European Union
Regional Policy

EN

REGIONAL POLICY FOR SMART GROWTH IN EUROPE 2020

MAY 2011

ISBN: 978-92-79-20332-9
doi:10.2776/39233

European Commission, Directorate-General for Regional Policy
Unit B.1 – Communication, Information, Relations with Third Countries
Raphaël Goulet
Avenue de Tervuren 41
1040 Brussels
BELGIUM
Fax: +32 22966003
E-mail: regio-info@ec.europa.eu
Internet: http://ec.europa.eu/regional_policy/index_en.htm

TABLE OF CONTENTS

Johannes Hahn
Member of the European Commission in charge of regional policy

1 FOREWORD

Innovation is key to staying competitive in a rapidly changing world. Europe's competitiveness, its capacity to create new jobs, its social fabric and cohesion, and, overall, our future standard of living depend on the ability to drive innovation in products, services, businesses and organisations.

Europe also needs more innovation to deal with challenges such as ageing societies, climate change, energy and resource efficiency and to deliver smart, sustainable and inclusive growth as outlined in the EU 2020 strategy[1].

Success in achieving these goals will be determined to a great extent by decisions made at local and regional levels. Regional policy is, therefore, vital for mobilising the full innovation potential of EU regions.

Innovation is important for all regions, for advanced ones to remain at the top of their game and for lagging ones to catch up. However, as a matter of fact, regions in Europe demonstrate considerable diversity in their innovation performance. It is the task and challenge of regional policy to raise the innovation performance of all regions, if Europe does not want to face a widening innovation gap and increasing disparities.

Regional policy has already undergone a fundamental paradigm shift over the past few years with innovation investments having more than tripled, from €26 billion in the period 2000-06 to more than €86 billion or 25% for the current period 2007-13.

To prepare another leap in stimulating regional innovation and to prepare the next funding period, the European Commission has published, jointly with the Communication on the "Innovation Union" flagship initiative, a separate Communication on "Regional policy contributing to smart growth in Europe 2020". In this important document we call on our Member States to reinforce their ERDF investments in education, research and innovation and to develop smart specialisation strategies for guiding future investments.

Smart specialisation will be instrumental in helping Europe's regions concentrate resources on strategic priorities and design the right policy mix to unleash smart growth. To concentrate resources on areas of comparative advantage is not only a question of more coherence and impact of EU action, it is also vital in times of budgetary restraint. Smart specialisation shall also ensure a more effective and complementary use of EU, national, regional and local funds for urban and regional development, research and innovation and also leverage more private investments, thus maximising the overall research and innovation potential of the Union.

This publication, being largely based on the Smart Growth Communication and the accompanying Staff Working Paper, is intended to help policy-makers and stakeholders in their efforts to enhance regional innovation potentials, invest in smart growth and build synergies between different policies and funding instruments.

I am looking forward to working with all European Member States and regions, with my fellow Commissioners, the European Parliament and the Committee of the Regions to realise our vision of an Innovation Union for all regions that expands Europe's scientific and technological prowess while enabling all regions to position themselves in the knowledge economy.

2 REGIONAL INNOVATION POTENTIAL AND CHALLENGES

A new notion of innovation is emerging and is reshaping public policies[2]. The closed innovation systems of the past are giving way to more open systems centred on collaborative networks and communities, which are changing the nature not only of science and innovation but also of societies and economies. The "Living Labs" open innovation ecosystems are a practical example.

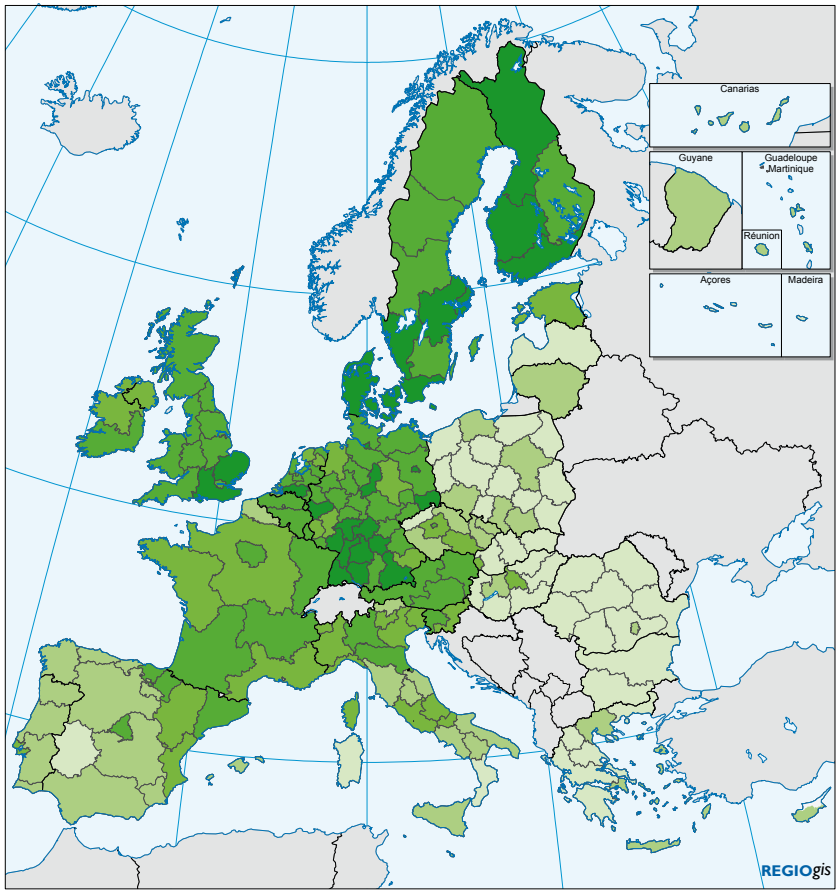
Public support for research and innovation (R&I) needs to adapt to this change, complementing a research and technology push model of innovation with a more systemic and interactive one. This involves open collaboration between all stakeholders[3] and interregional cooperation to open up new opportunities for public-private cooperation as well as fostering mobility of researchers within an EU-wide perspective.

Such support is justified since market forces will not ensure adequate long-term funding for the full range of innovation investments needed due to differences between social and private returns, uncertain outcomes, asymmetry of information and system failure (e.g. inefficient regulation). Public intervention is therefore important as a facilitator and catalyst for change: "innovation cannot be dictated but it can be cultivated"[4].

2.1. Regional diversity at the service of a common goal: smart growth

The capacity of regions to innovate depends on many factors – the business culture, the skills of the workforce, the existence of effective education and training institutions, innovation support services, technology transfer mechanisms, R&I and ICT infrastructure, the mobility of researchers, business incubators, new sources of finance and local creative potential. Good governance is also crucial. Performance in research and innovation varies markedly across the EU as shown by the Regional Innovation Performance Index, a composite indicator of many of these factors (Map 1). The gap between total R&I expenditure and the R&I target of 3% of GDP varies greatly across regions (Map 2). Agglomeration effects lead to R&I investments concentrating in a few leading-edge regions where R&I spending is nearly 7% of GDP while being extremely low in others.

Map 1: Regional Innovation Performance Index



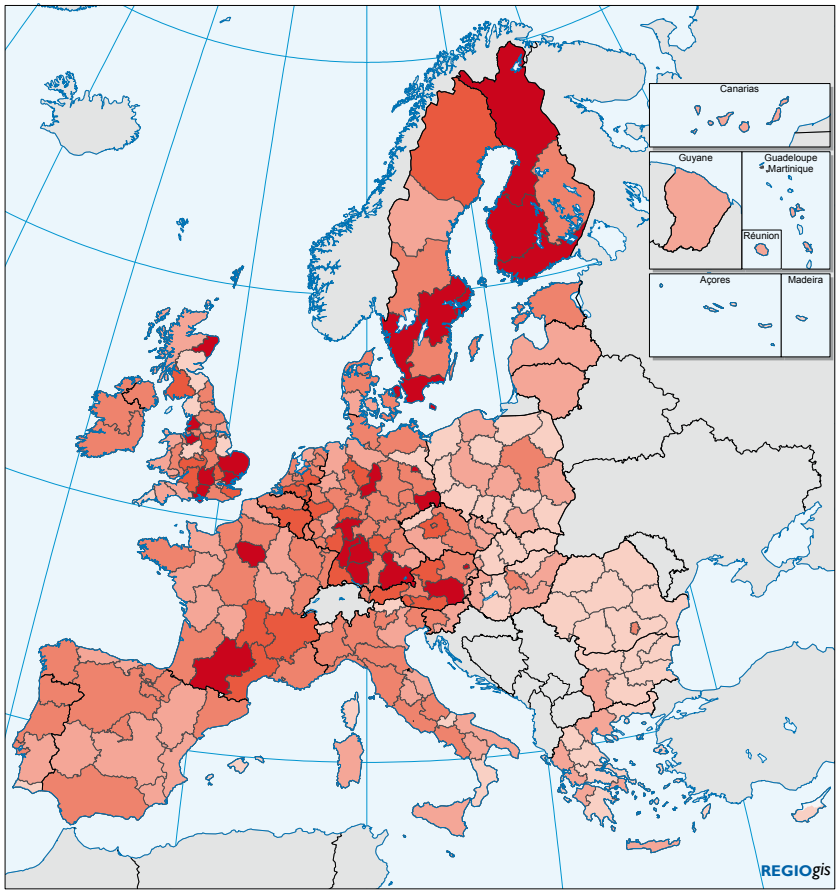
Regional Innovation Performance Index, 2006

- Low innovation performance
- Medium - Low innovation performance
- Average innovation performance
- Medium - High innovation performance
- High innovation performance

Source: DG Enterprise, MERIT

0 500 Km

Map 2: R&I expenditure



Total expenditure on R&I, 2007

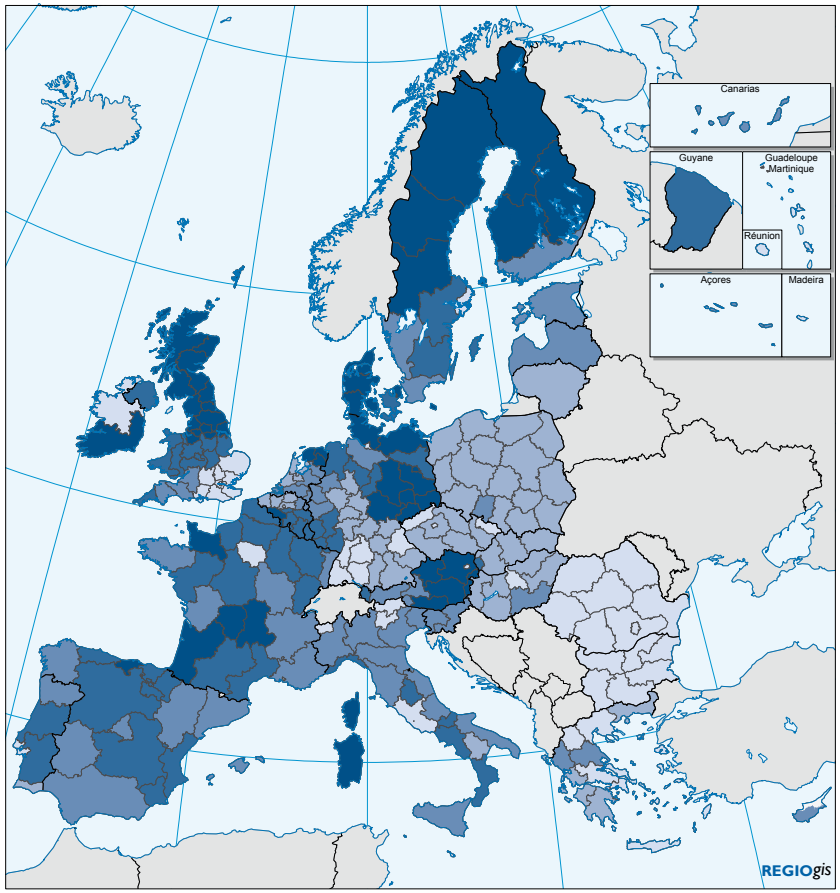
% of regional GDP

- < 0.5
- 0.5 - 1
- 1 - 2
- 2 - 3
- > = 3

EU-27 = 1.85
EL, IT: 2005; FR: 2004; NL: 2003
The Europe 2020 R&D target is 3%
Source: Eurostat

0 500 Km

Map 3: Planned investments of Cohesion Policy in R&I



Planned investments of Cohesion Policy in RTD, innovation, enterprise environment, 2007-13

% of total funding
< 19.2
19.2 - 21.6
21.6 - 27.5
27.5 - 34.2
> = 34.2

EU-27 = 23.0
Funding for RTD, innovation and enterprise amounts to some €79 billion
Source: DG REGIO

0 500 Km

2.2. Regional policy supports smart growth in all regions

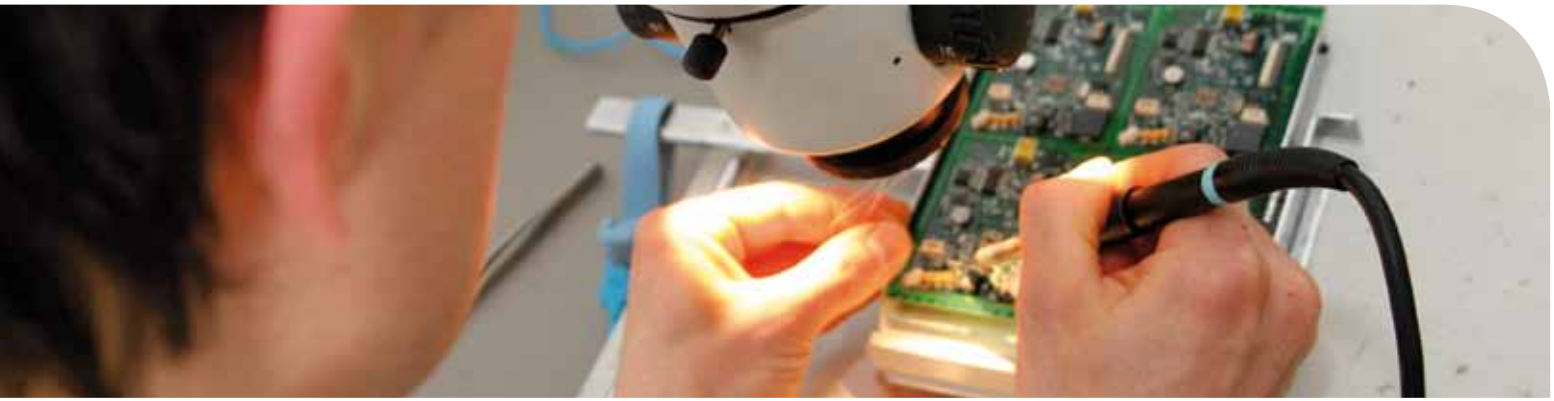
The support given to research and innovation by EU cohesion policy funding also varies greatly across regions (Map 3). It tends to be larger in more advanced regions, reinforcing a virtuous circle of innovation-driven growth.

While regions are differentially placed to contribute to the Europe 2020 goal of smart growth through innovation, regional diversity is seen as an asset since it advocates different routes to growth through innovation and smart specialisation and challenges policy-makers to develop the right policy mix adjusted to regional potentials and needs.

So while there is no "one-size-fits-all" policy solution, all can gain from adopting a policy mix that develops their strengths and tackles their weaknesses, whether through knowledge generation or through its diffusion and absorption, including the adaptation of generic technologies for specific market niches.

Support for innovation needs to be adapted to the territorial characteristics of regions and to build on local strengths while adopting more effective measures and practices[5].

Regional policy, through an integrated territorial approach that encourages regional cooperation and improves synergies with Community policies for research, innovation and education, can speed up smart growth right across the EU.



3 EUROPE 2020: TOWARDS SMART SPECIALISATION STRATEGIES

Investment in research, innovation and human capital is crucial for all regions, but regions start with different endowments and capabilities. There are potentially large gains from strategies that exploit an original, globally competitive specialisation niche and strengthen it over time. Such smart specialisation strategies can ensure that research and innovation resources reach a critical mass and are supported by targeted interventions in human resources, knowledge infrastructure and suitable framework conditions for businesses.

Smart specialisation strategies can help regions to concentrate resources on a few key R&I priorities rather than spreading investment thinly across areas and business sectors. Thus, they can ensure a more effective use of public funds and stimulate private investment. They can also be a key element in developing multi-level governance for integrated innovation policies[6]. Moreover, they have to be closely linked with other policy domains and require an understanding of regional strengths relative to other regions[7] and of the possible gain for interregional and transnational cooperation.

Smart specialisation provides a strategy and a global role for every regional economy and takes account of the differing capacities of regional economies to innovate. While leading regions can invest in advancing a generic technology or service innovation, for others, investing in its application within a particular sector or related sectors is often more fruitful. Smart specialisation is expected to create more diversity among regions than a regime in which every region imitates others. An absence of smart specialisation would almost certainly result in duplication, increasing uniformity and a lack of imagination and vision in setting R&I priorities, which in turn would diminish the potential for complementarities within the EU knowledge base.

Through encouraging all regions to invest in areas best-suited to developing their competitive advantage, smart specialisation is linked to the need to support the development of more world-class clusters in new and emerging industries, offering the possibility of fostering excellence at all levels and of strengthening areas of regional specialisation, while avoiding a misallocation of scarce resources.

Strategic intelligence is needed to identify the new high value-added activities, which offer the best chance of strengthening a region's competitiveness. Smart specialisation involves businesses, research centres and universities working together to identify not only a region's most promising areas of specialisation, but also the weaknesses that hamper innovation. It must include mechanisms for policy learning, in particular through peer reviews involving public officials, practitioners and regional stakeholders.

Smart specialisation needs to exploit regional diversity, stimulate cooperation across national and regional borders and open up new opportunities by avoiding fragmentation and ensuring that knowledge flows more freely across the EU.

Regions on the way to smart specialisation

What is "smart specialisation"?

Smart specialisation is an important policy rationale and concept for regional innovation policy. It promotes efficient, effective and synergetic use of public R&I investments and supports Member States and regions in diversifying and upgrading existing industries and in strengthening their innovation capacity.

In a nutshell, smart specialisation is about placing greater emphasis on innovation and having an innovation-driven development strategy in place that focuses on each region's strength and competitive advantage. It is about specialising in a smart way, i.e. based on evidence and strategic intelligence about a region's assets and the capability to learn what specialisations can be developed in relation to those of other regions.

It aims at identifying factors of competitiveness and bottlenecks and concentrating resources on key priorities. It also aims to harness regional diversity by avoiding uniformity and duplication in regional investment goals. It combines goal-setting (EU 2020, Innovation Union) with a dynamic and entrepreneurial discovery process involving key stakeholders from government, business, academia and other knowledge-creating institutions.

What is a "smart specialisation strategy"?

A smart specialisation strategy is a multi-annual strategy aimed at developing a well-performing national or regional research and innovation system as part of the National Reform Programme. It defines a policy mix and budgetary framework focusing on a limited number of priorities targeted at stimulating smart growth. The strategy is preceded by an analysis of all the assets of a region concerning innovation strengths and weaknesses and of emerging opportunities and market developments to identify the existing and potential competitive advantages in comparison with other regions.

It is based on a strong partnership between business, public entities and knowledge institutions. It reflects EU priorities, avoiding unnecessary duplication and fragmentation of efforts, and actively seeks to exploit opportunities for joint programming, trans-national cooperation and exploiting the leverage effects of EU instruments.

Thus, smart specialisation strategies should ensure a more effective and complementary use of EU funds and other investments in the regions and they will also help leverage private investments towards the regions' areas of smart specialisation. One key feature of smart specialisation strategies that distinguishes them from the average regional innovation strategies is their strong outward orientation towards exploiting global competitive advantage.

Many EU Member States and regions have long-standing experience in developing and implementing innovation strategies. In many cases these strategies already include most or many of the elements that would justify them as being "smart", i.e. they were developed based on a sound assessment of a region's competitive assets and potential, including a SWOT analysis, a broad and intense stakeholder consultation, and a deep understanding of business R&I needs, and they have developed a policy mix that covers the whole knowledge triangle. A few examples from regions that have embarked on such a smart specialisation exercise are included in this brochure.

Yet many others have seen such exercises fail for want of strategic intelligence or political commitment or a lack of capacity or long-term political and budgetary commitment to implement such plans, properly evaluate them or sufficiently involve key stakeholders. For these there is a need to provide targeted assistance.

To this end a "smart specialisation platform" will be launched in 2011. It will provide assistance to national and regional innovation policy-makers for the development and review of smart specialisation strategies, bringing together the relevant EU funding programmes and policy support activities in research, regional, enterprise, innovation, information society-related, sustainability, health and education policies.

Macro-sectors and focus on education and talent in Navarra

Navarra's modernisation strategy was launched in order to maintain and improve not only its regional competitiveness and GDP per capita, but also its human development and its environmental sustainability levels by 2030. "Moderna Navarra" integrates more than 90 pre-existing plans and aims to lead the regional structural transition from an industry-based economy to a knowledge-based economy. Navarra's government played a pivotal role in providing the impulse for developing the strategy, in particular by facilitating the coordination of the main academic, business, social and political actors.

The strategy was developed through an in-depth SWOT analysis and vision-building process led by 33 high-level international experts. A concrete action plan was developed in consultation with stakeholders, which was subsequently discussed and approved by the Regional Parliament. As an outcome of this exercise three macro-sectors were identified: health care, green economy and talent/education. Within these macro-

sectors, precise niche sectors, such as biomedicine or medical appliances, have been identified as specialisations. Regions with similar sectors were visited, in order to learn from them and to develop niche specialisations while trying to avoid duplications.

Where complementary activities could be developed, cooperation projects with other European regions were established. The region is currently working to fine-tune and further improve its specialisations and to develop cross-sectoral ones, such as medical tourism or green vehicles. The education system will receive specific attention to improve the supply of the specific technical and managerial skills needed for a successful transformation of the economy and to disseminate entrepreneurial values. In terms of implementation, the role of the regional government will, in particular, consist of improving framework conditions and driving public administration reform. Regular monitoring and evaluation will ensure the effectiveness and efficiency of delivering the strategy on the ground and contribute to a flexible evolution of the strategy and its instruments.

Spearhead initiatives and strategic clusters in Flanders

By 2020, Flanders wants to rank among the top five knowledge-intensive regions in Europe. To reach this target, the region has taken steps towards a transformational policy approach. This focuses on value chains, economic clusters, open innovation and "grand projects", which are selective investments in future-oriented domains with a high innovation and growth potential and large societal impact.

Based on a SWOT analysis of Flanders versus other EU countries and regions, combined with a European foresight study of 15 key areas and a stakeholder consultation, the region has defined six strategic technological and innovative clusters that represent in total ten thematic "spearheads" for Flanders. The six clusters in knowledge-intensive fields are: (1) Transport – Logistics – Services – Supply Chain Management; (2) ICT and Services in Healthcare (e-health); (3) Healthcare: Translational Medicine, Nutrition; (4) New Materials – Nanotechnology – Manufacturing Industry – Sustainable Chemistry; (5) ICT for Socio-economic Innovation (e-health, e-government, e-learning); (6) Energy and Environment for Services and Industry.

For each of these clusters, a panel of experts from industry and knowledge institutions was selected. Based on a positioning and a Delphi analysis, it came up with 30 high-priority technology domains in which Flanders could be leading Europe and the world by 2015. Moreover, 15 secondary conditions were listed to increase Flanders' innovative power, setting out a clear roadmap for the region.

A budgetary basis has been provided through (combined use of) existing support measures for direct funding, guarantees and loans, as well as one-off and special funding tools for innovation and R&I. EU funds are being used to achieve these cluster-oriented targets, e.g. Waterstofregio Vlaanderen – Nederland (Hydrogen region) or BioBase Europe Vlaanderen-Nederland (bioenergy) are examples of cross-border INTERREG IV A projects, where EU, public and private funds are pooled.

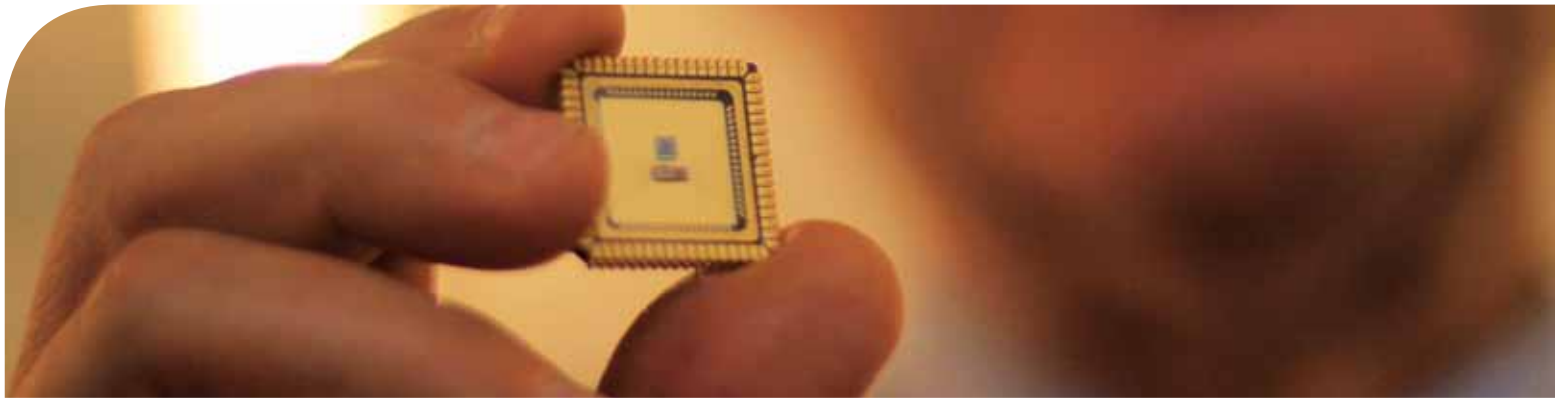
Specialisations and Technopoles in Lower Austria

Lower Austria's proximity to the knowledge-intensive Vienna region and the neighbouring Czech and Slovak Republics presents it with a specific set of challenges and opportunities. It managed to make the best of this position by focusing on cooperation both with Vienna, and within the cross-border CENTROPE region, but also with other neighbouring regions, such as Upper Austria, to allow the development of synergies, the opening of new markets for local companies and complementarity between value chains.

The region's innovation strategy is based on both qualitative and quantitative data and takes into account local and external conditions. Lower Austria has gone through extensive prioritisation processes thanks to several strategic exercises since the mid-1990s. In 1998, a project for the continuous improvement of its regional innovation system was started. The regional government carried out a SWOT analysis, sent questionnaires to its companies, organised workshops and carried out interviews with stakeholders. It also completed a survey of the activities of other similar regions.

Based on analysis of the region, several actions aimed at addressing the innovation needs of companies were undertaken, among them the creation of three "Technopoles", in the areas where the region has a competitive advantage: Biotech and Regenerative Medicine; Environmental Biotechnology and Agrobiotechnology; and Microsystems Engineering, Tribology and Medical Systems Technology. In this way, Lower Austria invested in improving those specialisations with a potential for excellence and in creating complementarities in those areas where knowledge and resources have to be shared with other regions, therefore steering clear of excessive specialisation and any risk of trying to excel at everything.

A recent independent study on the economic contribution of these specialisations and the related support measures (Technopoles) confirmed their beneficial impact on structural change and value creation in the region.



4 NEW OPPORTUNITIES FOR REGIONAL INNOVATION

4.1. Innovation clusters for regional growth

Clusters – geographic concentrations of interdependent companies, often SMEs, which interact with each other as well as with clients and suppliers and which often share a common pool of specialist labour, business and financial services, R&I and training facilities – are an important element in smart specialisation strategies. Clusters are major building blocks for regional economies, providing a favourable business environment to foster competitiveness and innovation in established and emerging industries.

The economic prosperity of regions is related in some degree to the strength of clusters[8]. Clusters are important means for regional and modern industrial policy to achieve smart and sustainable growth, in particular by improving the local business environment, notably for SMEs. Regional cluster policy needs to be focused on areas of actual or potential regional comparative advantage[9], investing in knowledge infrastructure, in particular in science parks and business incubators[10], as well as in creating the necessary knowledge flows between businesses, universities and regional authorities.

Cluster support can provide an important impetus to cluster cooperation at EU level[11] which is likely to help clusters meet new emerging challenges and specific needs more quickly and effectively[12] and so compete successfully in global markets. Clusters can be used by regional governments as existing industry-led platforms bringing together and mobilising local actors to design and successfully implement smart specialisation strategies, attracting innovative companies and creating more jobs at local level.

The Commission in 2008 called for a comprehensive approach to fostering world-class clusters in the EU by promoting not only mutual policy learning and transnational cooperation but also professional cluster management and internationalisation of SMEs through clusters[13]. Such support is provided by the "Regions for Economic Change" initiative[14], "Regions of Knowledge" action under FP7[15] as well as several CIP-funded cluster initiatives such as the European Cluster Observatory, the European Cluster Alliance and the European Cluster Excellence Initiative[16].

Corallia – Hellenic Technology Clusters Initiative, Greece (RegioStars 2009 finalist)[1]

Corallia provides support for the development of state-of-the-art, industry-driven innovation clusters, and acts as a hub for industry, research centres and venture capitalists involved in innovation activity. This was the first systematic and strategic national cluster initiative in Greece. The project has yielded tangible results through the establishment and operation of the "mi-Cluster" in Microelectronics and Embedded Systems and has led to a notable increase in annual turnover, exports, patent applications and new jobs. Mi-cluster company members have strengthened the production value-chain of the ecosystem and also increased involvement in joint research efforts. The cluster actively cooperates with other cluster initiatives in the EU, such as the Foundation Sophia-Antipolis. This ERDF-funded initiative has received many European awards and was a finalist in the 2009 RegioStars Awards.

Medicon Valley – Øresund, Denmark/Sweden (RegioStars 2008 winner in the cluster category)[2]

Following completion of the new bridge linking Sweden and Denmark in 2000, with the financial support of cohesion policy, an exciting development opportunity arose in what became known as the Øresund region. The Medicon Valley Alliance – a network of firms, universities, hospitals and public authorities and the Øresund Science Region – capitalised on existing links between the area's universities and the biomedical sector. As a result, the Øresund region is now one of the leading biomedical regions in Europe and today accounts for 60% of all Scandinavian life science exports. Even more impressive, it is now one of the top 10 European regions for biotechnology and applied microbiology, immunology and oncology.

4.2. Constructing innovation-friendly business environments for SMEs

A thriving SME sector is essential for growth, jobs and innovation and therefore an effective way to promote cohesion. Innovative companies are more likely to be high-growth and to create more new jobs[17]. Regional and national authorities should therefore provide support for the development of innovation-friendly business environments to assist SMEs, especially R&I intensive ones, and promote the creation of new firms. Innovation patterns in SMEs depend largely on their technology and knowledge intensity. High-tech start-ups have different needs and require different policy approaches than traditional manufacturing SMEs that mostly innovate by using available technology in new ways.

SMEs, and especially micro-enterprises, are heavily dependent on their regional environment where proximity plays a key role, in particular regarding access to tacit knowledge for innovation. SMEs, accordingly, need policy support to access outside knowledge, in the form of innovation support services tailored to their needs so that they are able to face up to the new forms of competition that are developing in the global economy. They equally need policies, which are place-based[18], and so take explicit account of the specific features of different regions, to create an innovation-friendly business environment and to support the development of smart regional specialisation.

Member States have committed themselves to implementing the Small Business Act for Europe (SBA)[19], which is a unique and comprehensive framework designed to create a more friendly business environment. In conjunction with this, the Commission in cooperation with the Member States has developed the SBA Database of Good Practices as a means of exchanging information on suitable policy measures in this regard[20].

Accordingly, SMEs are at the core of regional policy, which is aimed primarily at creating jobs and raising productivity by making regions and businesses more competitive. A thriving SME sector is essential not only for growth, job creation and innovation but also for social and economic cohesion. The Community Strategic Guidelines on Cohesion[21] for the period 2007-13 emphasise the key role of SMEs, notably when it comes to increasing investment in R&I, facilitating innovation and promoting entrepreneurship. Regional policy is in fact the largest source of Community financial support to SMEs, including in the form of financial engineering instruments such as JEREMIE (see point 4.2.3).

Units for Intellectual Property Promotion (UIPP), Portugal[3]

The Portuguese Institute of Industrial Property (INPI) launched the UIPP project co-funded by the ERDF in the 2000-06 programming period – aimed at increasing the access of companies and universities to the National Patent Office, by providing services to researchers and SMEs, and pre-diagnosing IPR needs. Funding covered the costs of training, awareness activities and seminars, IPR advertising and dissemination, technical assistance and advice by specialists. The UIPP supported partnerships and was responsible for establishing a network between two business associations, 10 universities, seven technological centres and three science and technology parks. Between 2001 and 2007, the number of hi-tech patent applications submitted to the European Patent Office per million inhabitants increased from 0.4 to 7.5 in Portugal (European Innovation Scoreboard).

Ifex initiative, Baden-Württemberg, Germany (Enterprise Awards 2006 winner)[4]

Via its online portal, ifex (Initiative for Start-ups and Business Transfer) is a one-stop agency for information on start-up and business transfer policies, giving access to a large network of over 1 400 support service providers. It provides tailor-made educational and support services to specific target groups, including schools, universities, women, ethnic and minority groups. Due to the success of the project, ifex became a permanent unit in the State Ministry of Economic Affairs of Baden-Württemberg and also manages the nationwide "German Agency for Women's Start-ups" on behalf of three federal Ministries. Ifex has demonstrated how to build an innovative and successful regional support infrastructure, in cooperation with all regional support service providers and in spite of shrinking public budgets. Its support measures have already been successfully transferred to other German and European regions with impressive results.

4.2.1. Promoting entrepreneurial attitudes and innovative mindsets

The importance of early entrepreneurship education is stressed again in the Europe 2020 strategy, which emphasises that Member States need to focus school curricula on creativity, innovation and other aspects of entrepreneurship. The Commission has outlined a set of recommendations designed to increase the role of education in creating a more entrepreneurial culture across the EU[22].

In 2007, the Commission published the *Oslo Agenda for Entrepreneurship Education in Europe*[23], conceived as a menu from which stakeholders can select the action to take at different levels. Efforts focus currently on improving coordination between different actors so as to develop more systematic strategies at national and regional level.

In addition, the Commission has launched CIP-funded campaigns, such as the European SME Week[24] to promote entrepreneurship, and also organised the "European Enterprise Awards"[25] since 2006 to identify and reward excellence among public authorities in supporting entrepreneurship and small businesses at national, regional and local level.

Moreover, the Erasmus for Young Entrepreneurs[26] exchange programme was introduced in 2009 with the same objective, in this case through enabling young people to learn from experienced entrepreneurs in different parts of the EU.

XPER-REGIO, Bavaria, Germany (European Enterprise Awards 2007 runner-up)[5]

21 Lower Bavarian municipalities got together in a strategic alliance to support entrepreneurship in small rural areas. The EU funded a scheme to mobilise the creative capital of the region by identifying and supporting creative entrepreneurs and people with exciting business ideas. This led to a call open to any enterprising person in the region to apply for funding for their ideas. The most promising concepts received consultancy support for further developing their concept and business plan. The local entrepreneurs were then asked to pitch their business plan and application for funding to a jury/the programme's steering committee. The best concepts/entrepreneurs received between €5 000 and more than €100 000 in EU co-funding for their ideas, thus boosting entrepreneurship and innovation in the localities and the region. The action resulted in the creation of 170 new firms and 400 new jobs. The project was runner-up for an "Entrepreneurial Trailblazer Award" at the European Enterprise Awards in 2007, recognising its outstanding contribution to promoting an entrepreneurial culture and mindset.

4.2.2. Kick-starting and growing innovative businesses

Promoting incubation and the development of small innovative businesses is singled out in the Europe 2020 strategy as a major way of pursuing knowledge-based growth. Given the huge diversity of regions across the EU and the great complexity of innovation processes, regional policy has an essential role to play in this regard. The Commission in 2007 published the "Smart Guide to Innovation-Based Incubators"[27], based on the lessons learned over 25 years of policy implementation, in particular through the BIC Network[28], to inform local stakeholders, including Programme authorities, about the scope of incubators and the steps needed to set up successful ones.

In addition, the Enterprise Europe Network[29] partners provide business partnering services for developing technology and transferring knowledge as well as for accessing markets abroad, offering information, feedback and tailor-made advice, so encouraging SMEs to participate in EU funding programmes. The Commission, with the support of the national authorities, has also launched the "Your Europe" portal[30], an online practical guide explaining each step of setting up and developing a business and setting out the rules and procedures to be followed for doing business in another Member State.

Incubator Technology Centre, Lower Silesia, Poland (RegioStars 2008 Finalist)[6]

The Incubator Technology Centre was created in the Lower Silesia Region to bridge the gap between strong scientific potential and the low level of innovative enterprises in the region making use of advanced technologies. The project, supported by the ERDF as well as national public and private investments, was managed by Wroclaw Technology Park, in cooperation with the Industrial Development Agency and the Lower Silesian Chamber of Commerce. Offering high-end offices, laboratories and production facilities as well as a full range of advisory services to entrepreneurs and start-up companies, it has quickly become a centrepiece of Wroclaw innovation activities and keeps inspiring the creation of knowledge-based enterprises and university spin-offs.

Smart Guide to Innovation-Based Incubators (IBI)

Promoting **business incubators** is one of the tools policy-makers use to help create growth through knowledge. Business incubators are programmes designed to accelerate the successful development of SMEs and new entrepreneurial companies through an array of business support resources and services, developed and orchestrated by incubator management and offered both in the incubator and through its network of contacts.

Based on the lessons learned over the past 25 years, in particular through the BIC Network, the European Commission has published a Smart Guide to Innovation-Based Incubators. The aim of the guide is to give local stakeholders in a region, including the managing authorities of cohesion policy funds, an insight into the scope for innovation-based incubators and the steps needed to set up successful ones.

http://ec.europa.eu/regional_policy/sources/docoffic/2007/working/innovation_incubator.pdf

4.2.3. Focusing on financial engineering support

Several studies conducted for the ex-post evaluation[31] of cohesion policy demonstrate that there is a need for non-repayable grants as well as a stronger role for loans, venture capital, guarantees and other forms of financial engineering. Currently, grants are by far the most common means of supporting business. Though loans are widespread, they account for a small proportion of total assistance and venture capital is confined to only a few regions (mainly in the UK or in Germany). The studies also show that there is a role for both "direct" grants and "indirect" support, such as for networking, clustering and business support services, and that a package of combined support, tailored to the specific needs of a region, can be more effective and efficient than a single type of support measure.

Financial engineering offers Member States the opportunity to use part of their Structural Funds allocations to fund SMEs indirectly through financial intermediaries, which can use public money to leverage more funding to provide support through equity, loans and guarantees. The funds invested in SMEs can then be repaid and reinvested in the future to provide yet more support. In this way, it is possible to create a sustainable legacy of several billion euro to be invested in a revolving manner to assist SMEs and start-ups, which is critically important in a time of crisis and budgetary constraints.

JEREMIE (Joint European Resources for Micro to Medium Enterprises)[32] is a joint initiative of the Commission and the European Investment Fund (EIF) to increase the use of financial engineering within cohesion policy in order to improve the access of SMEs to finance for expansion and investment in innovation as well as to support the creation of new businesses. The JEREMIE Networking Platform[33] was launched in March 2009 as a means for Programme authorities and other institutions to exchange information, experiences and good practice about the initiative and to facilitate its practical implementation.

In addition, the Commission is helping SMEs to access finance with the loan guarantees and equity investments of the Competitiveness and Innovation Framework Programme (CIP). The €1.1bn reserved for these financial instruments is implemented by the European Investment Fund (EIF) and can be accessed through local banks and other financial intermediaries. Since 2007, over 110 000 SMEs have been helped via the financial instruments, and by 2013 this number will be over 300 000.

Moreover, an additional source of funding is the Risk-Sharing Finance Facility (RSFF)[34], created by the Commission and European Investment Bank (EIB) at the request of the EU Council of December 2005 to provide support amounting to some €10 billion for the period 2007-13 for investment in research and innovation. This provides loans and guarantees for private companies or public institutions for higher risk projects.

Jeremie Investment Fund, North East UK[7]

This JEREMIE venture capital fund has been designed by One North East, the regional development agency, to provide a holistic and coherent response to the equity gap for high-growth businesses in England's North East region. It will invest in about 850 SMEs, create around 5 000 new jobs, and provide significant legacy returns to support future venture capital provision in the region in the long term, making sure there is venture capital available for the right opportunities through to 2015 (and beyond to 2025). The European Regional Development Fund 2007-13 and the European Investment Bank each contribute £62.5m to this £125m scheme. The fund will multiply this money by bringing in additional money from angel investors across the UK. Six sub-funds have been set up, each targeting a specific SME target group or market segment: an Angel Match Fund, a Technology Proof of Concept Fund, a Growth Fund, a Seed Fund, a Technology Fund and a Growth Fund 500.

JEREMIE Holding Fund, Andalusia, Spain[8]

The Innovation and Development Agency of Andalusia in Spain set up a JEREMIE Holding Fund in 2009 to invest in Andalusian enterprises. The JEREMIE Holding Fund has a size of €235m: 70% of the funding is from the European Regional Development Fund and 30% a national contribution from the Ministry of Economy, Innovation and Science of Andalusia. It consists of a multi-instrument fund (€185m) and a venture capital fund (€50m). Investments are carried out on a co-investment basis with the private sector. At the end of 2010 the fund had already invested €68m in 22 enterprises. These investments leveraged a total of €220m of new investment in these companies based on an average co-investment rate of 78% and a multiplier of 4.6, resulting in 3 060 new jobs and supporting 2 500 existing jobs.

4.2.4. Creating synergies around SME support

Research and development belong to the core business of many small innovative enterprises, notably those providing knowledge-intensive services. The majority of SMEs, however, lack the financial resources, capacity and in-house expertise to develop strategies in this regard and to undertake R&I. SMEs therefore need R&I support programmes that are conceived from their perspective and tailored to their needs, including simple and straightforward rules for participation and financing. A coherent and effective support package should encompass the whole innovation cycle from the conception of an idea through research and development to exploitation and commercialisation. It should target both technological and non-technological research and innovation, including service innovation, and have a clear orientation towards the market.

National and regional support measures co-financed by regional policy funds could further assist SMEs in internationalising their knowledge networks, for instance by providing support and advice to access European research and innovation programmes. Micro-grants such as innovation voucher schemes can help SMEs in kick-starting and exploring R&I projects and can be ideal instruments to accelerate the take-up of technological and organisational innovation in SMEs. After the R&I phase, there is often a need for further grant assistance e.g. to support demonstration activities in order to prove the viability of a new product or process before companies can commercially exploit it with the aid of venture capital or other sources of finance. In this context, it should also be mentioned that the Commission has published a "Handbook on Community State Aid Rules for SMEs", including temporary state aid measures to support access to finance in the current financial and economic crisis, which should be useful for the Programme authorities overseeing regional policy funds.[35]

Innovation Voucher Grant programme, Estonia[9]

The Innovation Voucher Grant programme in Estonia, launched in February 2010 with support from the ERDF, encourages enterprises to cooperate with research institutes to implement innovative ideas. SMEs can use the innovation voucher to buy in services related to development from institutions of higher education, the Estonian Patent Office, the Estonian Patent Library, patent officials, and accredited testing laboratories. The innovation voucher can also be used to obtain assistance from institutions of professional higher education and competence centres. SMEs have so far received vouchers for undertaking 149 innovation projects.

Lower Austria Innovation Assistant (RegioStars 2008 Awards winner)[10]

Niederösterreich piloted a landmark scheme to encourage SMEs to employ recent university graduates in order to strengthen their technological and innovation capacities. This innovative action – part-funded by the ERDF – targeted small SMEs in rural areas to provide them with support from "Innovation Assistants". These are "intrapreneurs" with a university background managing innovation projects tailored to the specific needs of the SME. The scheme proved to be extremely successful, not only by piloting a new approach to supporting innovation in the region, which was subsequently mainstreamed into the region's overall innovation support policy, but also by resulting in new product development for SMEs, improvements to their research and technological capacities, and organisational innovation. For most of the Innovation Assistants their assignments were veritable career boosters, a win-win situation for the SMEs, the employed graduates and the region. The project received a RegioStars award in 2008.

4.3. Education, training and lifelong learning in research and innovation

Higher education institutions and research centres need to work together with enterprises to bring innovation to the market. Many universities in the EU are helping to commercialise research by increasing the entrepreneurial mindset of students and by collaborating with firms in their region in innovation, so becoming more strongly involved in regional economic development. More efforts of this kind are needed. In this sense, DG REGIO in cooperation with DG EAC is preparing a guide on the contribution of higher education to regional development. This new guide for policy-makers will be published before the end of 2011.

The EU Forum for University Business Dialogue[36] has recently stressed the importance of effective cooperation between universities and business for regional development and has called for a stronger involvement of regional authorities in this partnership. To achieve closer cooperation, university programmes should involve students more strongly in activities linked to innovative businesses (incubators, start-ups, spin-offs).

Regional policy provides support for knowledge partnership between universities and industry in many forms, as well as territorial cooperation, focusing on innovation and the establishment of networks between universities, research institutes and SMEs.

Education, training and lifelong learning, as referred to in the Europe 2020 flagship initiative "Youth on the Move", are vital to developing the capacity of regions to innovate. Focusing school and higher education curricula on overarching competences like creativity, entrepreneurship and initiative will help young people develop their full potential for innovation.

The European Institute of Innovation and Technology is the first initiative aiming to boost the EU's competitiveness by fully integrating higher education, research and business (the Knowledge Triangle) to generate and promote innovation of world-class stature and impact. The EIT thus has an important contribution to make in the European innovation landscape.

Prince of Wales Innovation Scholarships, Wales, UK[11]

The Prince of Wales Innovation Scholarship programme is an innovative new £11.4 million initiative bringing together the private sector in Wales, higher education and bright young graduates from anywhere in the world. Each scholarship is worth £100 000. The scheme will provide 100 world-class graduates for Welsh businesses between 2009 and 2014, supporting them through a programme that is among the best financially supported PhD packages in the world. Scholars are posted for three years in companies. The scheme is focusing on R&I needs of SMEs and start-ups and includes a simple application process for businesses. The Programme is part-funded by the ERDF through the European Union's Convergence programme administered by the Welsh Assembly Government. The rest of the funding comes from the private sector and the University of Wales' own funds.

Embedding the university in the regional economy, Twente, NL[12]

The University of Twente is a good example of a university embedded in its regional economy taking a joined-up approach to knowledge transfer. Since the 1970s, the University of Twente has been active in promoting regional entrepreneurship and innovation in an attempt to strengthen the local economy. The university has a knowledge park and business accelerators communicating the knowledge it possesses to the business community. After supporting entrepreneurship for over 10 years, the university developed the TOP programme (Temporary Entrepreneurial Positions) which is rightly acknowledged as a world leader in promoting entrepreneurship. University student enterprises and a growth programme for owner managers have also been developed. Included in these modules are training and networking activities. The University of Twente has actively participated in the ERD Programme of Innovative Action for the region supported by cohesion policy.

4.4. Developing attractive regional research infrastructure and centres of competence

Research infrastructure is central to knowledge-based innovation systems. A three-pronged approach is needed to help regions realise their full potential: (i) develop world-class research and ICT infrastructure, building on existing regional scientific excellence through Structural Fund support, (ii) involve less research-intensive countries in networks of research facilities, and (iii) develop Regional Partner Facilities (RPF).

Typically these RPF would be associated through various schemes with large research facilities, such as those identified by the European Strategy Forum on Research Infrastructures (ESFRI). Thus, regional capacities could be built up engaging smaller countries and regions in competitive research and innovation performance. Instead of duplicating research infrastructures, regions should make the most of the European Research Area by accessing each other's centre of excellence.

The specific "partnership" role of RPF would include participation in preparing experiments, training young scientists and the broad promotion of the science undertaken at the large facility. The three ways listed above would also have an important, more general, role contributing to the circulation of "brains" and reducing the risk of brain drain while at the same time providing much-needed balance to the distribution of European research infrastructure. National and regional authorities should consider, in particular, how regional policy can contribute to the objective of the Innovation Union flagship of completing or initiating 60% of the research infrastructure currently identified by the ESFRI by 2015.

The PALS Research Centre, Prague, CR[13]

The PALS (Prague asterix laser system) joint research centre is the only laser laboratory in the Czech Republic and, indeed, in the EU-12 countries which operates a kJ-class terawatt high-powered laser. Lasers and their applications are important in all areas of sciences, life sciences and technologies. This facility will be linked to ELI (Extreme Light Infrastructure), which was selected as one of the 48 ESFRI research infrastructure projects of pan-European interest. The preparatory phase of this laser facility, involving 40 research and academic institutions from 13 Member States, had been supported by the Capacities programme of FP7. The implementation of this infrastructure to be located at three sites, in the Czech Republic, Hungary and Romania (a fourth site is under discussion) is being co-funded by EU regional policy. In fact, ELI will be the first large ESFRI infrastructure project in the EU, co-funded by the ERDF.

4.5. Creativity and cultural industries

Cultural and creative industries (CCI), which flourish at the local and regional level, are in a strategic position to link creativity and innovation. They can help boost local economies, stimulate new activities and sustainable jobs, have important spill-over effects on other industries and enhance the attractiveness of regions and cities[37]. Creative industries are therefore catalysts for structural change in many industrial zones and rural areas with the potential to rejuvenate their economies and help change the public image of regions.

In line with the commitment taken in the Innovation Union, the Commission intends to exploit the full potential of culture and design and to reinforce their links with innovation and competitiveness. Design is of particular importance and is increasingly recognised as a key discipline and activity to bring ideas to the market, transforming them into user-friendly products that can guarantee a better quality of life to citizens. Integrating a design aspect at an early stage in innovation projects can stimulate market take-up and ensure the commercial success of innovations.

Moreover, the presence of CCI and vibrant cultural communities are also seen by more and more cities and regions as "soft" location factors that can create a competitive advantage by establishing a favourable environment for innovation and attracting highly-skilled people as well as companies.

To exploit this potential successfully, it is necessary to integrate cultural and creative industries and design into development strategies and ensure an effective partnership between civil society, businesses and public authorities at regional, national and EU levels. Culture-based investment has helped diversify local economies in decline, spurring the growth and regeneration of the areas concerned and strengthening social cohesion.

Expandera project, Skane-Blekinge, Sweden[14]

The Expandera project, an ERDF-funded initiative of the Skane-Blekinge region and the City of Malmö, in cooperation with the Swedish Industrial Design Foundation and the Swedish Agency for Economic and Regional Growth, helps SMEs to integrate design into their business processes and decision-making. More specifically it aims to create growth through targeted creativity and design inputs in the early phases of process and product design. It also aims to strengthen design businesses in the region by helping them develop strong links to small companies. The project worked with 27 SMEs, which each received 105 hours of design input with a focus on companies that had not used design services before. The response from the companies has been enthusiastic and all but two of the companies involved continued working with the designers after the end of this initial support phase. An evaluation of this project is currently ongoing.

Source project, Northern Ireland/Ireland[15]

This ERDF (INTERREG IIIA) funded project helped to stimulate the growth of the emerging creative industries sector in the disadvantaged areas of Northern Ireland and the Republic of Ireland and stimulated cluster development of creative businesses in this area. Whilst there have been many initiatives to foster growth of creative industries in urban areas, the Source project has been leading the way in exploring and boosting the potential of creative industries in rural areas. The project helped to create 25 new businesses and 80 new jobs and established three incubation facilities for creative businesses. It also provided training and mentoring support to more than 400 individuals and businesses, with 43% of participants reporting increased sales and 78% reporting that the advice offered has been very important to their business. 73% found the networking opportunities particularly beneficial for opening up new opportunities.

4.6. Digital Agenda

The Digital Agenda aims to deliver sustainable economic and social benefits from a digital single market based on fast internet applications and open up access to online content.

Regional policy support for broadband in 2000-06 and 2007-13 has helped to reduce the gap in take-up between sparsely and densely populated regions from 67% in 2004 to 24% in 2008 and the gap in broadband coverage between rural and urban regions from 33% in 2004 to 28% in 2007. Gaps however still remain, particularly in rural areas: 94% of Europeans are covered by broadband networks but only 80% of the rural population.

Many regions are still struggling to invest ERDF funding allocated to ICT (around 4.4% of the total) due partly to a lack of planning capacity. Greater leverage of private investment in ICT is also needed to offset budget constraints on public expenditure. In this sense, DG REGIO in cooperation with DG INFSO and DG COMP is preparing a "Broadband/New Generation Access Implementation Guide" for policy-makers, which will be published in 2011.

With regard to the significance of ICT for the innovation system, Member States should consider how to make better use of the ERDF to accelerate achievement of the EU 2020 objectives for broadband access including total coverage, making use of the different technologies (fibre, ADSL, wireless, satellite) available to suit the diverse geographical needs and challenges of different regions across the EU.

High-speed broadband roll-out in Auvergne (RegioStars 2010 winner)[16]

High-speed broadband access can be a decisive competitiveness factor for regions, in terms of both attracting new residents and firms and improving access for existing ones. Yet, in sparsely populated areas, private telecommunication operators are frequently reluctant to take on all the risks of investing in these so-called "white areas". Faced with this challenge, Auvergne established a public/private partnership to extend high-speed broadband coverage to 100% of households. Some 99.6% of lines in Auvergne are now eligible for high-speed broadband through DSL technology, while the other 0.4% have a satellite option. This action won Auvergne a RegioStars 2010 award.

Ambulatory monitoring of heart patients, Brandenburg (RegioStars 2010 winner)[17]

This project developed a new ICT-based business model for the monitoring of patients who suffer from congestive heart failure, a potentially life-threatening condition. General practitioners, a telemedicine centre, health insurers, technology and technical service suppliers joined forces in this innovative telemedicine project, which cut the length of hospital stays and associated healthcare costs whilst increasing the standard of health care and quality of life for patients and their families. Remote monitoring of up to 130 patients led to a 62% reduction in hospital admissions and a 69% decrease in the total number of days spent in hospital.

4.7. Public procurement of innovation

Procurement budgets should include the purchasing of innovative or first commercialised goods and services as such, as well as pre-commercial PCP type procurement, i.e. the procurement of research services to develop solutions for the public sector. Simultaneously to procurement-related activities of the European Union under the Lead Market Initiative or within the Enterprise Europe Network, more and more Member States and regions are implementing schemes for supporting public procurement of innovation, where support to pre-commercial procurement methodology is often involved. The Commission will continue to provide guidance and financial support to stimulate the process and encourage public procurers to pull together. In addition, a new support mechanism will be piloted in 2011. It will operate through EU wide calls for proposals restricted to public procurers and will support the establishment of 'buyers groups' of procurers across Member States who develop common specifications and align or jointly procure major innovation of products or services.

East of England pre-commercial procurement for healthcare innovations[18]

In May 2009, the East of England Development Agency together with the UK National Health Services East of England and UK Technology Strategy Board launched a pre-commercial procurement of an innovative process, material, device, product or service which will help to meet current health priorities in the region. 117 applications were received and, supported by £800 000 from the ERDF, 11 successful SMEs were each awarded £100 000 in a first phase to develop the feasibility of their proposal. A further assessment at the end of six months of feasibility testing led to four companies being funded to develop their products ready for market. Instead of relying on known solutions, this initiative enabled the region to set out healthcare problems and invite innovative solutions, thus stimulating the SME market place and bringing the benefits of new innovations and technology to patients.

The Netherlands extension elevators procurement[19]

In the Netherlands, many 3- to 4-storey older apartment buildings have not been equipped with elevators and are thus not accessible to older tenants. The Foundation for Experiments in Social Housing (SEV) took the initiative with producers to develop and build an extension elevator. Extension elevators are a normal option nowadays for renovating older neighbourhoods. Social structures remain in place and social costs are avoided. SEV developed technical specifications, mitigated safety regulations and invited some 10 companies to carry out product development, including seven from abroad (Sweden). Procurement was carried out by each social housing scheme in each of the individual projects (largest: 254 elevators for 2 400 apartments). Mostly they were contracted as part of a restricted or negotiated procedure involving a builder who cooperated with a specific elevator supplier (2/3 of the costs being for construction and technical alterations, and 1/3 for the elevator).

4.8. Increasing synergies between policy instruments

The Council[40] and the European Parliament[41] stressed the importance of strengthening synergy between EU support policies in the area of research and innovation. They called on the Commission to explore further ways of harmonising and simplifying the rules and procedures for the measures concerned and to examine the inter-linkages between them, in order to provide guidance and to foster cooperation with national and regional bodies involved in their implementation.

Since then, a number of steps have been taken to support both those directly involved in innovation and public bodies responsible for designing regional innovation systems and providing support services. For the former, the Commission has published a practical guide[42] for researchers and enterprises. For policy-makers at national and regional level, efforts are being made to inform them of local recipients of EU funding to increase the potential for synergy between the activities concerned.

To explore the synergies between different EU instruments and deliver concrete recommendations for actions to take in the current and next programming periods, the Synergies Expert Group has been established. It started its work in 2010 and will deliver its final report in June 2011.

GOLM Science Park, Brandenburg, Germany (RegioStars Awards 2009 finalist)[20]

Since the mid-1990s the science park at Golm on the outskirts of Potsdam, established with ERDF funding, has developed into the largest research centre in Brandenburg. Originally the site of Potsdam University, Golm now hosts three Max Planck Institutes, two Institutes of the Fraunhofer Gesellschaft, an incubation centre (GO:IN) and many innovative enterprises. GO:IN, which opened in 2007, provides ideal conditions for new business start-ups with conference rooms, joint marketing, coaching and other services. In 2008, it housed 28 enterprises. More than 600 scientists and staff work at the science park and there are 7 000 students in the different university institutes. Many joint research projects have been funded under FP5, FP6 and FP7.

The Commission services are currently also exploring, with Programme authorities, how far the Operational Programmes can provide complementary financial support to FP7 for:

- the construction of research infrastructure which previously received financial support from the FP7 Research infrastructure programme (design studies, preparatory phase) and/or that which was foreseen in the ESFRI Roadmap;

- projects under the FP7 Research Potential in Convergence and Outermost Regions (RegPot) action, as well as the Regions of Knowledge (RoK) which, despite being positively evaluated, were not granted funding due to a lack of finance;

- development, demonstration and implementation of research results obtained by SMEs through the "Research for the benefit of SMEs" projects of FP7.

A further possibility is for Programme authorities to adopt best practice from the management of FP7 projects and to identify funding priorities for research and innovation in Operational Programmes through the use of international peer review.

Science and technology parks, as well as business incubators, are important in facilitating innovation and stimulating regional development[43], as well as enabling synergies between the ERDF and FP7. Many such projects are being supported by the ERDF, mainly in the EU-12 countries (new Member States). The aforementioned "Smart Guide to Innovation-Based Incubators" for regional policy-makers (see "4.2.2") can facilitate support in this area.

The Enterprise Europe Network (EEN) is made up of local and regional business and innovation support bodies, many of which are responsible for managing the ERDF. The Network promotes SME participation in FP7 and CIP projects and fosters technology transfer and business partnerships, so helping companies that may have developed with regional policy support to get connected to transnational innovation and knowledge networks. The Network also increases the capacity of local and regional partner organisations to provide support services adapted to the increasingly global value chains. The EEN's role could be consolidated to help make better use of the ERDF.

In addition, support at EU level for transnational programmes (e.g. the Baltic Sea Strategy) and interregional cooperation (e.g. FP7 Regions of Knowledge, CIP cluster initiatives and INTERREG IVC and URBACT, including the Regions for Economic Change initiative) should help regions to participate more in researching global excellence and increasing learning opportunities.

5 CONCLUSIONS

Among the European institutions, the EU Member States and the regions, there is a widely-shared consensus that mobilising the innovation potential of all regions and focusing regional policy on achieving the Europe 2020 objectives of smart, sustainable and inclusive growth is the way forward. Member States and regions can already start refocusing their policy practice by:

- **Developing smart specialisation strategies**, which require Member States and regions to concentrate resources on the most promising areas of competitive advantage based on clusters, cross-sectoral activities, eco-innovation, innovative services, high value-added markets or specific R&I areas. The development of such strategies can start immediately, drawing on support for technical assistance and subjecting them to international peer review.

- **Reinforcing ERDF support for education, research and innovation** in the current period to boost investment in these areas, including by drawing on complementary funding from FP7 and CIP. The framework conditions for research and innovation and a knowledge-based economy should be improved by aligning ERDF support with the National Reform Programme priorities (linked to Guideline 4 of the Integrated Economic and Employment Policy Guidelines).

- Making full use of the flexibility in the EU regional policy programmes and **drawing on the substantial funds still available under cohesion policy in the present programming period** to redirect funding to this end. The Commission will support requests for such redirection that tallies with a smart specialisation approach and speed up their approval.

- Making more extensive use of **financial engineering instruments** in support of innovation, including soft loans, guarantees and venture capital, according to the type and size of firm and risk involved. The expansion of lending and equity financing for innovation through existing instruments, including the EIB group, and particularly to SMEs, should be a policy priority.

- Pursuing the possibility[44] to finance **interregional cooperation** to promote research and innovation under the Convergence and Regional Competitiveness objectives and better access to international research and innovation networks under FP7 and CIP.

- Ensuring coherence between supply-push and demand-pull research and innovation policy, by making use of the opportunities offered by **public procurement co-financed by the ERDF** to increase the innovation content of products, processes and services.

- **Using international peer review by independent experts** for research projects more systematically to enhance the effectiveness of support.

- Drawing on complementary funding from FP7 and CIP and considering the use of the ERDF for financing suitable **shortlisted FP7 and CIP projects**.

- Exploiting the possibilities for improving regional innovation policy through the peer learning offered by FP7, CIP and INTERREG platforms and networks.

The implementation of the above actions should be set out in a dedicated section of the implementation reports and should be discussed by the respective Programme Monitoring Committees in the Member States and regions.

To support Member States and regions in this task the Commission will:

- **Develop a "smart specialisation platform" before 2012**, bringing together expertise from universities, research centres, regional authorities, businesses and Commission services, in order to **facilitate the formulation and implementation of smart specialisation strategies by national and regional governments**.

- **Assist Member States and regions to implement education, research and innovation projects** through knowledge transfer and dissemination of good practice, with the help of the "Regions for Economic Change" initiative (including "RegioStars") and Fast Track regional networks and interregional collaboration, supported under INTERREG IVC, Regions of Knowledge and the CIP.

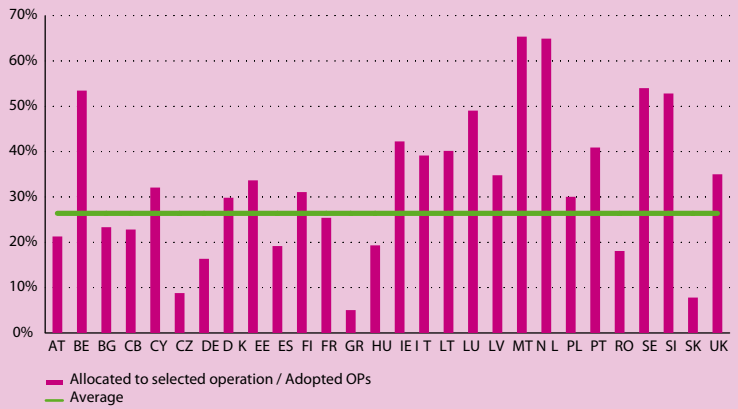
- **Work closely with financial institutions** to leverage funding and maximise the use of existing financial instruments, as appropriate, including by possibly establishing an RSFF[45] window/facility dedicated to Convergence regions, more intensive use of JEREMIE[46] to provide risk finance, and guarantees to stimulate innovation in SMEs and technology-based start-ups; and by examining ways of extending the scope of existing financial engineering instruments to new research and innovation activities.

- **Facilitate business opportunities for SMEs** through consolidating and reinforcing the Enterprise Europe Network (EEN), the partners of which should, in turn, help organisations to make better use of ERDF financing for innovation.

- **Improve the coherence and complementarity of EU policies for education, research and innovation**, with the aim of identifying and promoting the take-up of examples of good practice for policy-makers and innovation support providers; expanding and upgrading the "Practical Guide to EU funding opportunities" in this area and establishing a single web-based portal on Commission support for research and innovation, linked to, or included in, the FP7 Participant Portal to facilitate access for innovating bodies to EU funding.

Rate of progress in innovation project selection per Member State, 2007-13

As of September 2009[21] only €22 billion or 26% of the €86 billion initially planned under EU regional policy for research and innovation, including entrepreneurship and ICT, were allocated to projects (see Chart). This means that over half of the €86 billion of the European Regional Development Fund (ERDF) and European Social Fund (ESF) support initially planned for research and innovation, including entrepreneurship and ICT, still needed to be allocated to projects (see Chart).



The Commission understands that these figures are rapidly changing. The full reporting by Member States on their 2010 positions shall be presented by 30 June 2011.

FOOTNOTES

1. Commission Communication – Europe 2020: a strategy for smart, sustainable and inclusive growth. COM(2010)2020, 3 March 2010.
2. "New Nature of Innovation", OECD 2009.
3. "The OECD innovation strategy: getting a head start on tomorrow", OECD 2010.
4. "The Federal Government and the growth of regional innovation clusters", J. Sallet, E. Paisley and J. Masterman, 2009.
5. SEC (2009) 1197.
6. Background note, "Accelerating the transformation of Europe through innovation", Joint Informal Meeting of Ministers for Research and Industry, Brussels, 15 July 2010.
7. Belgian Presidency input to informal Competitiveness Council, July 2010.
8. European Cluster Observatory (2009): EU Cluster Mapping and Strengthening Clusters in Europe.
9. European Commission, SEC (2008) 2637: 33.
10. European Commission, "Smart Guide to Innovation-Based Incubators", http://ec.europa.eu/regional_policy/sources/docoffic/2007/working/innovation_incubator.pdf
11. European Commission, SEC (2008) 2637: 40.
12. European Commission, SEC (2008) 2637: 36.
13. COM(2008)652, "Towards world-class clusters in the European Union".
14. http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/index_en.cfm
15. "Regions of Knowledge" promotes the development of regional research-driven clusters involving at least three countries following the triple-helix model of linking research entities, businesses and regional authorities.
16. See: http://www.europe-innova.eu/web/guest/cluster-cooperation/overview
17. Flash Eurobarometer No 271, "Access to finance", Analytical report, September 2009; NESTA, Measuring Business Growth report, October 2009. http://ec.europa.eu/enterprise/policies/finance/files/survey_access_to_finance_analytical_report_en.pdf, http://www.nesta.org.uk/publications/reports/assets/features/measuring_business_growth
18. See: "An Agenda for a reformed cohesion policy – A place-based approach to meeting European Union challenges and expectations", Fabrizio Barca, April 2009. http://ec.europa.eu/regional_policy/policy/future/barca_en.htm
19. See: http://ec.europa.eu/enterprise/policies/sme/small-business-act/
20. http://ec.europa.eu/enterprise/policies/sme/best-practices/database/SBA/index.cfm?fuseaction=welcome.detail
21. See: http://ec.europa.eu/regional_policy/sources/docoffic/2007/osc/l_29120061021en00110032.pdf
22. "Implementing the Community's Lisbon Programme: Fostering entrepreneurial mindsets through education and learning", COM(2006) 33 final, 13 February 2006.
23. http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/education-training-entrepreneurship/policy-framework/index_en.htm

24. http://ec.europa.eu/enterprise/policies/entrepreneurship/sme-week/index_en.htm
25. http://ec.europa.eu/enterprise/policies/sme/best-practices/european-enterprise-awards/index_en.htm
26. http://www.erasmus-entrepreneurs.eu/
27. http://ec.europa.eu/regional_policy/sources/docoffic/2007/working/innovation_incubator.pdf/
28. European Business and Innovation Centres (BICs) are support organisations for entrepreneurs and innovative SMEs. The first BICs were created in 1984, co-funded by the ERDF as so-called "Innovative Actions". Today more than 200 BICs are coordinated and supported by the European Business and Innovation Centre Network (EBN), http://www.ebn.be/
29. http://www.enterprise-europe-network.ec.europa.eu/index_en.htm
30. http://ec.europa.eu/youreurope
31. "Supporting business development: Over 67,000 small and medium-sized enterprises received support, leading to the creation of nearly 200,000" and "Investing in research and innovation: Nearly 38,000 research and development projects received support with the creation of over 13,000 new long-term research jobs", http://ec.europa.eu/regional_policy/policy/impact/index_en.htm
32. http://www.eif.europa.eu/what_we_do/jeremie/index.htm
33. http://ec.europa.eu/regional_policy/funds/2007/jjj/jeremie_network_en.htm
34. http://www.eib.org/products/loans/special/rsff/index.htm?lang=en
35. http://ec.europa.eu/competition/state_aid/studies_reports/sme_handbook.pdf
36. COM(2009)158, SEC(2009)425 "A new partnership for the modernisation of universities: the EU Forum for University Business Dialogue".
37. COM(2010)183 "Unlocking the potential of cultural and creative industries".
38. Conclusions of 17 May 2010.
39. EP Resolution (EP:A7-0138/2010, P7_TA(2010) 1089; May 2010) based on the report produced by Lambert Van Nistelrooij, MEP.
40. http://cordis.europa.eu/eu-funding-guide/home_en.html
41. EESC CCMI/025 (22/06/2010), "Technology, Industrial innovation and Science Parks".
42. Under Article 37 (6)(b) of Regulation EC No 1083/2006.
43. Risk-Sharing Finance Facility (see 4.2.3.)
44. Joint European Resources for Micro to Medium Enterprises (see 4.2.3.)

Regional good practice examples

(1) http://ec.europa.eu/regional_policy/projects/stories/details_new.cfm?pay=EL&the=45&sto=1642&lan=7&region=ALL&obj=ALL&per=2&defL=en

(2) http://showcase.homesandcommunities.co.uk/case-study/medicon-valley-alliance-denmarksweden.html

(3) http://www.innovaccess.eu/documents/20081211brussels/11-Dinis.pdf

(4) http://www.ifex.de/ifex/05_English_information/index.php

(5) http://www.xper-regio.de/

(6) http://www.technologpark.pl/sub.php?lng=en&p=48

(7) http://www.onenortheast.co.uk/page/jeremie/index.cfm

(8) http://www.docstoc.com/docs/67837428/JEREMIE-Brussels-Premium

(9) http://hei.eas.ee/index.php?option=com_content&view=article&id=636:enterprise-estonia-gave-innovation-vouchers-for-149-small-enterprises-last-year-&catid=41:news

(10) http://ec.europa.eu/regional_policy/conferences/excellence/doc/pdf/excellence_en.pdf

(11) http://www.wales.ac.uk/en/GlobalAcademy/Welcome.aspx

(12) http://www.utwente.nl/en

(13) http://www.pals.cas.cz/pals/pae101fr.htm,
http://ec.europa.eu/research/esfri
(Please note: At the closing date of this publication the Czech part of this project had already been approved by the European Commission).

(14) http://www.expandera.org/

(15) http://www.ruralcreativity.com/

(16) http://ec.europa.eu/regional_policy/projects/stories/details_new.cfm?pay=FR&the=45&sto=1865&lan=7&region=560&obj=ALL&per=2&defL=en

(17) http://ec.europa.eu/regional_policy/projects/stories/details_new.cfm?pay=DE&the=45&sto=1873&lan=7&region=ALL&obj=ALL&per=2&defL=EN

(18) http://www.eeda.org.uk/4091.asp

(19) http://www.wisspark.de/

(20) http://underpin.portals.mbs.ac.uk/Home/tabid/1537/language/en-GB/Default.aspx

(21) COM(2010)110 Cohesion policy: Strategic Report 2010 on the implementation of the programmes 2007-2013

REGIONAL POLICY FOR SMART GROWTH IN EUROPE 2020

Regional policy is a key delivery mechanism for Europe 2020 and the Innovation Union. Investment in research, innovation and human capital is crucial for all regions, but regions start with different endowments and capabilities. Regional diversity favours different routes to growth through innovation and specialisation and challenges policy-makers to develop the right policy mix adjusted to regional potentials and needs. All regions can gain from adopting a policy mix that develops their strengths and tackles their weaknesses, whether through knowledge generation or through its diffusion and absorption.

There are potentially large gains from strategies that focus on competitive advantage exploiting global specialisation niches and strengthening a region's knowledge-based potential through targeted interventions. This publication sets out the key innovation tools relevant for regions. It also presents the Commission's proposed smart specialisation strategy for regions intended to help policy-makers and stakeholders in their efforts to enhance regional innovation potentials, invest in smart growth, leverage private R&I investments and ensure more effective and complementary use of EU, national and regional funds. It is largely based on the European Commission Communication "Regional Policy contributing to smart growth in Europe 2020".

KN-32-11-753-EN-C

Publications Office

ISBN 978-92-79-20332-9

9 789279 203329