering groups, plenaries and coordinators. The National Council for Research &amp; Innovation has advisory role to the government on research and innovation strategy. National networks of smart specialisation</strong></td>
<td><strong>MAs of ROPs, Regional Research and Innovation Councils</strong></td>
<td><strong>Regional networks of smart specialisation, Regional platforms for smart specialisation under EDP (in some regions)</strong></td>
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<tr>
<td><strong>PL (Pom)</strong></td>
<td><strong>Marshal Office of the Warminsko-Mazurskie region (MA of the ROP)</strong></td>
<td><strong>Working group on Smart Specialisation; Regional Steering Committee for Regional Innovation Strategy</strong></td>
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<td><strong>PL (WiM)</strong></td>
<td><strong>Marshal Office of the Pomorskie region (MA of the ROP)</strong></td>
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<tr>
<td><strong>Lead</strong></td>
<td>Political coordination: Ministerial Coordination Committee (composed of the Ministries of Economy, Education &amp; Science, and Regional Development)</td>
<td>The Regional Coordination and Development Commissions (CCDR) / Regional Governments (Açores, Madeira) (MAs of ROPs)</td>
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<tr>
<td><strong>Support / operational lead</strong></td>
<td>Operational coordination: Coordinating Council (integrates representatives of 4 national agencies: ANI, National Innovation Agency; IAPMEI, Agency for Competitiveness &amp; Innovation; AICEP, Agency for Investment &amp; Foreign Trade; FCT, the Science &amp; Technology Foundation), the ADC, representatives of the Regional Governments and the Regional Coordination &amp; Development Commissions (CCDR)</td>
<td>Regional Innovation Councils (where established)</td>
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<td><strong>Other policy platforms</strong></td>
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<td>Regional Platforms of Smart Specialisation (where established)</td>
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<td><strong>ES (PV)</strong></td>
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<tr>
<td><strong>Lead</strong></td>
<td></td>
<td>Basque government’s Department for Economic Development &amp; Competitiveness; Scientific Committee (advice); Interdepartmental Committee (coordination and implementation)</td>
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<tr>
<td><strong>Support / operational lead</strong></td>
<td>Basque Council for Science, Technology &amp; Innovation (CVCTI)</td>
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<td><strong>Other policy platforms</strong></td>
<td>Government Office for Development &amp; European Cohesion Policy (MA); Implementation Working Group</td>
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<td><strong>SI</strong></td>
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<tr>
<td><strong>Lead</strong></td>
<td>Government of the Republic of Slovenia</td>
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<td><strong>Support / operational lead</strong></td>
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<tr>
<td><strong>Lead</strong></td>
<td>Swedish Agency for Economic &amp; Regional Growth (Tillväxtverket, MA); Swedish Ministry of Enterprise &amp; Innovation; The National Innovation Council</td>
<td>Swedish Agency for Economic &amp; Regional Growth (Tillväxtverket, MA)</td>
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<tr>
<td><strong>Support / operational lead</strong></td>
<td>VINNOVA (Sweden’s innovation agency) – promotes and invests in Smart Specialisation by national programmes and calls for proposals</td>
<td>Regions</td>
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<tr>
<td><strong>Other policy platforms</strong></td>
<td></td>
<td>Regions work in collaborative partnerships to define how to specialise</td>
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<td>National Level</td>
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<tr>
<td>UK</td>
<td>England (Eng)</td>
<td>Scotland (Sco)</td>
<td>Wales (Wal)</td>
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<tr>
<td>Department for Business, Energy &amp; Industrial Strategy (DBEIS)</td>
<td>Innovate UK, the UK's innovation agency, Part of UK Research &amp; Innovation (UKRI), the national funding agency investing in science and research. UKRI is an executive non-departmental public body, sponsored by DBEIS</td>
<td>Ministry of Housing, Communities &amp; Local Government (ERDF MA), oversees ERDF involvement in strategy. ERDF-funded Smart Specialisation Advisory Hub (providing technical support on Smart Specialisation)</td>
<td>Welsh Government</td>
<td>Welsh European Funding Office (MA)</td>
<td>Innovation Advisory Council for Wales</td>
<td></td>
</tr>
<tr>
<td>ERDF-funded Smart Specialisation Advisory Hub (providing technical support on Smart Specialisation)</td>
<td></td>
<td></td>
<td>Scottish Government (MA) Operationalisation of ERDF element is largely through the Strategic Intervention for Business Innovation, implemented by Scottish Enterprise and Highlands &amp; Islands Enterprise</td>
<td>Scottish Government Economic Development Directorate</td>
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</table>

Source: IQ-Net research.
## ANNEX II – LIST OF INTERVIEWEES

<table>
<thead>
<tr>
<th>IQ-Net country (region)</th>
<th>Organisation</th>
<th>Date</th>
<th>Format</th>
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<tbody>
<tr>
<td>Austria</td>
<td>Secretariat of the Austrian Conference on Spatial Planning (ÖROK)</td>
<td>28 September 2018</td>
<td>Face-to-face</td>
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<td></td>
<td>Secretariat of the Austrian Conference on Spatial Planning (ÖROK)</td>
<td>8 November 2018</td>
<td>Phone</td>
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<tr>
<td>Belgium (Flanders)</td>
<td>Flanders Innovation &amp; Entrepreneurship (VLAIO)</td>
<td>10 October 2018</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Croatia</td>
<td>Ministry of regional development and EU funds, Service for Coordination of Technical Assistance</td>
<td>24 September 2018</td>
<td>Face-to-face</td>
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<td></td>
<td>Ministry of regional development and EU funds, Service for Coordination of Technical Assistance</td>
<td>11 October 2018</td>
<td>Written</td>
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<tr>
<td></td>
<td>Ministry of regional development and EU funds, Service for Coordination of Technical Assistance</td>
<td>9 November 2018</td>
<td>Written</td>
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<tr>
<td>Czech Republic</td>
<td>Ministry of Industry and Trade of the Czech Republic</td>
<td>9 October 2018</td>
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<td></td>
<td>South Moravian Innovation Centre</td>
<td>11 October 2018</td>
<td>Phone</td>
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<tr>
<td>Denmark</td>
<td>South Denmark Region</td>
<td>12 October 2018</td>
<td>Phone</td>
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<td></td>
<td>Danish Business Authority</td>
<td>2 October 2018</td>
<td>Face-to-face</td>
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<tr>
<td>Finland</td>
<td>Regional Council of the Helsinki-Uusimaa region</td>
<td>5 October 2018</td>
<td>Face-to-face</td>
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<td>Regional Council of the Tampere Region</td>
<td>9 October 2018</td>
<td>Face-to-face</td>
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<td></td>
<td>Ministry of Economic Affairs and Employment</td>
<td>5 October 2018</td>
<td>Face-to-face</td>
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<tr>
<td></td>
<td>Regional Council of Pirkanmaa</td>
<td>12 October 2018</td>
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<tr>
<td>Germany (Nordrhein-Westfalen)</td>
<td>Land Nordrhein-Westfalen Ministry for Economic Affairs, Innovation, Digitalisation and Energy</td>
<td>16 October 2018</td>
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<td>Greece</td>
<td>Directorate of Planning and Programming of Policies and Actions of Research and Technology, General Secretariat of Research and Technology (GSRT), Ministry of Education, Research and Religious Affairs</td>
<td>4 October 2018</td>
<td>Face-to-face</td>
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<td>Special Service for Strategy, Planning and Evaluation (EYSSA), Ministry of Economy and Development</td>
<td>10 October 2018</td>
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<td>IQ-Net country (region)</td>
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<td>Poland (Pomorskie)</td>
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<td>Portugal</td>
<td>ADC Cohesion and Development Agency</td>
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<td>Government Office for Development and European Cohesion Policy</td>
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<td>Spain (Pais Vasco)</td>
<td>Provincial Council of Bizkaia, Pais Vasco</td>
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<td>Sweden</td>
<td>Tillvaxtverket (Swedish Agency for Economic and Regional Growth)</td>
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<td>Ministry of Housing, Communities and Local Government</td>
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<td>Smart Specialisation Hub</td>
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<td>United Kingdom (Scotland)</td>
<td>Scottish Government</td>
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<td>United Kingdom (Wales)</td>
<td>Welsh European Funding Office (WEFO)</td>
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<td>Face-to-face</td>
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