Why reinvent the wheel?
Capitalising on regional policy achievements in creating innovation systems
About the authors

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Innovation systems present many new challenges but also opportunities for regional policymakers. In this context, the interregional cooperation programme, INTERREG IVC, has recently published the results of an important policy analysis, one in a series of 12, each focusing on a different policy theme. This brochure offers just a brief preview of what you can find in the report on ‘Innovation systems’, which details a raft of tried-and-tested good practices and offers evidence-based policy recommendations.

**Innovation systems: the goal**

Policymakers everywhere have recognised that innovation is key to competitiveness, which is also why it is at the heart of the Europe 2020 and Innovation Union strategies, and why its importance is stressed in the Regulations for the next Structural Fund programming period. It is against this backdrop that many nations and regions have made innovation a top priority and have set out to develop or enhance national and regional innovation systems (IS), which involve integrating a range of innovation stakeholders into a collaborative system.
Innovation systems: challenges and scope

Policymakers need to develop better regional innovation governance systems. The full capitalisation report, which draws on the literature on the subject, discusses this need and notes three generic policy challenges, which can be summarised as:

- **A lack of resources** within the innovation system. This is a straightforward problem with three facets: (1) organisations in the system focus their assets on the wrong services; (2) they provide low-quality services; or (3) the region lacks the assets necessary to build a full innovation system.

- **Fragmentation**, i.e. the organisations making up the innovation system do not know how to cooperate effectively, and so miss out on potential synergies. It is also possible that norms or legislation discourage cooperation.

- **Lock-ins** within the innovation system can result from stakeholders having shared values and practices, basically thinking too much alike and being unreceptive to new ideas.

With these basic problems as a point of departure, the report reviews a number of individual projects that have focused on IS policy and their respective good practices, grouping them under thematic areas according to the objectives, target groups, and stakeholders involved, as summarised in the table below.

As can be seen in the good practices pie-chart, two categories stand-out in terms of the number of practices covered: Technology transfer/Research commercialisation and Spin-offs and incubation account for more good practices than the other thematic areas combined (excluding ‘Other’).

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>Content</th>
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<tbody>
<tr>
<td>Spin-offs and incubation</td>
<td>Commercialisation of research results through spin-offs and support to businesses in the early stages of development via incubators.</td>
</tr>
<tr>
<td>Cluster development and management</td>
<td>Cluster-based cooperation between industry &amp; academia with complementary assets can create synergies that benefit a whole region but development into a sustainable cluster requires active management.</td>
</tr>
<tr>
<td>Finance incl. Venture capital funding</td>
<td>Financial resources are essential to most activities within the innovation system. Access to venture capital (VC) in particular is necessary to transform research into new products or services.</td>
</tr>
<tr>
<td>Internationalisation</td>
<td>Includes connecting with actors outside the regional innovation system as a way to increase the influx of ideas and resources.</td>
</tr>
<tr>
<td>Technology transfer / Research commercialisation</td>
<td>Technology transfer is about businesses working with knowledge-providers (e.g. universities) to develop new products or services. Ideas can come either from business or from the knowledge providers.</td>
</tr>
<tr>
<td>SME-Academia links</td>
<td>This concerns creating fora for business and higher education (HE) institutions to meet and learn how to work together for mutual benefit.</td>
</tr>
<tr>
<td>Skills</td>
<td>This can refer to the skills of the managers in the regional innovation system, e.g. among policymakers not directly involved in innovation as such, but whose actions and knowledge matter.</td>
</tr>
<tr>
<td>Patenting / Intellectual property rights (IPR)</td>
<td>Patenting is crucial for the knowledge economy, but creative approaches to IPR may also be used to stimulate and facilitate cooperation between HE and business.</td>
</tr>
<tr>
<td>Other</td>
<td>Includes topics not covered by the other thematic areas.</td>
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</table>
The distribution of good practices across the thematic areas can be used as an indicator for the main challenges facing policymakers, which are as follows:

- The role of universities and how they may be better utilised as knowledge creators.
- The management of clusters and how businesses can cooperate more effectively.
- The exchange of ideas, people and resources between knowledge creators (universities) and business.

The triple-helix perspective enables policymakers to frame the above challenges as a question of creating interactive systemic links (see Fig. 2) between knowledge creators, policymakers and businesses in the innovation system. It is the links and the synergies they enable that are considered essential to a dynamic innovation process. In the quadruple helix model, civil society plays the role of the fourth active player in this innovation process.

The triple helix framework was deployed within the INTERREG IVC project KNOW-MAN to tackle system fragmentation problems. Projects such as CLIQ consider the role of civil society as an essential one, and have used the ‘quadruple helix’ model to inform their approach to innovation.
Meeting the challenges: good practices from INTERREG IVC

The capitalisation process revealed a number of good practices from different regions that have tackled the challenges presented above. The full report presents a total of 195 such good practices, a brief selection of which is listed below.

- **UNICREDS (University Collaboration in Regional Development Spaces)** focuses on the importance of universities as knowledge creators and for transforming underperforming regions into high-value knowledge economies. One of the good practices, from Skellefteå municipality, is called *Multi-university campus* and concerns the provision of university education, via the establishment of a multi-university campus, in peripheral regions.

- **INNOPOLIS (Innovation Policy in University City Regions)** involves partners from city regions that are home to leading higher education institutions and large student populations. Project goals include identifying best policy practices for knowledge exchange between universities and business. One good practice is the *Knowledge Transfer Partnership* from Greater Manchester in which companies and HE institutions cooperate to place recent graduates in local businesses, providing the latter with new skills and knowledge, and the former with ‘real world’ experience.

- **INOLINK (Connecting the territory through the innovation network)** focuses on how regional policies and practices can promote technology transfer and cluster development. It is based on observations of the real situation on the ground, for example, that a large proportion of firms rarely or never innovate. INOLINK promotes a range of good practices to remedy such ‘systemic’ innovation problems, for example by connecting technology producers with businesses that could profitably exploit it.

- **EURIS (European Collaborative and Open Regional Innovation Strategies)** aims to foster open innovation, and to accelerate knowledge exchange and technology transfer between different innovation stakeholders. The *Competence Centres* initiative in the Stuttgart region is a good practice with a key role in facilitating cross-sectoral activities, especially between regional companies, universities and research institutions that are active within a particular technology field.

- **CLIQ (Creating Local Innovation through a Quadruple Helix)** widens the triple-helix innovation system to include civil society as an additional player in the innovation process. One good practice is the “*Make Brighton Rock – engagement of civil society through social media to generate new ideas*”, run by the Sussex Innovation Centre. The aim was to engage with the citizens of Brighton and enable them to offer their ideas on how to improve city life through the organisation of a contest.
Discover more about current innovation systems policy

The projects and good practices reviewed for this policy capitalisation analysis have been working to put innovation policy on a firmer conceptual and operational footing. The full report is written with regional policymakers in mind and seeks, against the backdrop of a new regional programming round starting in 2014, to inform the development of innovation policy in the EU. To this end, the main report provides:

- A common framework for understanding the challenges of innovation policy;
- A wealth of inspiration regarding regional approaches to support innovation;
- Advice to help design context-adapted innovation policies;
- Detailed description and analysis of good practices that have contributed or are contributing to solving a number of key innovation system challenges.

The report also includes detailed policy recommendations organised into three parts: firstly, general recommendations aiming to support a conceptualisation of regional innovation systems as learning systems; secondly, specific recommendations relating to delivering innovation systems, including discussion on the importance of regional self-knowledge, stakeholder commitment, and policy adaptability. The third and last set of recommendations turn the spotlight on the success factors for policy transfer with the report making recommendations stemming directly from the policy learning work carried out within the INTERREG IVC projects.

“Innovation policy goes beyond the development of isolated sectoral policies. It involves more than specific efforts to increase spending on R&D, support to SMEs, or support to high-tech activities. It focuses on developing integrated approaches based on the characteristics of the different territories. It establishes networks of institutions and stakeholders, creates space for them to develop constructive dialogue, and uses their inputs in the decision-making process.”

Commissioner Hübner, February 2009

Download the full report from: www.interreg4c.eu/capitalisation
Over the last seven years the INTERREG IVC programme has been enabling public institutions all over Europe – over 2000 in total – to 'learn through cooperation' across 204 different interregional projects aimed at improving regional policies.

In June 2012, the programme commissioned a team of thematic experts to analyse, benchmark, and capitalise on the wealth of knowledge generated by projects working on similar regional development issues. Altogether, 12 policy themes, ranging from innovation to the environment, have been covered. 12 reports are now available detailing the insights and lessons from this capitalisation process for the benefit of all regions across Europe.

In their presentation of the wide range of innovative good practices and policies improved by the projects, the reports offer a timely inventory of up-to-date evidence and experience to help regional authorities and interested stakeholders introduce or develop their regional policies. Policymakers and practitioners at all levels – regional, national and European – will find theme-specific recommendations tailored to them.

This brochure is a preview of the full-length report in the field of innovation systems.

The Interregional Cooperation Programme INTERREG IVC, financed by the European Union’s Regional Development Fund, helps Regions of Europe work together to share experience and good practice in the areas of innovation, the knowledge economy, the environment and risk prevention. EUR 302 million was granted for project funding but, more than that, a wealth of knowledge and potential solutions are also on hand for regional policy makers.