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# Regional Innovation Monitor

**Thematic Paper 2**

**Policies and Processes of Smart Specialisation: Realising New Opportunities**

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***In association with:***  
**Fraunhofer ISI & UNU MERIT**



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# Preface

The research for this report was undertaken by Technopolis Group in the framework of the Directorate-General for Enterprise and Industry project 'Regional Innovation Monitor' (Contract No. ENTR/09/32).

This thematic paper is the product of a desktop research carried out between mid-January and mid-April 2011). It also takes into account baseline regional profiles, innovation measures repository as well as the regional governance and policy survey (hereinafter referred to as the RIM survey) all of which were developed in the framework of the RIM project. The report has been written by Jacek Walendowski (Technopolis Group).

The author wish to thank all those who have provided their comments on the first draft of paper, especially Dr. Viola Peter, Helena Acheson (Technopolis Group), and Dr. Henning Kroll (Fraunhofer ISI).

RIM provides detailed information on regional innovation policies for 20 EU Member States: Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden and the United Kingdom. The core of the RIM service is a knowledge base of information on some 200 regions.

For further information about the Regional Innovation Monitor and access to the full range of information on regional innovation policies, please visit the RIM website at: <http://www.rim-europa.eu>

## ***Disclaimer***

It should be noted that the content and conclusions of this report do not necessarily represent the views of the European Commission. The report is the responsibility of the author alone.

# Executive summary

The objective of this thematic paper is to contribute to the ongoing discussion on smart specialisation strategies at regional level. The report puts a spotlight on strategic anchoring mechanisms and regional branching policies.

It does so by assessing policies implemented across 16 EU regions, which are aimed at developing global-local relationships and improving local networking (“strategic anchoring mechanisms”). This is complemented by the analysis of spin-off processes and labour mobility (“regional branching policies”), which are considered to be the main mechanisms through which knowledge spills over from one local firm to the other, and which contribute further to knowledge diffusion and accumulation at the regional level.

Recognising the fact that smart specialisation is not only about public support measures at national or regional level but also about the processes, this paper includes three case studies showing different stages of development of smart specialisation strategies, but also different adopted approaches.

In summing up, the key messages offered by this thematic paper are as follows:

1. The concept of smart specialisation has been a subject of great interest in regional studies for decades, albeit labelled differently. The new dash for smart specialisation can be therefore largely considered as a revived policy uptake of existing research.
2. With regard to strategic anchoring mechanisms, it is clear that the majority of regions are investing in building stronger networks and fostering a higher degree of connectivity. However, a significantly lower number of regions support global network interconnectivity.
3. None of the analysed regions has implemented a measure in support of the diffusion of innovative technologies, products and services. In more than half of the regions under review (10 out of 16 in total), the absence of policies in support of labour mobility was identified. Overall, the policy focus is placed on direct support of business R&D (grants and loans) and R&D co-operation.
4. Irrespective of types of policies (whether they are strategic anchoring policies or regional branching policies), it is often considered that it is too early to judge their success. However, preliminary assessments based on the analysis of semantics clearly suggest that improvements in policies are necessary.
5. Based on three case studies of Baden-Württemberg, North East of England, and Silesia the following observations can be drawn. Firstly, smart specialisation is not exclusively about focusing on a single industry sector but primarily about fostering cross-sectoral linkages. To this end, IT and media industries are considered to be of strategic importance for the regional industrial base. Secondly, the case of the North East of England shows the evolution from establishing centres of excellence in key technology areas to efforts concentrated on building internationally competitive clusters. In comparison with Baden-Württemberg and the North East of England, Silesia is at an early stage of development of a smart specialisation strategy. The proposal of the 2020 Strategic Plan for Technological Development is a concrete example of efforts undertaken recently by the regional authorities.

## 1. Context of Smart Specialisation Strategies

The concept of ‘*smart specialisation*’ which has been the main focus of a recent Communication on Regional policy contributing to smart growth in Europe 2020 (Commission, 2010), is a new emerging policy orientation. As it is still a rather vague concept that still needs to be further investigated, it is perhaps one of the most appealing innovation related policy topics nowadays. The effects may only be visible in the coming years.

Although the concept is often attributed to Dominique Foray, one of the leading academic experts in the economics of innovation and knowledge and economic policy implications of the new knowledge-based economy (Foray, 2006; Foray and Van Ark, 2007), smart specialisation has been a subject of great interest – of course using a different terminology – in regional studies for many years. For example, already back in the mid-1970s globalisation issues began to be introduced in these studies. More recently, a research undertaken by H. Bathelt et al. in 2002 has contributed to establishing a better understanding about links between global-local relations and the process of knowledge creation is another important milestone.

While the concept of Smart Specialisation Strategies (S3) attracts a lot of interest among the policy makers and is increasingly appearing in policy debates, it is also important to note that in parallel the research in the field has not stopped<sup>1</sup>. On the contrary, it seems to set out new important challenges. By addressing them, it will be possible to deepen the knowledge about policies and mechanisms leading to successful regional development. All this provides a unique opportunity to influence the existing strategies. This can be done by involving a range of actors with different backgrounds and experiences and requires going beyond the bilateral dialogue between policy makers, practitioners or researchers.

Prior to the presentation of existing conceptual frameworks, it is important to acknowledge the fact that taking reinvigorated efforts of developing smart specialisation strategies during austerity and tightening up public spending is both timely and most relevant. Besides that, the need to increase the return of public investments especially in the most recent regions of EU Member States (MS), where significant financial investments with the support of the Structural Fund (SF) interventions are made is another explanation.

Two recent studies by Benneworth (2010), Boschma and Frenken (2009) can be used to focus the analysis of such a complex topic as smart specialisation.

What is so interesting about their contributions is that they both make an attempt to push boundaries in regional policy studies, but most importantly they search for a better understanding on how to improve the quality and impact of regional innovation policies. Whilst the former noted that we stand on the brink of a structural shift due to the global crisis and that a successful resolution of the global-local paradox underlining the need to think globally and acting locally will be one of the most pressing concerns in the coming years, according to Boschma and Frenken there will be increasingly more attention given to regional diversification because highly specialised regions run the risk of being affected by the current economic crisis (e.g. Detroit).

The main motivation behind preparing this paper is two-fold. The first is a perceived lack of more explicit and specific assessments of policies implemented in regions to develop and/or strengthen global-local relationships and improving local networking.

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<sup>1</sup> E.g. see the latest presentation on Strange Attractors: Designing Innovative Systems of the Future by Phil Cooke from Cardiff and Aalborg Universities delivered at the “Making Cities and Regions Fit for Innovation: Research Needs and Policy Perspectives” Symposium on 18 April 2011 in Brussels: Available at: [http://jiip.eu/files/2011/04/1\\_Cooke.pdf](http://jiip.eu/files/2011/04/1_Cooke.pdf)

Recognising that strategic coupling matters along these two dimensions, the obvious challenge for both the practitioners and policy makers as noted by Benneworth (2010) is to better understand strategic anchoring processes both in terms of the connectivity of key regional actors (hinges) in other global networks as well as regional connectivity and network density. He also argued that contextual issues (and not purely economic) are required to upgrade our knowledge about network dynamics. Similarly, the second motivation is a lack of comparative analysis of mechanism of knowledge transfer at the regional level.

Taking into account the above-mentioned considerations, the objective of this paper is to analyse ‘*strategic anchoring*’ and ‘*regional branching*’ policies based on a selected number of regions<sup>2</sup>. These types of policies can be defined as follows. Firstly, strategic anchoring policies are policies which aim at the development of regional connections (regional interaction patterns). Those include cluster framework policies, R&D co-operation, and support to technology transfer between firms. Secondly, regional branching mechanisms are those through which knowledge spills over from one local firm to the other, and which contribute further to knowledge accumulation at the regional level through support of spin-off process (entrepreneurship), labour mobility and networks.

The main objective of this paper is, therefore to contribute to the ongoing debate on smart specialisation with more concrete examples of policies implemented in a selected number of EU regions by building upon recently identified research challenges in regional policy studies. Based on concrete examples, the paper also looks at the process aspects behind the development of the S<sup>3</sup> strategies in different regions, especially regarding foresight and priority setting.

## 2. Recent Empirical Findings on Smart Specialisation

### 2.1 Global-Local Relationships

One of the main findings of the recent paper by P. Benneworth undertaken for the OECD back in 2010 was that more research on global-location relationships was needed, in order to explain how regions function as a space of connections between regional and global processes in distinctive ways in different types of regions.

As the title of the paper suggests “Beyond global pipelines and local buzz” the author points out that there is a limitation to the generally accepted view that strengthening the connection points between global networks and actors, such as universities, lead firms, public laboratories, or multi-nationals the regional economy will be developing by bringing in global innovation resources. His key argument is that there is a need to establish a better understanding about strategic coupling processes along two key dimensions, notably the connectivity of regional actors in global networks as well as regional connectivity and density.

Taking these considerations into account, the challenge is to introduce more clarity about regional conditions and strategically anchoring global processes. This leads to the establishment of a classification of different types of regions and distinct desirable policies. The proposed categorisation and desirable policy orientations are presented in Table 2-1.

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<sup>2</sup> In total, 16 regions are analysed. ‘Connecting globally’: Madeira (PT30), Silesia (PL22), Attiki (GR30), and Sardegna (ITG2). ‘Sustaining momentum’: Île de France (FR10), Baden-Württemberg (DE1), Flanders (BE2), and Castilla y León (ES41). ‘Cluster-building’: Sydsverige (SE22), Navarra (ES22), Utrecht (NL31), and Nord - Pas-de-Calais (FR30). ‘Deepening pipelines’: Noord-Brabant (NL41), Piemonte (ITC1), Wallonia (BE3), North East (UKC).



Table 2-1 Summary of Policy Orientations in Different Types of Regions

	<b>Connecting globally</b>	<b>Sustaining momentum</b>	<b>Cluster-building</b>	<b>Deepening pipelines</b>
<b>Type of regions</b>	Peripheral regions lacking strong research strengths and international connections	Regions with strong local cluster organisations well networked with policy actors	Small groupings of competitive businesses with limited local connectivity	Region dependent on limited number of global production networks/ value chains
<b>Key challenge</b>	Building a global pipeline: finding connection point from region to key global actors	Building up new regional hinges connected to regional firms – building critical mass.	Improving local networking connecting more local actors to growing regional network	Extending hinge connectivity & networks around hub
<b>Optimal solution</b>	Helping regional actors take the first steps in international co-operation	Bringing outside actors in, and helping to collectively shape future trends	Channeling innovation support to stimulate growth through regional clusters	Helping second-tier innovators become market leading and shaping
<b>Example of regions</b>	Madeira, Portugal Tallinn, and Tartu Estonia Attica, Greece, Sardinia, Italy	Île-de-France, France Baden-Württemberg, Germany Flanders, Belgium Toronto, Canada.	Skåne, Sweden Navarra, Spain Auckland, New Zealand Zuid-Holland, Netherlands Nord-Pas-de-Calais, France	Eindhoven, Netherlands Piemonte, Italy Limburg, Belgium Seattle, USA North East of England, United Kingdom

Source: Based on (Benneworth, 2010)

## 2.2 Related Variety and Economic Branching in Regions

In light of the current economic crisis and delocalisation trends, there is a lot of interest in understanding the mechanisms behind regional diversification or in other words smart specialisation. It can be expected that smartly specialised regions will be not only more innovative, but also their economies may be more resilient in the event of a financial crisis.

One of the key messages emerging from the report on related variety prepared for the OECD by R. Boschma and Frenken in 2009, is that it will be possible to attain long-term regional development by taking concrete actions aimed at transforming renewal of the economic base of regions. The existing evidence shows that regions with a higher degree of related industries will perform better, precisely because of knowledge flows much easier across related industries and as a result this contributes to industrial renewal and economic branching in regions. The three main mechanisms through which knowledge spills over among enterprises and which further contributes to knowledge accumulation in regions include those aimed at supporting: spin-off dynamics, labour mobility and network formation.

The main benefits of these three mechanisms can be explained as follows. First, the spin-off process facilitates the knowledge transfer through entrepreneurship. In essence, the newly formed spin-off exploits the knowledge acquired as a former employee of an incumbent firm in the same sector. Second, labour mobility is not only considered as the main carrier of knowledge but will also contribute to knowledge diffusion. The third knowledge transfer mechanism is via networks.

A sustainable option for regions is to diversify into the new fields relating to existing regional assets. In addition to the three mechanisms, it is also argued that due to the systemic nature of innovation processes regional development also requires that organisations meet the following conditions: (1) good degree of connectivity enabling flows of knowledge, capital, and labour; (2) good enabling knowledge sourcing beyond the core regional network; (3) flexibility and responsiveness must be ensured by local organisations and institutions.

The other important consideration for the design of regional innovation policies concerns a tendency of aiming at ‘picking-the-winners’. The main problems identified with regard to this approach are three-fold. Firstly, it is impossible to predict which will be the new growth regions and the winning sectors. Secondly, ‘picking-the-winner’ often results in picking the same dominant technologies like for example biotechnologies. In case all regions are targeting the same sectors, it is most likely that only few regions will be able to develop new industries. Thirdly, ‘picking-the-winner’ policy denies the fact that each region has a unique growth potential (Boschma and Frenken, 2009). Overall, the argument is that regional policy based on related variety concept is mostly relevant because it helps regions to avoid the above-mentioned dangers of ‘picking-the-winner’ policies.

### 3. Assessment of Strategic Anchoring Mechanisms

#### Summary of Key Messages:

- Fostering connectivity and co-operation between different stakeholders of the regional innovation systems is considered by a large majority of regions as one of the biggest priorities. **A significantly lower number of regions has recognised and paid special attention to instruments in support of strategic global-local relations.** In a long-term perspective, the absence of such mechanisms is likely to have a negative impact on the knowledge flow and transfer between local and global networks at least in certain types of regions.
- Whilst there are many measures in support of R&D activities and science-industry cooperation, **the analysis of RIM repository of support measures finds no measure in support of the diffusion of innovative technologies, products and services** in the group of regions under review.
- The assessment of the extent of success indicates that strategic anchoring measures are oversubscribed but still too early to judge. Further analysis reveals that the **ongoing measures especially regarding their outcomes could be improved.**
- There are seven regions out of 16 analysed regions, which passed a threshold of €10m per annum of innovation investments in strategic anchoring policies. Based on the analysis of information about the available financial plans, **two distinctive approaches can be identified, notably implementation through a flagship single initiative or a number of several small measures.**

#### 3.1 Policy Focus and Recent Trends

The findings of the text analysis of baseline regional profiles available on RIM website<sup>3</sup> reveal that in the majority of regions there is an observable trend towards building stronger networks and establishing better connectivity. In the sample of selected regions only three out of 16 have their policies focused on priorities other than fostering connectivity and co-operation.

Table 3-1 Evidence of Strategic Anchoring Mechanisms in a Selected Group of EU Regions

Strategic anchoring	Frequency	Percent
No	3	18,8
Yes	13	81,3
Total	16	100,0
Regions		
No	ITG2, NL31, PT30	
Yes	BE2, BE3, DE1, ES22, ES41, FR10, FR30, GR30, ITC1, NL41, PL22, SE22, UKC	

Source: Technopolis Group. Calculations based on SPSS text analysis of baseline regional profiles available on RIM website (<http://www.rim-europa.eu>).

<sup>3</sup> <http://www.rim-europa.eu/>

In most cases, however, regional innovation policies tend to be inward looking. A significantly lower number of regions have paid special attention to closer co-operation with global production networks. As shown in Table 3-2, there are only five regions for which there is some evidence that developing global networks of interconnected actors is recognised as a policy priority. In particular, this can be considered as an issue of concern for certain regions that lack strong research strengths and international connections because developing links with external contacts could be helpful to strengthen their regional innovation systems.

Table 3-2 Evidence of Global Network Interconnectivity in a Selected Group of EU Regions

Global networks	Frequency	Percent
No	11	68,75
Yes	5	31,25
Total	16	100
Regions		
No	BE2, BE3, FR10, FR30, GR30, ITC1, ITG2, NL31, NL41, PT30, SE22, UKC	
Yes	DE1, ES22, ES41, NL41, PL22	

Source: Technopolis Group. Calculations based on SPSS text analysis of baseline regional profiles available on RIM website (<http://www.rim-europa.eu>).

More detailed analysis also shows that there are regions like the Île de France (FR10) and Flanders (BE2) where one would expect to find at least some evidence of regional policies focused on bringing outside- and regional actors together. On the other hand, there are regions like Silesia (PL22) where one would not necessarily expect to find indications of such policy orientations and this finding can be explained by the existence of some general internationalisation support mechanisms. Particularly, two concrete examples of Baden-Württemberg (DE1) and Castilla y León (ES41) exemplify good practices.

## 3.2 Analysis of Ongoing Support Measures

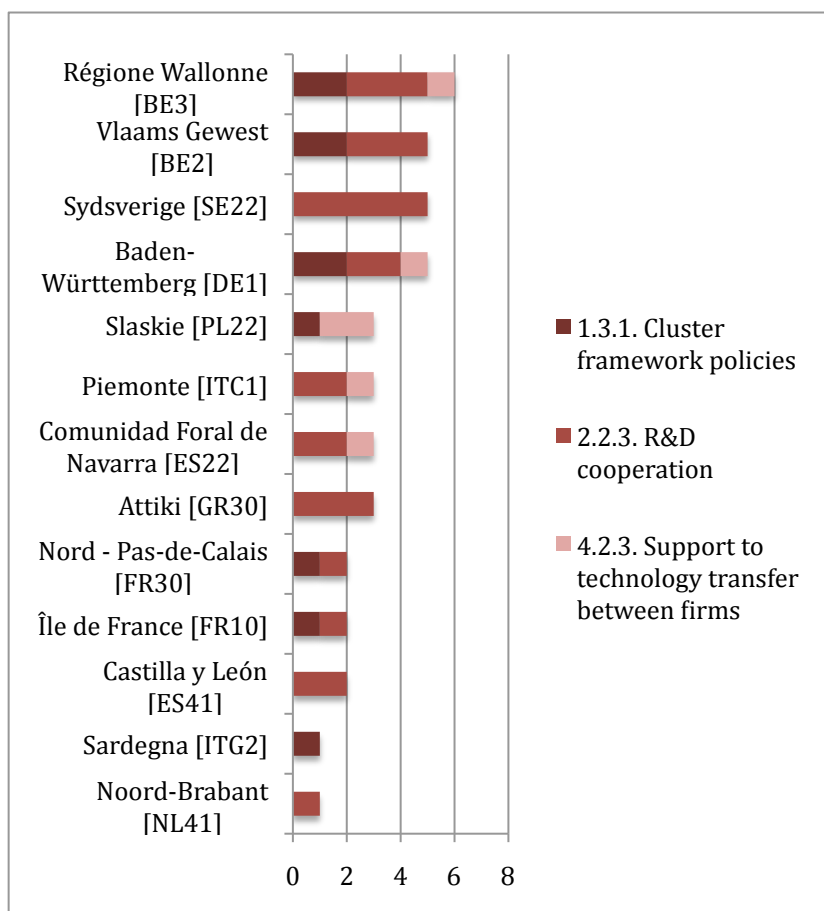
### 3.2.1 Assessment of Policy Priorities

The analysis of support measures which most closely correspond to the objective of a better connectivity and co-operation reveal some differences within the group of selected regions. Altogether there are three regions (out of 16 in total), which do not seem to have a support measure addressing one of the following three policy priorities, such as 'cluster framework policies', 'R&D cooperation' and 'support to technology transfer between firms'.<sup>4</sup>

Figure 3-1 also shows that the policies tend to address a mix of objectives. While in five regions there is an exclusive focus on one policy priority, in two regions, notably Wallonia (BE3) and Baden-Württemberg (DE1) all three priorities are addressed.

<sup>4</sup> These are North East (UKC), Madeira (PT30), and Utrecht (NL31). Based on the text analysis of baseline regional profiles the two last regions were also identified as regions where no policy trends towards strategic anchoring could be found.

Figure 3-1 Number of Policy Priorities: Strategic Anchoring Measures



Source: Technopolis Group. Calculations based on RIM repository (<http://www.rim-europa.eu>).

In general, the results can be considered as a confirmation of findings presented under Section 3.1. Surprisingly, there was no single region that implemented measures in support of the diffusion of innovative technologies, products and services. This category provides financial incentives to consumers or enterprises encouraging the development or adoption of innovative technologies, products or services. Certainly such intervention could be considered along other instruments in support of strategic anchoring processes.

In terms of the annual financial plans, there are seven regions which passed a threshold of €10m per annum of innovation investments in strategic anchoring policies. With regard to the adopted approaches, the support mechanisms in Sydsverige (SE22) are numerous but do not represent comparatively significant amounts. In contrast, Île de France (FR10) has one support measure and still is among the top five regions with the total highest budget. Hence, the latter example could be considered as a consolidation of efforts in the framework of a single support measure.

Based on the analysis of policy priorities, it is found that the focus of current policies in all regions under review tends to be on:

- Direct support of business R&D (grants and loans);
- R&D cooperation;
- Support to innovative start ups including Gazelles;
- Knowledge Transfer;

- Cluster framework policies; and
- Support to innovation management and advisory services.

### 3.2.2 Measuring Success

With regard to the extent of success of measures in support of stronger partnerships and better linkages, an emerging finding is that a more favourable assessment is given for this specific type of instrument than on average, i.e. when all measures are taken into account (Table 3-3). This is reflected in responses concerning ‘evidence of an impact...’ and ‘the measure has achieved its intended target’.

Table 3-3 Comparative Assessment of the Extent of Success Between all and Strategic Anchoring Measures in a Selected Group of EU Regions

Extent of success (all) measures	Frequency	Percent	Extent of success 'strategic anchoring' measures	Frequency	Percent
<b>Oversubscribed but still too early to judge</b>	33	38,8	<b>Oversubscribed but still too early to judge</b>	18	43,9
<b>Evidence of an impact based on verifiable indicators or an evaluation</b>	9	10,6	<b>Evidence of an impact based on verifiable indicators or an evaluation</b>	6	14,6
<b>Too early to judge the success</b>	33	38,8	<b>Too early to judge the success</b>	11	26,8
<b>The measure has achieved its intended target</b>	9	10,6	<b>The measure has achieved its intended target</b>	6	14,6

Source: Technopolis Group. Calculations based on RIM repository (<http://www.rim-europa.eu>).

Given high shares of responses indicating that it is too early to judge the impact of support measures, it is evident that there are continuous efforts needed to monitor the implementation of regional innovation policies. Establishing a better understanding about the extent of success as well as its contributing factors is a prerequisite for the design and implementation of successful regional innovation policies in the nearest future.

It is also important to underline the fact that the challenge does not only concern the regions of the most recent EU MS. The bottom line is that the evidence of impacts needs to be transparent, but also timely delivered at the right moment in the policy-making cycle. Otherwise, policies will be based on heuristic assumptions and not evidence-based findings.

### 3.2.3 Assessment of Outcomes and Financial Efforts

A next logical step is to investigate what lessons can be drawn from the semantic analysis of ‘evidence of outcomes’, which are parts of regional innovation support measures available on RIM repository<sup>5</sup>. As a result, it should be possible to compare the new findings with the results discussed above about relatively more positive assessments of strategic anchoring policies.

Overall, it is found that nine out of 31 support measures have been positively assessed. Hence, the results confirm that the activities undertaken within the existing measures

<sup>5</sup> E.g. Madeira: <http://www.rim-europa.eu/index.cfm?q=p.baseline&r=PT30>

have not largely received favourable opinions. In contrast, in 14 out of 31 cases negative assessments were found. Based on the existing results, it can be concluded that improvements in regional innovation policies, including strategic anchoring mechanisms are necessary.

Table 3-4 Evidence of Outcomes From the Implementation of Strategic Anchoring Measures in a Selected Number of EU Regions

Strategic anchoring measures & positive attitudes	Frequency	Percent	Strategic anchoring measures & negative attitudes	Frequency	Percent
No	22	71	No	17	54,8
Yes	9	29	Yes	14	45,2
Region			Region		
Yes	SE22, FR30, ES22, ES41, BE2		Yes	SE22, PL22, ES22, ES41, BE3, BE2, ITC1, NL41	

Source: Technopolis Group. Calculations based on RIM repository (<http://www.rim-europa.eu>).

### 3.3 Summary Assessment

The major findings emerging from the analysis of strategic anchoring policies can be summarised as follows. Firstly, the existing evidence shows that **policy efforts in most regions under review are focused on building stronger networks and establishing a better connectivity, however, policies in support of global network interconnectivity are rare.**

Secondly, the **results concerning qualitative assessments might not be entirely conclusive, but appear to be justifiable and sound.** The most prominent example among others where SPSS Text Analysis has proved to be useful was during the assessment of outcomes of implemented policies pointing out to the need of further improvement of ongoing measures.

Recognising that efforts should not be only focused on achieving better networking but also diffusion of knowledge, the final concluding remark is that it is astonishing that there has been **no single region has in place policies in support of the diffusion of innovative technologies, products and services.**

Pursuing the analysis, the focus of the next section is to assess other types of policies, known as 'regional branching instruments'.

## 4. Assessment of Regional Branching Instruments

### Summary of Key Messages:

- In comparison with the strategic anchoring mechanisms, the existing evidence points out to a **significantly lower number of regions with instruments in support of spin-off and labour mobility**, notably support to innovative start-ups, risk capital as well as incentives for recruitment of researchers / skilled personnel in enterprises.
- Based on the analysis of policy priorities in regions for which no regional branching types of support measures could be identified, it is found that **the focus of current policies in those regions tends to be especially on direct support of business R&D, universities, knowledge transfer, and support to technology transfer between firms.**
- The assessment of extent of success of regional branching policies shows that in most cases it is too early to judge their impacts. Certainly, one of the explanations is that those types of instruments are relatively recent support. Further investigation points out to that **there is a need of continuous monitoring of outcomes because of an equal number of positive and negative opinions found with regard to regional branching policies.**
- One of the findings, which stand out from the other results of analysis, is that **the budgets for regional branching policies are significantly much lower than strategic anchoring mechanisms.** It is most likely that in many regions this type of activities is mainly undertaken at the central level.

### 4.1 Policy Focus and Recent Trends

The text analysis of baseline regional profiles of the selected regions shows that there is only a limited number of regions for which spin-off and labour mobility have been identified as innovation policy trends. This category includes primarily incentives for recruitment of researchers and skilled personnel in enterprises. Altogether there are seven out of 16 regions in total, where such policy priorities are found.

More specifically speaking, mechanisms in support of spin-offs were identified in four regions, notably Attiki (GR30), Madeira (PT30), Nord - Pas-de-Calais (FR30) and Castilla y León (ES41), while the support for mobility was found in three regions, including Madeira (PT30), Baden-Württemberg (DE1), and Castilla y León (ES41).

This result can be somewhat biased given the nature of the baseline regional profiles as they are intended to provide with snapshots of policy trends and thus may not include each and every support measure. In order to check this possible lack, the RIM repository of support measures was analysed to validate the extent of current supporting spin-off processes and labour mobility policies.

### 4.2 Analysis of Ongoing Support Measures

#### 4.2.1 Assessment of Policy Priorities

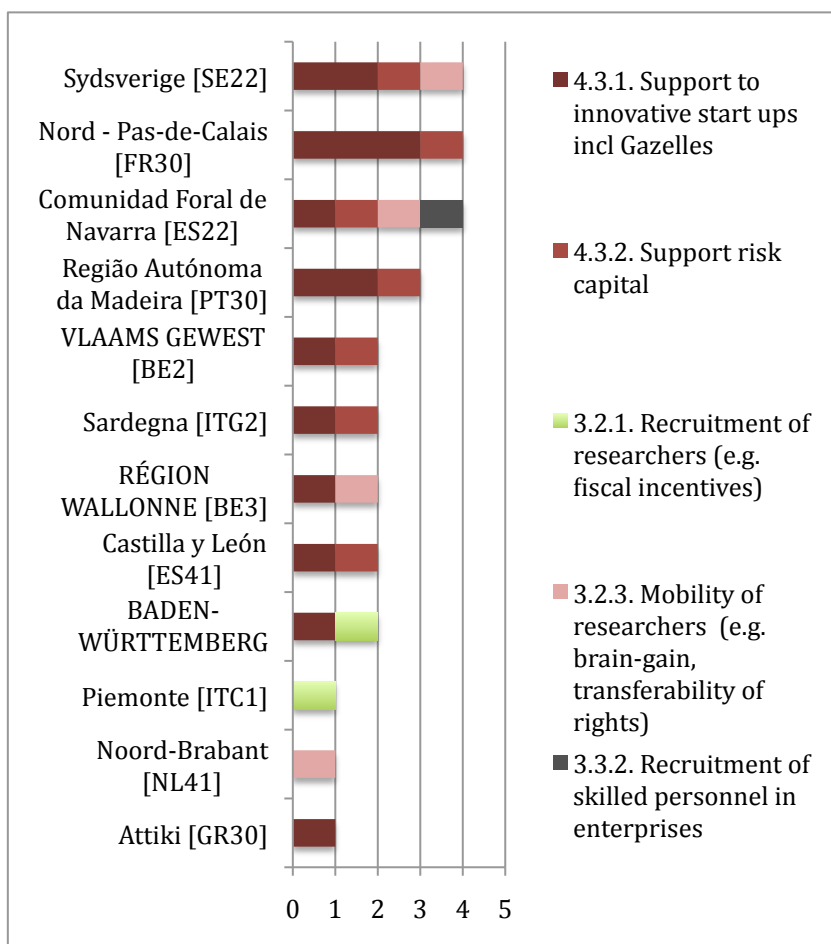
The analysis of policy priorities of the regional branching policies shows that there are four regions which appear not to have implemented this type of support.<sup>6</sup>

With regard to the overall results, Navarra (ES41) stands out from the rest of the regions. It is the region with the highest number of policy priorities concerning regional branching mechanisms. In the majority of the 16 regions, support measures tend to be focused on two priorities, whereas only three regions Piemonte (ITC1), Noord-Brabant (NL41) and Attiki (GR30) indicated a single policy priority. Particularly, concerns about the absence of labour mobility schemes need to be expressed. The explanation of the lack of labour mobility initiatives can be partly explained by the actual competences in this area at the sub-national level (Figure 4-1).

<sup>6</sup> Those four regions include, notably Île de France (FR10), North England (UKC), Silesia (PL22), and Utrecht (NL31). Based on the text analysis of baseline regional profiles the four regions were also identified as regions where no policy trends towards regional branching could be found. In nine out of 16 regions that this present report looks at there is the absence of policies supporting labour mobility.



Figure 4-1 Number of Policy Priorities: Regional Branching Measures



Source: Technopolis Group. Calculations based on RIM repository (<http://www.rim-europa.eu>).

With regard to financial efforts, the annual budgets for regional branching policies are significantly much lower than strategic anchoring mechanisms. In absolute terms, it is estimated that while the average annual budgets are roughly about €49m latter, in the case of the former they are only slightly more than €10m.

The four regions lacking regional branching instruments have the following priorities:

- direct support of business R&D;
- universities;
- knowledge transfer;
- support to technology transfer between firms; and
- support to innovation management and advisory services.

#### 4.2.2 Measuring Success

A comparative assessment of the extent of success between regional branching instruments and the average results for all measures shows some interesting findings (Table 4-1). Firstly, there is no evidence of an impact based on verifiable indicators or an evaluation. While the answers indicating that the measure has achieved its intended target is very similar to the results of all measures, the share of responses that it is too early to judge is considerably higher.



Table 4-1 Comparative Assessment of the Extent of Success Between All and Regional Branching Measures in a Selected Group of EU Regions

Extent of success (all) measures	Frequency	Percent	Extent of success 'regional branching' measures	Frequency	Percent
Oversubscribed but still too early to judge	33	38,8	Oversubscribed but still too early to judge	8	42,1
Evidence of an impact based on verifiable indicators or an evaluation	9	10,6	Evidence of an impact based on verifiable indicators or an evaluation	0	0
Too early to judge the success	33	38,8	Too early to judge the success	9	47,4
The measure has achieved its intended target	9	10,6	The measure has achieved its intended target	2	10,5

Source: Technopolis Group. Calculations based on RIM repository (<http://www.rim-europa.eu>).

The explanation for the relatively high shares of answers according to which it is too early to judge the success is due to the fact that policies in support of spin-off processes and labour mobility are recent initiatives.

#### 4.2.3 Assessment of Outcomes and Financial Efforts

A more detailed analysis of 19 support measures shows that there is an equal number of positive and negative opinions with regard to the outcomes of mechanisms in support of the spin-off processes and labour mobility (Table 4-2).

Overall results clearly point out to the need for continuous efforts in order to ensure a greater effectiveness and impacts of the ongoing support mechanisms. Consequently, this will be of particular importance because the majority of support measures have been only launched recently.

Table 4-2 Evidence of Outcomes and From the Implementation of Regional Branching Mechanisms in a Selected Number of EU Regions

Regional branching & positive attitudes	Frequency	Percent	Regional branching & negative attitudes	Frequency	Percent
No	11	57,8	No	11	57,8
Yes	8	42,1	Yes	8	42,1
Total	19	100	Total	19	100
Regions			Regions		
Yes	SE22, FR30, ES41, BE3, PT30, DE1, NL41		Yes	SE22, FR30, ES22, ES41, BE3, BE2, PT30, DE1	

Source: Technopolis Group. Calculations based on SPSS text analysis of baseline regional profiles available on RIM website (<http://www.rim-europa.eu>).

### 4.3 Summary Assessment

The main conclusions emerging from the analysis of regional branching policies can be summarised as follows. Firstly, it is estimated that **only in six regions out of 16 in total there are some forms of support for labour mobility**.

Due to their short implementation of regional branching policies, little is known about the actual outcomes of ongoing initiatives. Nevertheless, preliminary assessments

show a **mixed view**. **Positive and negative opinions about the extent of success of those interventions co-exist**. Since the majority of the ongoing initiatives has been recently launched, it is important to monitor closely the progress and to assess their results in a later stage.

The final concluding remark is that the **budgets earmarked for measures in support of spin-offs and labour mobility are significantly lower in comparison with strategic anchoring policies**. It may be not surprising that policy orientations are not necessarily tailored at spin-off processes due to the scale of potential outcomes given the number of new spin-off companies is often not significant.

## 5. Considerations About the Processes Behind the Development of Smart Specialisation

### 5.1 Background

Based on the analysis of policies which could be called as ‘smart specialisation’ policies, it is possible to conclude that the gravity is especially on policies in support of better networking and connectivity among different actors at the sub-national level. On the other hand, the investigation of policies in support of spin-off processes and labour mobility has shown that there is no widespread use of such policies.

Recognising the fact that smart specialisation is not only about support measures but also about other aspects especially regarding foresight, strategies, priority setting, as well as actors themselves, this part of the report sets out to discuss in more detail considerations about the processes behind the development of smart specialisation strategies in a selected number of regions.

### 5.2 Baden-Württemberg: As a Business Location for IT, Media and Creative Industries

The case of Baden-Württemberg clearly shows that the policy is focused on supporting the Mittelstand which refers to small and medium-size enterprises in German-speaking countries. In essence, this approach comes down to relentless pursuit of niches by little known SMEs avoiding head-to-head competition with global giants (Economist, 2010). While enterprises are highly internationalised, the sceptics point out that they also face a danger of becoming the victims of own success. However, until now there is no evidence of such pessimistic scenarios. In the meantime, companies have concentrated their efforts on developing lucrative niche markets and are constantly innovating. As a result, this is what allows them to stay ahead of competitors and minimise the negative impacts of counterfeiting.

The philosophy of the Mittelstand is also formally acknowledged in strategic policy documents of Baden-Württemberg, such as the 2009 Future Programme Mittelstand. The core objectives set out by this programme include improvement of framework conditions, securing supply of skilled employees and executive personnel, strengthening of innovation ability, optimisation of business support, and intensification of internationalisation.<sup>7</sup>

The lessons that can be drawn from the Mittelstand are three-fold. The first lesson is that companies can preserve high-quality jobs in a vast array of industries so long as they are willing to innovate. Secondly, niches can produce huge global markets. The third lesson is that regions do not need to try to build own versions of Silicon Valley to prosper but primarily should strengthen traditional strengths (Economist, 2010).

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<sup>7</sup> <http://www.rim-europa.eu/index.cfm?q=p.policy&n=13664>

The existing evidence suggests that Baden-Württemberg has been taking actively continuous efforts to position the region as the future and foremost supplier and leading market in a number of technology specific areas. For example, Baden-Württemberg is branding itself as a technology location for electro-mobility. Particularly, the most important areas of research and business activity include battery technology, vehicle engineering, lightweight construction, infrastructure and fuel cell technology.

With regard to advantages of building upon transitional industries, the path of future development of Baden-Württemberg is evolving from traditional automotive industry towards sustainable mobility.

Other areas in which Baden-Württemberg enjoys good reputation and tries to branch as a premier location include: medical technology, electrical and electronic engineering (the third strongest branch of industry in the state's manufacturing base, after mechanical engineering and automotive production), plastics and rubber, rail transportation systems, environmental technologies, aerospace, and information technology, software, telecommunications and the creative industries.<sup>8</sup>

In addition, the focus information technology, software, telecommunications and the creative industries has been placed high on the policy agenda of Baden-Württemberg. South-West Germany is still best known as a location for the automotive and engineering industries, it has recently taken a leading role in the field of IT and media which are now considered as two emerging major pillars in Baden-Württemberg's economy. The vision of supporting globally successful SMEs is far from being disconnected from reality. As noted by a recent report, summarising the results of Baden-Württemberg's foresight project officially completed in March 2009, there are indeed SMEs that have grown, while exploiting successful niches for themselves in the market place.

According to the Minister of Federal and European Affairs and the State Ministry of Baden-Württemberg:

*"If we intend to make responsible provision for the future of our economy, it is vital to build up a broad portfolio of crisis-proof technology areas. High-end knowledge services such as IT and business consulting or advertising need to be offered more extensively than in the past and perfected such that they become our new number one export" (Minister Professor Wolfgang Reinhart – Minister of Federal and European Affairs and the State Ministry of Baden-Württemberg).*

The origins of strengthening Baden-Württemberg's position as a business location for IT, media and creative industries goes back to 1995 when the innovation agency, known as MFG Baden-Württemberg was created<sup>9</sup>. The main focus of the agency's activities is concentrated around the areas of information technology, software, telecommunication and the creative industries. The objective is to support successful entrepreneurship in the field of IT, media and creative industries and also connecting them with application-oriented research and public funding programmes. 'Where creativity meets Technology' is a favourite slogan which describes well the overall mission of that agency.

To achieve the set out objectives, the MFG provides innovation support and technology transfer. It has also been committed to promote interdisciplinary cooperation and fostering a systematic exchange of knowledge and ideas between research, industry and public administration. With the view of identifying and mobilising innovative strengths, the MFG brings together the region's most innovative

<sup>8</sup> Baden-Württemberg International: <http://www.bw-i.de/deu>

<sup>9</sup> MFG Baden-Württemberg: <http://www.mfg-innovation.com>

players – scientific researchers and companies, commercial and business service providers and potential investors.

In order to shed light on the potential future role as an IT and media location and show mutual interdependencies between a set of variables and possible development paths, the FAZIT project was initiated by the state of Baden-Württemberg back in 2005 and performed by the MFG Foundation division of MFG Baden-Württemberg, researchers from the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer ISI) and the Centre for European Economic Research (ZEW). The project examined IT and media trends of relevance for the region's future viability and investigated a set of four different scenarios.

Briefly, in *'The empowered user'* scenario the user is operating in an interconnected world. In essence, the multiple applications of the future IT and media are exploited in private and professional context (Haasis and Buchholz, 2009). Figure 5-1 depicts how 'the empowered user scenario' could look like.

Figure 5-1 The FAZIT scenario 'Empowered user' in Baden-Württemberg



Source: (Haasis and Buchholz, 2009).

In the second *'The always on society'* scenario, the applications are used for professional and private purpose, and also for education means. This scenario is considered as the most desirable especially as the penetration is steadily increasing in a similar fashion in other branches of industry like manufacturing and engineering.

A pessimistically counter-scenario to the *'The empowered user'* scenario is called *'The ICT industry is following the experimental phase'*. In this vision, much of what is considered to be feasible today fails to be successfully realised. It has neither been possible to develop sustainable business models, nor overcome various reservations concerning the innovative IT applications which exist in both the private and professional context. New applications are only utilised comprehensively in a very few areas.

According to the last of the four scenarios *'The flexible, virtualised employee'*, there will be the virtualisation of the working world along the use of complex IT applications, however, a divide is visible when it comes to both business and individual acceptance. Consequently, the economy and society will be highly fragmented.

What the FAZIT's results underline is that smart specialisation is not necessarily about focusing on a single industrial/service sector (or enterprise) but about fostering cross-sectoral linkages. One of the key characteristics of IT and media is that they have cross-cutting functionalities. They are used across many industries, where they facilitate innovative products and help to optimise the most diverse processes of innovation. Nevertheless, they do not only have a positive impact on traditional industries, but are also considered as crucial driving forces for the emergence of new and dynamic markets (Haasis and Buchholz, 2009).

Setting out a long-term vision even in such a wealthy and well performing region as Baden-Württemberg is not free from challenges, according to the above-mentioned foresight study. The major challenges can be summarised as follows:

- to strengthen the networks between different organisations;
- to seek out the opportunities and limitations of internationalisation;
- to foster talents and commit specialists to South-West Germany; and
- to take steps to increase user acceptance of innovative technologies.

As noted, the bottom line is that all stakeholders including firms, research institutes, universities, and policy makers alike work together with the view of conquering new markets and protect the region's future viability, including consumers.

### 5.3 North East of England: Delivery of Current Strategies

The case of North East of England shows a number of distinctive features. The region's focus is on delivering and implementing the current strategies rather than setting out new forward-looking policy agendas. This is due to the government's announcement that Regional Development Agencies (RDA) will close at the end of March 2012. They will be replaced by local enterprise partnerships; legislation is expected later in 2011 to formally ratify RDA closures. 'One North East' is the RDA covering North East England that will be closed as well. Consequently, the activities are concentrated primarily on ensuring the professional wind down and closure of the agency and transferring assets to the most suitable partner to drive forward future economic growth.

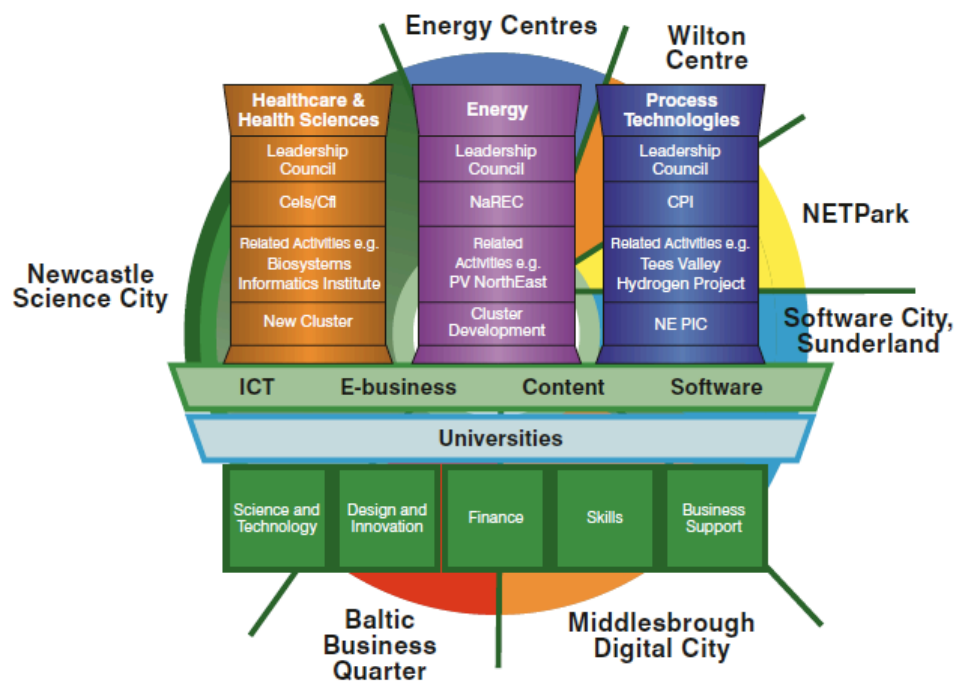
The second difference as noted by the practitioners is that initially in 2001, five 'Centres of Excellence' in key technology areas of Digital Technology & Media, Life Sciences, Nanotechnology, New & Renewable Energy, and Process Innovation were established in the North of England to shape research from the perspective of market needs. By maximising the use of the region's research base, the objective was to generate innovation, competitiveness and growth. What this approach meant in practice was to set out an ambitious goal in order to achieve long-term structural change in the region's economy and sustained development by taking concrete actions aimed at renewing the science and technology base.

During the subsequent review of the 'Strategy for Success' Programme in 2004, North East has focused on building internationally competitive clusters in Energy and the Environment, Healthcare and Health Sciences, and Process Industries (Figure 5-2). Given that each of these three 'pillars' envisaged integration with industry and other related initiatives, it has been argued that this reflected a shift from narrow sector-based policies towards a broader, more generic innovation policy (Coenen, forthcoming).

The North East of England's strategy represented a mix of continued efforts to establish a greater prioritisation, while integrating the universities and 'Centres of Excellence' with industry and other organisations. It has to be noted that the three

pillars were considered as high value and growing sectors, within which the North East of England has a particularly strong chance of achieving a competitive advantage, and one which will provide a platform for future economic growth. The envisaged activities were especially geared towards achieving greatest return on investment for the region as a whole and to moving towards a more productive economic structure. Similarly as in the case of other regions, such as for example Baden-Württemberg, the North East has also recognised the importance of emerging technologies especially as digital technology and media, and design, precisely because they were viewed to be underpinning the three pillars in enabling the regional structural change.

Figure 5-2 The Paradigm for the North East of England



Source: Regional Economic Strategy 2006-2016.

It is also worthwhile pointing out to Newcastle which was designed as one of six UK Science cities back in 2005. The ambition for the Newcastle Science City<sup>10</sup> has been three-fold. The first was to ensure that Newcastle is synonymous across the world with excellence in three scientific fields, notably ageing & health (Newcastle Universities Institute for Ageing & Health), stem cell and regenerative medicine (The International Centre for Life), and sustainability (Science Central). The second motivation was to create prosperity for the city and the wider region by supporting the creation of new businesses and jobs and assisting new businesses to innovate and grow. The third ambition was to ensure that the local population can become part of the city's continued scientific achievement. In order to achieve this, the Newcastle Science City undertook a series of activities. By 2025, Newcastle as a Science City (NSC) aims to create 500 new high growth companies by 2025. It provides support to business development aimed specifically at delivering innovative solutions to market needs.

Overall, the rationale behind this initiative was that knowledge transfer happens most

<sup>10</sup> <http://www.newcastlesciencecity.com>



effectively at a local level. In addition to efforts of establishing greater prioritisation and involvement of the science sector, this specific initiative represents an approach of introducing a spatial focus especially for physical investments. The ambition of the Newcastle Science City was to create a hub, providing infrastructure for every stage of business growth and ensure that the city is synonymous with scientific excellence (North East of England, 2006).

#### 5.4 Silesia: Setting out Priorities in the 2020 Technology Development Programme

To overcome negative stereotypes including pollution, manufacturing, degradation of environment caused by the mining industry, the region has been making great strides to brand itself as a region with ‘positive energy’, which became a slogan of the Regional Promotion Strategy, inspired by the experience of other mining regions like Nord-Pas-de-Calais and the Ruhr Valley. In comparison to the cases of Baden-Württemberg and North East of England, Silesia is at an early-stage of developing a smart specialisation strategy.

Current priorities are to a great extent influenced by the EU SF. The overall innovation policy mix has already considerably improved, it includes the array of measures to support the development of industrial and technological parks, business intermediary organisations, financial instruments to support entrepreneurship, internationalisation, modernisation of micro- and small and medium-size enterprises, technology transfer and the development of local and regional clusters.

The annual funding earmarked for broadly defined innovation support measures is roughly about €78m - a significant financial contribution and a real opportunity for the region to deploy successful strategies enabling structural changes to take place. Additional to this budget are funds from the national programmes (mainly supported by SF). One of the biggest challenges for the region was to identify complementarities between those two different streams of funding in order to achieve synergies and high impacts of public investments.

In practice, the main difficulties to establish synergies are:

- funding available at regional level is lower than that at national level;
- designing an optimal innovation policy mix needs to avoid direct competition with the programmes implemented at the national level.
- the limited involvement of local and regional actors in the design of national programmes impede the identification of mutually reinforcing mechanisms and risk to duplicate programmes.
- the region requires a strengthening of almost all dimensions of a regional innovation system.

With regard to foresight and establishing priority technologies for the sustainable regional development, the region published a document in December 2010 that sets out a strategic plan for the technological development of Silesia for the years 2010-2020 (Karbownik, 2010). The document draws on the analysis of various strategic documents prepared in the framework of previous foresight projects, national sectoral strategies, and other regional/strategic documents. Hence, this meta analysis of priority technological areas and technologies was prepared on the basis of baseline material, and eventually discussed during the meeting of the Silesia Innovation Council.

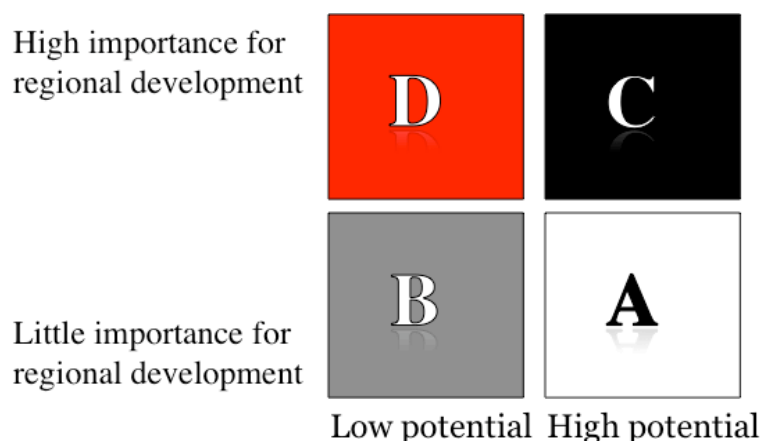
The following technological areas were selected and included in the proposal of the Technology Development Programme for 2010-2020:

- Medical technologies (health), e.g. medical biotechnologies and medical engineering technologies.

- Technologies for the energy and mining sector, e.g. coal combustion technologies, clean coal technologies, fuel cells, renewable energy sources, carbon storage, gas processing technologies, recognition and protection of coal reserves.
- Technologies for environmental protection, e.g. biotechnologies for environmental protection, intelligent and energy efficient construction, environmental protection technologies, waste technologies, technologies for processing gasses and water, supply and purification of water, air protection technologies, technologies supporting the management of environment.
- Information and communication technologies, e.g. telecommunication and information technologies, modelling and simulation of processes and optoelectronics.
- Production and processing of materials, e.g. metal alloys, polymer – and ceramic materials.
- Transport and transport infrastructure, e.g. integrated, intelligent transport systems, modern solutions for mobility technologies.
- Machinery, automotive, aerospace and mining sectors, e.g. industrial automatisisation, sensors, robots, design technologies and production of machineries, mining and energy related equipment.
- Nanotechnologies and nanomaterials.

For delivering evidence-based assessments of technological areas and strategic orientations for the Technology Development Programme experts were involved. The methodological approach is based on two-step approach. The first step is to provide a preliminary overview of technological areas for diagnosis purposes. Secondly, the next complementary step of a classification of technological areas shall allow establishing strategic orientations. The potential will be assessed along three dimensions, notably technical, organisational and intellectual. Figure 5-3 and Figure 5-4 illustrates how the framework for the assessment of technological areas and technologies could look like.

Figure 5-3 Diagnosis of Potential in Silesia



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Source: (Karbownik, 2010).

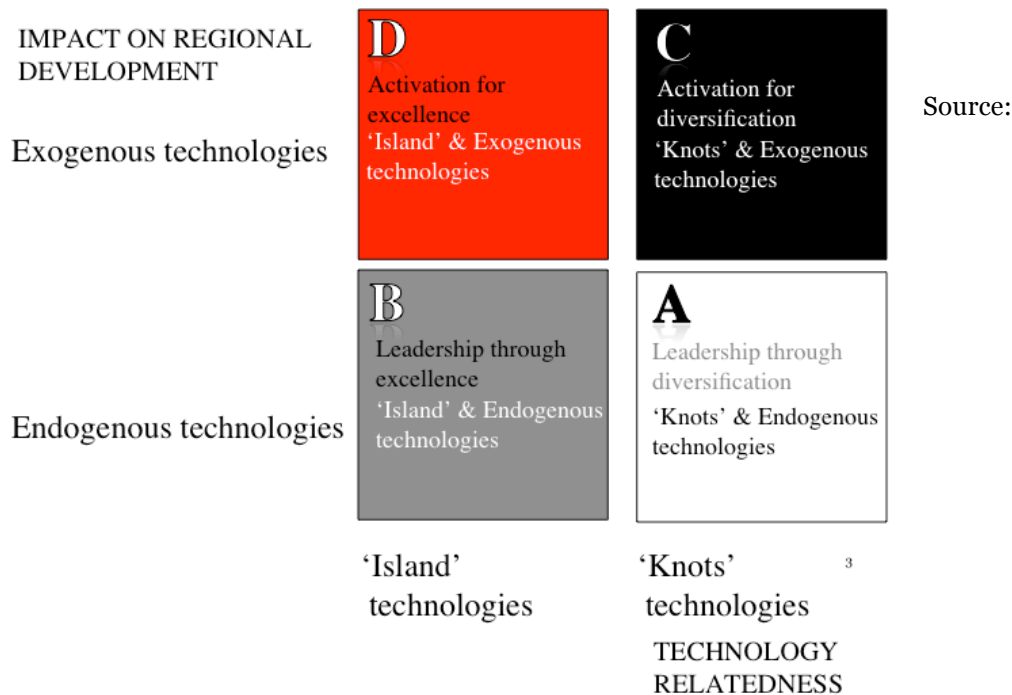
With regard to the proposed matrix to prioritise public investments, the two main assessment criteria are (1) relatedness between technologies and (2) potential impact for regional development. Therefore the expert assessments need to take into account:

- ‘Knots’ technologies - strongly dependent of development of other technologies in the region or conditioning the development of other technologies in the region.



- ‘Island’ technologies - not related to other technologies in the region or not conditioning the development of other technologies in the region.
- Endogenous technologies - being developed in the region.
- Exogenous technologies - being developed outside the region.

Figure 5-4 Justifications of Public Funding Investments in Silesia



(Karbownik, 2010).

Hence, the four distinct possible development pathways include:

- Orientation A labelled as ‘*Leadership through diversification*’ refers to technologies characterised by a high degree of relatedness with key technologies within the region and useful for building on external markets new technological position of the region.
- Orientation B labelled as ‘*Leadership through excellence*’ describes the situation where technologies exhibit low technological relatedness with key technologies within the region, even though have a high degree of usefulness for building on external markets new technological position of the region.
- Orientation C labelled as ‘*Activation for diversification*’ refers to technologies characterised by high degree of relatedness with other technologies in the region and increasing pressure to use them in the region.
- Orientation D labelled as ‘*Activation for excellence*’ is mainly about technologies with low levels of relatedness with other key technologies in the region and increasing pressure to use them in the region.

The identification of technologies and groups of technologies to be carried out based on the model presented above will constitute the basis for taking public investment decisions with the view of diversification or focusing on excellence. Technology- and innovation audits are recognised as useful tools for the assessment of the performance of specific technologies. They will constitute the basis for evidence-based decision-

making regarding the support of specific sectors. Last but not least, it is also recognised that technological audits will need to be carried out periodically, even if there are a few stages before the actual prioritisation of technologies and technological areas can be made. Finally, it is vital to ensure that priority setting is not entirely influenced by the actors from the innovation supply side, but that the consumer's positions are taken into account.

## 6. Conclusions and perspectives

In summing up, the key messages offered at this thematic paper are as follows:

- Smart specialisation enjoys increased interest among policy makers. Its regional implementation is somewhat linked to regional strategic intelligence, taking into account technological and industrial current strengths and weaknesses and fostering regional innovation networks that are used for developing prospective strengths. Considering scientific and technological trends developed elsewhere can be crucial.
- With regard to strategic anchoring mechanisms, the majority of the analysed EU regions are investing in building stronger networks and establishing better connectivity. However, a significantly lower number of regions support global network interconnectivity.
- None of the analysed regions has implemented a measure in support of the diffusion of innovative technologies, products and services. In half of the regions under review, no policies in support of labour mobility could be identified.
- Given the many responses indicated that it is too early to judge the success of measures in support of strategic anchoring and regional branching, continuous monitoring efforts are needed. Missing evidence of impact of such policies can partly be explained due to their recent implementation. There are also, however, preliminary assessments calling for further improvements.
- The examples show that regions are better off by concentrating their efforts on building upon existing strengths. The ability to develop successful related technologies seems to be one of the main ingredients of success. The path of future development of Baden-Württemberg has been evolving from traditional automotive industry towards sustainable mobility of the future. The case of Baden-Württemberg also underlines that smart specialisation is not necessarily about focusing on a single sector but about fostering cross-sectoral linkages.
- The case of the North East of England shows the evolution from establishing 'Centres of excellence' in key technology areas to efforts concentrated on building internationally competitive clusters. The North East region has also recognised the importance of emerging technologies especially digital technology, media, and design, as they are underpinning other sectors. All in all, this case illustrates well a shift from sector to value-chain based approach.
- In comparison with Baden Württemberg and the North East of England, Silesia is at an early stage of developing smart specialisation strategies. The proposal of the 2020 Strategic Plan for Technological Development is a concrete example of efforts undertaken by regional authorities. Technology- and innovation audits are recognised as useful tools for the assessment of potential of specific technologies. The biggest challenge emerging from the case of Silesia is to ensure that priority setting is not dominated by the innovation supply-side stakeholders.

The current and most likely lasting time of austerity and tightening of public spending offers the opportunity to re-think current policy making in a more radical way, to stop with the 'business as usual' option and think strategically. Smart specialisation, which at regional level consists of a process to identify priorities and to design the necessary

measures as a joint effort of several stakeholders, needs to replace a system of conventional forms of support.

There are certainly challenges associated with developing smart specialisation strategies such as not to fall into the trap of defining a narrow, sector-based policy. The attempt to ‘pick the winner’ can lead to technological lock-ins instead of a broad regional development. It is equally important to have the consumers and the demand side in general taken into account and integrated in the process. Otherwise, leading-edge technological developments entirely based on the ideas of supply-side stakeholders may face a reluctance of the demand side.

When discussing the development of smart specialisation strategies, it is crucial to take a broader perspective. Hence, a region involved in the preparation of smart specialisation strategies should take into account the existing forms of support at national and EU-level, explore possibilities of how to improve inter- and trans-regional co-operation, in addition to the analysis on all three types of potential, i.e. sectoral-, scientific-, and technological.

The final point in closing is how the process of smart specialisation might provide a platform for future economic growth. The bottom-line is that regions should focus the reflection on how to make connections between different branches of industries, scientific- and technological areas, which may appear initially distant from each other, but eventually could contribute to a successful process of regional diversification.

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### 1.2. RIM Baseline regional profiles/repository of innovation support measures

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13. Baden-Württemberg (DE1)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=DE1>
14. Castilla y León (ES41)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=ES41>
15. Flanders (BE2)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=BE2>
16. Île de France (FR10)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=FR10>
17. Madeira (PT30)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=PT30>

18. Navarra (ES22)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=ES22>
19. Noord-Brabant (NL41)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=NL41>
20. Nord - Pas-de-Calais (FR30)  
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21. North East (UKC)  
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22. Piemonte (ITC1)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=ITC1>
23. Sardegna (ITG2)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=ITG2>
24. Silesia (PL22)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=PL22>
25. Sydsverige (SE22)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=SE22>
26. Utrecht (NL31)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=NL31>
27. Wallonia (BE3)  
<http://www.rim-europa.eu/index.cfm?q=p.baseline&r=BE3>

### 1.3. Other websites:

28. MFG Baden-Württemberg: <http://www.mfg-innovation.com>
29. Baden-Württemberg International <http://www.bw-i.de/deu/>
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