INTERREG IVC
analysis report

Innovation systems
Credits

Experts for thematic capitalisation on Innovation System:

The inno Group, founded in 1991, is a strategic management consulting company for public and private clients. Branch offices are located in Karlsruhe, Rostock, Leipzig and Berlin, Germany, as well as in Sophia-Antipolis, France and Stockholm, Sweden. inno provides its clients with consulting services as well as a longstanding experience and expertise in the commercialisation of research results.

inno Group is a European-wide well-known manager of cross-organisational projects as well as process moderator for the initialisation and implementation of pilot actions between public research organisations and business companies. inno has successfully served its clients in the fields of a) development and implementation of regional innovation strategies, b) clustering activities and clustering projects, c) business creation activities and business incubators, d) European innovation and technology transfer policy, e) studies – evaluations, feasibility studies, benchmarking, etc.

inno Group supports higher education institutions, research organisations, other public organisations and companies in the successful acquisition of public funding from regional and national authorities as well as from the European Commission for research and innovation purposes. In addition inno assists its clients in delivering effective project management - and financial processing of projects (e.g. controlling, audit-compliance). To this aim, the company employs disposes of a well trained and experienced team of consultants and support staff.

The authors of the report are:

Prof. Dr. Peter Heydebreck
Prof. Dr. Peter Heydebreck is founding partner and member of the board of the inno Group. He mentors and advises national and regional governments and multi-national organisations (e.g. EU, OECD, UNIDO) in the field of innovation policy and competitiveness. His experience covers the public sector and private businesses. Peter is dedicated to boost the return on private and public investments into innovation. Peter is a member of the Advisory Board of HZDR Innovation GmbH and he has also served as a member of the Research Commission of the German Science Council (Wissenschaftsrat). He holds a professorship for Innovation Management and Entrepreneurship at the University of Malmö (Sweden).

Nils Gabrielsson (1st year of Capitalisation)
Nils Gabrielsson holds a MSc. in Environmental Engineering from the Royal Institute of Technology in Stockholm. He also studied at Darmstadt Technical University and the University of Heidelberg, Germany. Nils has extensive experience in designing, implementing and directing studies and evaluations, and has extensive knowledge of Scandinavian and European innovation systems as well as national and regional innovation processes. He is also an expert in cluster management and industrial networks.

Carl Arvid Dahlöf (2nd year of Capitalisation)
Carl Arvid Dahlöf holds a MSc. in Management and Economics of Innovation from Chalmers University of Technology in Gothenburg. He is a consultant at inno Group's Stockholm office, where he has been involved as an evaluator in a number of EU-funded projects. Carl Arvid has previous experience from the EU Delegation to the US and the Swedish Embassy in Washington, DC.

For further information, visit www.inno-group.com

“The contents of this work reflect the views of the author(s) and do not necessarily represent the position of the INTERREG IVC programme. The authors are entirely responsible for the facts and accuracy of the data presented.”
Foreword: Capitalising on achievements

Over the last seven years, with the goal of improving regional policies, more than 2,000 public institutions across Europe have been learning from each other through cooperative policy learning in 204 interregional projects supported by the INTERREG IVC territorial cooperation programme.

The programme can now point to hundreds of examples of how a region or city has built on the experiences of their counterparts elsewhere to enhance their own policy and delivery strategies. A few examples:

- inspired by the approaches taken by the Welsh ECO Centre and an Educational Centre in the Dutch city of Sittard-Geleen, the Hungarian city of Vecsés developed educational activities on renewable energy and sustainability for its school children.
- after consulting the Spanish city of Paterna, the Latvian Daugavpils City Council was able to successfully modernise its soviet-era industrial parks, giving a major boost to business development.
- after consulting the Cypriot authorities, the Greek Region of Crete invested in water recycling and re-use schemes, applying the Cypriot models.

The policy learning enabled by the INTERREG IVC Programme is not just a paper exercise: it has helped, through 204 projects, almost 6,000 staff involved in regional policy to acquire new skills and capabilities, and it has led directly to the improvement of more than 400 policies. The programme was therefore determined to go a step further and share its tremendous wealth of policy experience and know-how even more widely.

The programme therefore asked 12 teams of experts covering 12 different fields of policy to analyse the achievements of its projects and to report back on ‘what works’. This report, which focuses on Innovation systems, is the fruit of their work. It showcases a selection of tried-and-tested innovation systems policies and practices that have been shared through the INTERREG IVC programme, and which will be of interest to all EU regions. Policymakers and practitioners interested in this topic – whether working on regional, national or European scales – will also find policy recommendations tailored to them.

Cooperative policy learning makes sense. It makes sense because, in an era of tight budgetary constraints, local and regional authorities are seeking best value for money, and robust evidence can enhance the chances of policy success by eliminating the risks and costs of trial and error.

To take forward the programme’s key strategic task of sharing policy know-how, the new programme for 2014-2020, INTERREG EUROPE, is developing ‘Policy Learning Platforms’ which will stimulate a process of continuous policy learning among all interested regional policy stakeholders around Europe.
Table of Contents

Executive summary ................................................................................................................. 4

1 Introduction and Methodology ............................................................................................. 7
  1.1 Definition of theme-specific terms .................................................................................... 7
  1.1.1 Innovation System .......................................................................................................... 7
  1.1.2 Good practice ................................................................................................................. 8
  1.1.3 Innovation policy .......................................................................................................... 8
  1.1.4 Open innovation ............................................................................................................ 8
  1.1.5 (Innovation) Policy measure .......................................................................................... 8
  1.1.6 Innovation system ‘actor’ .............................................................................................. 9
  1.2 Approach and analytical framework ................................................................................. 9
    1.2.1 Analytical framework - Good Practice characteristics .................................................. 10
    1.2.2 Analytical framework - Added value and synergies ...................................................... 12

2 Policy context ....................................................................................................................... 14
  2.1 Introduction ...................................................................................................................... 14
  2.2 The European innovation scene ....................................................................................... 14
    2.2.1 Policy and strategy ....................................................................................................... 15
    2.2.2 Framework programmes .............................................................................................. 15
    2.2.3 Programmes and Initiatives ......................................................................................... 16
  2.3 Added value of interregional co-operation for Innovation systems policies (triple helix & open innovation) .................................................................................................................................................................................. 17

3 Analysis ............................................................................................................................... 19
  3.1 Individual project analysis ................................................................................................. 19
    3.1.1 CLIQ - Creating Local Innovation through a Quadruple Helix ................................ 19
    3.1.2 ERMIS - Effective Reproducible Model of Innovation System ................................. 21
    3.1.3 EURIS - European Collaborative and Open Regional Innovation Strategies .............. 24
    3.1.4 INNOPOLIS - Innovation Policy in University City Regions ..................................... 25
    3.1.5 INOLINK - Connecting the territory through the innovation network ....................... 28
    3.1.6 IPP - The Interregional Partnership Project ................................................................. 30
    3.1.7 KNOW-HUB - Enhancing the regional competences in strategic management of innovation policies .................................................................................................................................................................................. 32
    3.1.8 KNOW-MAN - Knowledge Network Management in Technology Parks .................... 34
    3.1.9 UNICREDS – University Collaboration in Regional Development Spaces ................ 35
    3.1.10 URMA – Urban-rural partnerships in Metropolitan Areas ........................................... 37
  3.2 Analysis of additional projects .......................................................................................... 39
    3.2.1 Cross-Innovation – Promoting Cross-Innovation in European Cities and Regions ....... 39
    3.2.2 ERIK Action – Upgrading the innovation capacity of existing firms ......................... 39
    3.2.3 INNOHUBS – Innovation Hubs for Edge Cities ......................................................... 40
    3.2.4 Mini Europe – Mainstreaming Innovative Instruments for SME development in Europe 40
    3.2.5 SMART+ - Mini-Programme for SME Innovation and Promotion of RTD ................. 40
    3.2.6 DISTRICT+ - Disseminating Innovative Strategies for Capitalisation of Targeted Good Practices .................................................................................................................................................................................. 41
    3.2.7 InnoMot – Improving Regional Policies promoting and motivating non-technological Innovation in SMEs .................................................................................................................................................................................. 41
    3.2.8 PERIA – Partnership on European Regional Innovation Agencies ............................. 41
  3.3 Aggregated analysis ......................................................................................................... 42
    3.3.1 Common features and challenges of the projects ......................................................... 42
    3.3.2 Good practices in common and transferability ............................................................. 47
    3.3.3 Same problem – different solutions .............................................................................. 50
    3.3.4 Particularly interesting good practices ......................................................................... 51
    3.3.5 Cross-regional relevance of project results and up-scaling possibilities ..................... 53
    3.3.6 Core pre-requisites for a successful implementation of regional policy in the field of innovation systems .................................................................................................................................................................................. 54
    3.3.7 Influence on Smart Specialisation Strategies .................................................................. 54
4 Key Policy Messages and Conclusions ................................................................. 61

4.1 Relevant findings for other EU regions ........................................................... 61
4.2 Policy recommendations ................................................................................... 64
   4.2.1 Framework conditions of a successful innovation system ....................... 64
   4.2.2 Targeted recommendations ...................................................................... 66

5 Annexes .............................................................................................................. 69

Annexe 1: Innovation systems (triple helix & open innovation) projects overview ... 69
Annexe 2: Innovation systems (triple helix & open innovation) project partners Map ... 71
Annexe 3: Innovation systems (triple helix & open innovation) projects factsheets .... 72
Annexe 4: Innovation systems (triple helix & open innovation) Literature List ........... 82
Executive summary

A regional innovation system is "... that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such, it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies." (Metcalfe, 1995)

Drawing on such theoretical insights, European regions are today striving to improve the competitiveness of regional industry by designing and implementing policies and measures focused on increasing the level of innovation. The INTERREG IVC programme offers a unique pan-European arena for exchanging experiences and learning from each other on how to formulate even better innovation policies. The ten projects included in this capitalisation analysis have utilised the potential of exchange and learning to a maximum. Overall, the projects have identified and processed over 500 good practices and documented approximately 250.

Our analysis shows that although the projects have been designed in differing regional contexts, they share a number of common traits, in particular when it comes to the fundamental problems related to regional innovation systems. It can be concluded, for example, that lack of resources in regional innovation systems is not normally considered to be a key bottleneck. Rather, the main problem is system fragmentation caused by weak governance structures and a lack of dynamic change. Governance in this context should be understood as the ability of a region to ensure the optimal efficiency of its innovation system, in particular by aligning regional resources to work in joint strategic directions. The lack of dynamic change is related to the challenge of renewing the innovation system by integrating new ideas or working models. As for the publicly funded organisations in innovation systems, the issues of institutional lock-in, a lack of resources and insufficient inter-organisational exchange are common.

The analysis of the projects' good practices indicates that many of them address a number of conceptually similar thematic areas. Those most commonly addressed are: 1) Technology transfer/Research commercialisation, 2) Spin-offs and incubation, 3) Cluster development and management, and 4) Linking SMEs to knowledge providers. A relatively large number of good practices are alike in terms of purpose and how they work. Although conceptually similar, few, or no schemes are identical, though. It should be mentioned here, however, that there are also thematic areas which are not so well covered by good practices although they receive much attention in the European debate. Two such themes are 'Venture and early stage funding' and 'Internationalisation'. The INTERREG IVC projects we have reviewed do provide some examples of good practices in these fields but not in proportion to the attention given in debate.

From the analysis, we can also draw the conclusion that the transfer of good practices is a challenging task even if many projects share challenges, objectives and even look for similar types of good practices. There are a number of factors that explain the difficulties encountered during the transfer. The key barrier seems to be the absorption capacity of regional policymakers. In many cases, there is also insufficient policymaker involvement in the projects. Further, it should be pointed out that there may be a conflict between 1) the innovativeness of a practice, 2) proven success and 3) transferability. We have observed that it is often the simpler (and often less innovative) practices that are transferred between regions, whereas highly successful practices with proven impact have often developed in a specific context over a long period of time - something that tends to make quick transfer less feasible. The difficulty of actually transferring a practice within the framework given by the INTERREG programme is often highlighted. In fact, it is probably true that a certain proportion of the practices said to be 'in transfer' are more likely to be influencing policies (strategies, guideline, etc.) rather than becoming stand-alone regional programmes or initiatives.

We can conclude that our analysis has brought forward evidence that the projects within the topic ‘Innovation systems (triple helix & open innovation)’ have contributed in positive ways to enhancing the capability of participating regions to develop and improve regional innovation systems. In particular, we would like to highlight the following areas where we believe the impacts to be the clearest:

1 OECD (1997); Organisation for Economic Co-operation and Development: National Innovation System, p.7)
a) Helping regions to overcome lock-in effects
b) Increasing their capability to design effective innovation policy
c) Increasing their capability to implement better innovation policy measures
d) Good complementarity and potential synergies with other EU-programmes
e) Creating a pan-European network of professionals

It is within this framework that the projects covered by this analysis have been working and it is within this framework that the main outcomes and messages should be understood as they are most usefully presented at different levels of abstraction.²

1. Contributing to better regional innovation policy by transferring good practices

For regions that wish to take up a new innovation measure in its portfolio, the following recommendations are crucial:

- Ensure a clear definition of the practice to be taken up
- Ensure that the stakeholders that are to be involved in the process possess the necessary capacity. Is sufficient funding available, or is it feasible to make the necessary financial arrangements?
- Ensure that commitment to the new practice is in place at all relevant levels of government (city council, regional authorities, etc.)
- Review and assess the stability of the political and financial situation of the region.
- Assess the legislative and/or regulatory situation related to the new practice
- Analyse if companies will welcome the new practice. Does the new practice fit the local habits and routines of companies and public bodies?
- Make sure that potential environmental impacts as well as equal opportunities and gender issues are taken into account.

2. Region-specific recommendations for policy transfer aiming at better innovation systems

- Implementing regional policies requires an understanding of the region's characteristics, its potential and ‘enabling’ conditions, but also its needs and possibly any ‘hampering’ conditions, both in terms of stakeholders and organisational arrangements.
- Stakeholder involvement and commitment are crucial. This is true for both good practice transfer and implementation.
- The capability to adapt an existing policy to regional organisational arrangements and conditions is of uttermost importance. Flexibility of not only policies, but also on the part of the stakeholders, is noted as being an enabling factor for successful policy implementation.

3. General policy recommendations – normative characteristics of regional innovation systems

- Successful innovation systems display dynamic and flexible organisational arrangements and processes that facilitate the diffusion of knowledge throughout the economy. In particular, it is crucial to take the regional-specific context better into consideration.³
- Successful innovation systems are networked mutual learning systems. All members of a regional innovation system should closely interact and learn from, and in cooperation with, each other, not (exclusively) from each other.
- Successful systems are both sustainable and flexible in responding to modified/new challenges and context factors.

² More detailed policy messages and recommendations can be found in chapters 3 & 4.
Successful innovation systems possess substantial resources and critical mass. Such systems have well developed links with external systems from which they can access complementary know-how and competencies.

Successful innovation systems have a demand-orientation and provide firms with knowledge and resources in respect to all the key determinants of success in innovation processes, in particular (but not exclusively) in respect to technology, management, marketing, and financial resources.

4. **Recommendations for specific target groups**

- National level policymakers should: be guided by return on investment; act through public procurement; engage in system building measures and make regions compete with each other.

- Regional level policymakers should: take a mentoring role towards innovation system members; internationalise and specialise their region and acknowledge the importance of a wider set of issues to the innovation system.

- Research institutes and universities should: think and act innovation; interact with businesses and provide incentive mechanisms.

- Implementation support bodies should: have a clear division of responsibilities; take a system approach and engage with companies and listen to their needs.
1 Introduction and Methodology

On the June 22, 2012, the INTERREG IVC Joint technical Secretariat (JTS) launched a Thematic Programme Capitalisation analysis that aims to enable all regions in Europe to exploit the knowledge capital gained from projects working on the same or similar topic. It focuses on the thematic content and not on the interregional cooperation process.

The mission is carried out by experts, who, for each of the 12 selected themes, analyse projects’ features and results and identify their added value. The exercise is coordinated at programme level by the Joint Technical Secretariat (JTS) and the Information Points.

Thematic capitalisation means collecting, analysing and disseminating ‘theme-specific’ knowledge gained from projects working on the same topic. The insights and information generated by the capitalisation analysis will be useful for the innovation policy community all around Europe. The capitalisation is aimed, however, in particular towards a) decision-makers including politicians and their professional staff at local, regional, national and EU levels, b) programme bodies including members of the Monitoring Committee, Managing Authority, Joint Technical Secretariat (JTS) and Information Points and c) the end-users (i.e. the people directly affected by the projects) and other policymakers and practitioners.

The objectives of the thematic capitalisation are to better exploit the knowledge generated by projects working on a similar theme for the benefit of local and regional authorities in Europe as well as to increase the visibility of the programme and its impact on the policymaking process at local, regional, national and European levels. The systematic analysis of the projects aims to deliver the following results:

- identified innovative approaches that could also be relevant to other regions in Europe
- theme-specific policy recommendations for the national and the EU levels
- possible synergies and mutual enrichment among the INTERREG IVC projects dealing with similar issues
- projects links to related initiatives in other EU programmes
- specific topic-related recommendations to the projects

Dr Peter Heydebreck, Nils Gabrielsson (1st year of Capitalisation) and Carl Arvid Dahlöf (2nd year of Capitalisation) of INNO AG (www.inno-group.com) are the assigned capitalisation experts for the INTERREG IVC projects under the theme ‘Innovation systems (triple helix & open innovation)’. The theme includes ten projects co-funded by the programme throughout the first to the fourth rounds of financing. More information on the respective projects can be found in chapter 3.1, as well as in the Annexe. This report presents the final analysis results based on an in-depth review of the projects.

1.1 Definition of theme-specific terms

1.1.1 Innovation System

Innovation Systems, regional as well as national, are defined as follows:

- “... the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies.” (Freeman, 1987)\(^4\)

“... the elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge ... and are either located within or rooted inside the borders of a nation state.” (Lundvall, 1992)

“... a set of institutions whose interactions determine the innovative performance ... of national firms.” (Nelson, 1993)

“... the (regional) national institutions, their incentive structures and their competencies, that determine the rate and direction of technological learning (or the volume and composition of change generating activities) in a country.” (Patel and Pavitt, 1994)

“... that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such, it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies.” (Metcalfe, 1995)

### 1.1.2 Good practice

Good practice is defined by INTERREG IVC as:

“... an initiative (e.g. methodologies, projects, processes and techniques) undertaken in one of the programme’s thematic priorities which has already proved successful and which has the potential to be transferred to a different geographic area. ‘Proved successful’ is when the good practice has already provided tangible and measurable results in achieving a specific objective.”

### 1.1.3 Innovation policy

Innovation policy deals with promoting the development, diffusion, and efficient use of new products (e.g. goods and services) and processes, and as such follows one of two generic approaches: a laissez-faire or a systemic approach (Lundvall and Borrás, 2005). According to Moodysson & Nilsson (2011), the systemic approach, which is currently the most accepted model, originates in the contention that most policy fields need to be considered in terms of the extent to which they contribute to innovation. It is therefore not possible to fully understand innovation policy without also considering how it inter-relates with other policies like tax policy, education policy, financial policy, etc.

### 1.1.4 Open innovation

“Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.” (Henry Chesbrough, Open Innovation: Researching a New Paradigm).

### 1.1.5 (Innovation) Policy measure

According to PRO INNO Europe, an innovation policy measure is defined as any activity that:

- mobilises resources (financial, human, organisational) through publicly (co-) financed research and innovation programmes or initiatives; and/or

---

• funds the generation or diffusion of information and knowledge (studies, road-mapping, technology diffusion activities, advisory services, public-private partnerships, etc.) in support of research and innovation activities; and/or
• promotes an institutional process (legal acts, regulatory rules) designed to explicitly influence the undertaking of research and innovation by organisations.

Moreover, a policy measure is normally implemented on an ongoing (multi-annual) basis, rather than being a one-off ‘event’ or a single ‘project’.

1.1.6 Innovation system ‘actor’

Innovation System actors are primarily private enterprises, universities and public research institutes and the people within them. “Innovation and technology development are the result of a complex set of relationships among actors in the system, which includes enterprises, universities and government research institutes”.9 Moodysson & Nilsson (2011) Liu and White (2001) distinguish between primary actors, secondary actors and institutions. Primary actors are those performing fundamental innovation functions. Secondary actors are organisations that affect the behaviour of, or interaction between, primary actors. Secondary actors may act directly, e.g. when public bodies establish policies and make decisions about sustainability in the public health care system, it affects the way hospitals purchase products and services.

1.2 Approach and analytical framework

The information on which the analysis is based has been gathered through desk research drawing on, in particular, the projects’ application forms, web-sites, reports, and face-to-face interviews with the projects’ Lead Partner representatives and, in some cases, also with other project partner representatives.

The findings presented in this report are divided into chapters. Chapter 1, this chapter, presents the introduction and methodology. Chapter 2 outlines the European policy and programme context. Chapter 3 presents the main part of the report including both the project level analysis and a consolidated analysis for the ten different projects. Finally, chapter 4 summarises the thematic capitalisation results (main findings) and presents key policy messages and conclusions. The report also incorporates Annexes with additional relevant information on the individual projects for the interested reader.

Chapter 3 is the main part of the report as it addresses the core questions of the capitalisation analysis. These questions are:

1. What are the common features / challenges / difficulties / successes among the projects of the same topic?

2. In particular, which are the similar or different solutions and good practices available in the partner regions that tackle the common challenges? How do these solutions, approaches and good practices add a competitive advantage in the involved regions?

3. Does one region have a particularly interesting or innovative practice or policy identified which would deserve to be made available to other regions in Europe? Is it easily transferable?

4. Has a project achieved a particular interesting result (e.g. in terms of good practices transferred or policies improved) which could be useful for the other projects in the same topic and more generally for other local/regional authorities dealing with that topic?

5. Do the participating regions identify core pre-requisites for a successful implementation of their regional policy in the domain tackled? How could these help the regions shape their policies and in particular their Smart Specialisation Strategies?

6. Which relevant state of the art approaches from other EU (in particular ETC) Programmes and projects could be considered in order to validate the benchmark of the knowledge from

---

9 OECD (1997); Organisation for Economic Co-operation and Development: National Innovation System, p.9
INTERREG IVC? What is their learning effect on the still running INTERREG IVC projects? Are there possible synergies?

7. Based on the findings of the analysis, which results from the other capitalisation topics and even other ETC programmes (in particular URBACT, ESPON, and INTERACT) Capitalisation initiatives should be considered to enrich the conclusions and create mutual learning?

8. Based on the findings of the analysis, can specific recommendations be provided to individual projects which may not be aware of important practices / policies or which may be less advanced and experienced than other projects?

9. Based on the findings of the analysis, which are the unique features and the added value of the INTERREG IVC? How could INTERREG IVC projects contribute to the implementation of Europe 2020? Which links can be identified with the EU flagship initiatives in the thematic field analysed?

10. Based on the answers to all the above questions, which overall lessons learnt / policy recommendations can be drawn that could be useful for policy makers and practitioners at regional, national and/or European level?

For the purpose of analysis, the capitalisation questions have been divided into three groups as shown in the figure below.

To answer these questions, we designed an analytical framework to provide a common platform for addressing the ten capitalisation questions in a coherent way. Due to the diversity of the projects, we also developed a theoretical model that, as far as possible, aims to make a sound analysis of the different projects for the first two questions. Questions 3-7 are of a more subjective and relative matter and therefore the possibility of addressing them coherently depends more on the ability to assess comparative strengths, to assess contextual factors, to detect synergies between projects and to detect unaddressed needs in regions' policy portfolios. Finally, questions 8, 9 and 10 represent the aggregated knowledge of the capitalisation analysis both on the project and overall levels.

1.2.1 Analytical framework - Good Practice characteristics

The framework for addressing questions 1-2 is built on the following three pillars:

1. Fundamental problems of innovation systems
2. Functions of innovation systems
3. Policy tools

Fundamental problems of innovation systems

The starting point for innovation policy development is an understanding of the underlying problems and challenges facing regional innovation systems. Consequently, a thorough problem analysis must also
be the foundation for capitalising on projects working on the ‘Innovation systems (triple helix & open innovation)’.

There are three generic problems which are likely to affect the success of regional innovation systems, as proposed in the related literature: 1) lack of resources, 2) fragmentation and 3) lock-in effects (Isaksen 2001, Nauwelaers and Wintjes 2002, Tödtling and Trippel 2005). These problems relate both to the functional and structural dimensions of innovation, and together can be presented, as shown in the table below, from a system and actors perspective. After the analysis, the projects will be added to the table according to the challenges and problems they tackle.

<table>
<thead>
<tr>
<th>Problems and challenges</th>
<th>Functional dimension</th>
<th>Structural dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of resources</td>
<td>Poor performance</td>
<td>Insufficient organisational power</td>
</tr>
<tr>
<td></td>
<td>Low demand-orientation. The actors do not focus on the assets that the innovation system needs most, or services are not of sufficient quality.</td>
<td>No resources. There are not enough players who can provide the innovation system with the necessary assets.</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Functional mismatch</td>
<td>Structural / institutional mismatch</td>
</tr>
<tr>
<td></td>
<td>Actors do not know how to co-operate. Lack of coordination between different activities in a RIS results in Low/ no synergies between different actors.</td>
<td>Actors do not want to co-operate. The institutional framework (rules, legislation, regulations) is not suitable for all actors which leads to actors mistrusting each other and therefore reluctant to cooperate.</td>
</tr>
<tr>
<td>Lock-ins</td>
<td>Functional inertia</td>
<td>Structural inertia</td>
</tr>
<tr>
<td></td>
<td>Encrusted structures. Shared values, norms and practices cause lock-in effects that hinder change and adaptation. In short, the system fails to bring new ideas and tools to the target groups.</td>
<td>Closed systems. Lock-in effects caused by the innovation system and institutional structures. Lock-in effects are most frequent in smaller systems where organisational renewal may be slow. In larger or urban regions this is often not the case.</td>
</tr>
</tbody>
</table>

Functions provided by innovation systems

The challenges can also be viewed from a functional point of view, i.e. with respect to the function(s) of the innovation system that the projects aim at strengthening. The functions of an innovation system are as follows (based on Moodysson 2011; Bergek et al. 2008b; Hekker et al. 2007):

<table>
<thead>
<tr>
<th>Function</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge development and diffusion</td>
<td>Creating knowledge and facilitating information and knowledge exchange.</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Creating new businesses</td>
</tr>
<tr>
<td></td>
<td>Indirectly: experimenting with new products, identifying and testing new markets and opportunities, etc.</td>
</tr>
<tr>
<td>System infrastructure creation</td>
<td>Developing and maintaining the system’s infrastructure, e.g. production plants, educational institutions etc. as well as non-physical infrastructure, e.g. educational institutes.</td>
</tr>
<tr>
<td>Resource mobilisation</td>
<td>Attracting and building resources (human, financial, complementary, etc.) relevant to the RIS.</td>
</tr>
<tr>
<td>Market identification and formation</td>
<td>Identifying markets or market niches as well as stimulating the formation of local markets.</td>
</tr>
<tr>
<td>Legitimation</td>
<td>Internally: Creating coherence, understanding. Externally: promoting the industry or regional agenda, lobbying, etc.</td>
</tr>
<tr>
<td>Facilitation/creation of synergies</td>
<td>Stimulating the identification and utilisation of synergies within the system. Collaboration and joint projects (e.g. joint product development, processing, R&amp;D, lobbying, resource development, etc.)</td>
</tr>
</tbody>
</table>
Guidance of search (Regional governance) Inducing actors to enter the RIS, directing their search and investments towards the system. Also to direct the attention of actors in the system towards specific problems and growth opportunities.

Taxonomy of policy measures
To complete the analytical framework for the first capitalisation questions, it is also necessary to look at what specific policy areas the projects address. A policy area is understood as a sub-set of innovation policy that can be addressed through specific measures, i.e. a programme, initiative, project, etc., designed to address a specific problem and/or to strengthen a function of an innovation system. Within the context of this analysis, such measures normally constitute the good practices of the projects.

An important part of the capitalisation analysis has been to define a set of policy areas that correspond to the measures (good practices) identified by the projects. In order to achieve this, we have investigated how the projects themselves have classified their work and tried to find a common taxonomy that corresponds, as far as possible, to the terminology used by the projects themselves. Due to the varying nature of the projects’ objectives and approaches, this can differ significantly, and so does the wording used by the projects to characterise them. Despite this, we managed to define a common taxonomy, which comprises the following themes:

<table>
<thead>
<tr>
<th>Spin-offs and incubation</th>
<th>Cluster development and management</th>
<th>Finance incl. VC Funding</th>
<th>Internationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME-Academia links</td>
<td>Skills</td>
<td>Patenting / IPR</td>
<td></td>
</tr>
<tr>
<td>Tech. transfer / Research commercialisation</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In short, the analytical frameworks outlined above will be used to describe, discuss and present the fundamental nature of the projects as well as their selected good practices.

1.2.2 Analytical framework - Added value and synergies
To answer the questions in this group, it is necessary to define what ‘a particularly interesting or innovative practice or policy’ means. This will then make it possible to develop a process that facilitates the identification of potential good practices and to set up criteria that help in deciding what the interesting cases are. Overall, the projects under the Innovation systems theme have identified several hundreds of good practices. As it is unfeasible to review all of these within the capitalisation analysis, we apply a ‘funnel model’ to narrow down the selection. This ‘funnel model’ comprises of a number of steps, from a preliminary list of identified ‘Initial Good Practices’ to an identified number of ‘Transfer-oriented Good Practices’, with each step reducing the number of potential ‘high interest’ practices.

The project partners themselves carried out the initial screening. Virtually all of the included projects have identified a large number of practices and applied different filtering mechanisms in order to compile a set of practices that are considered to be in line with the project’s objectives and the interests of the project partners e.g. by carrying out regional Strength, Weakness, Opportunity and Threat (SWOT) analyses and matching outcomes with the identified good practices.

Typically, after this initial filtering, each project worked on around 20-40 ‘Objective-oriented Good Practices’. Most projects describe these practices in a brochure or report.

After this step, many projects applied another filtering mechanism – the ‘transfer filter’. Here, some of the identified practices are of such interest and relevance to one or more of the project partners that further transfer efforts are justified. Which and how many good practices enter the transfer process depends on the individual project’s context and design. The process is illustrated in the figure below.
The approach for assessing whether a good practice is particularly interesting or innovative will follow the process outlined above insofar as not all good practices identified will be analysed. Our focus will be on the ‘objective’ and ‘transfer’-oriented practices. One could argue that the ‘transfer’-oriented practices are those with the highest likelihood of bringing added value. However, we believe that limiting the analysis to these practices could lead to interesting cases being overlooked. There are also projects that have still not reached the transfer stage. To avoid this, the following aspects will be taken into account when identifying the particularly interesting practices:

- The good practice has been highlighted by the partnership itself, e.g. in presentations, etc.
- The good practice is mentioned by interviewees involved in the capitalisation analysis (mainly Lead Partner representatives)
- There is an apparent high interest from a large number of project partners (or others) in a specific good practice. This can be determined based on interviews with lead partners but also from project documents and evaluation reports.

The actual transfer of practices does not only depend on the expressed interest of a region: other aspects must also be considered when discussing which good practices are of particular interest. These aspects are related to the actual transfer success of a good practice and include:

1. **Specialisation**

   Specialisation refers both to the thematic specialisation of a practice and the regional context in which it functions. In short, this means that in order to be transferable, a practice should normally be focused in nature and not a general approach to a problem.

2. **Reproducibility**

   “Reproducibility is the ability of the transferee partner to obtain similar performance shown by the practice in the transferor partner region after implementation.” (ERMIS Charter of Best practice). This aspect is very much context-dependent: a region taking up a practice must not only make sure that the mechanisms are in place to actually deliver the practice but also that other regional framework conditions are favourable.

3. **Effects**

   The extent to which implementation is likely to be conducive to positive impacts on the regional innovation system.

This means that the analysis must take account of both the interest of beneficiaries in a specific good practice as well as the actual and practical possibility of transferring it to other regions.
2 Policy context

2.1 Introduction

A straightforward way of understanding an innovation system is to view it as a system in which those who generate new knowledge are efficiently connected to those who can benefit from its use. Then, by going into more detail, one can see that these connections are established through a set of instruments, institutional settings and infrastructure that accelerate knowledge flows and enable innovation. Thus, a successful innovation system (regional or national) is characterised by having:

- Institutions such as universities or research institutes that are linked to each other and to a strong private business sector.
- Instruments such as public-financing processes to elicit the largest possible private sector Research and Development (R&D) investment response, fiscal and financial incentives.
- Incentives such as a proper intellectual property rights (IPR) regime and strong competition in product and input markets, as well as the proper linkages among the latter.

While the individual actors of an innovation system may not think of themselves as constituents of a ‘system’, viewed from an outside theoretical perspective, this notion nevertheless proves beneficial. The concept of an innovation system provides a tool for analysing regional specificities in the innovation process in a globalised economy, as well as a guide for policy formulation. It highlights interactions and interfaces between various actors and the workings of the system as a whole rather than the performance of its individual components.

The regional specificities are highly relevant when regional governments, in their development of smart specialisation strategies, try to identify which high-value added activities offer the best chance of strengthening the region’s competitiveness. Here, the idea of a regional innovation system comes into play, since smart specialisation involves businesses, research centres and universities working together to identify a region’s most promising areas of specialisation, but also the weaknesses that hamper innovation.

The European Commission provides some key ideas as to what could make up the main elements of such specialisation strategies, elements that also fit well with the innovation system concept. For example, supporting the development of clusters made up of interacting companies that share competences and infrastructure can create an environment to foster competitiveness and drive innovation. Ensuring sustained knowledge creation through lifelong learning in research and innovation, and instilling an entrepreneurial mind-set in students are vital to developing a region’s innovation capabilities. Linked to this is the necessity of an attractive regional research infrastructure in a knowledge-based innovation system. As for the public sector, its role is not only one of policymaking but also covers direct involvement with the businesses in the innovation system, in particular. Through public procurement, the public sector can bear the role as risk taker and act as a lead customer, thereby functioning as a driver for innovation helping innovative firms speed up their entry into the market.

Thus, the concept of a regional innovation system used to model the actions and interactions of universities, businesses and public actors is also useful for strategic work, since it provides structure to which strategic elements are linked.

2.2 The European innovation scene

Over the past decades, the European Commission has developed and implemented a range of programmes and initiatives to support innovation in the member states and lately, to an increasing extent, also in the regions. The European efforts have been framed by strategic policy frameworks. From 2000 to 2010, this framework was called the Lisbon agenda. This policy framework was heavily based on the economic concepts of innovation as the motor for economic change (based on the writings of Joseph Schumpeter), the ‘Learning economy’ as well as social and environmental renewal. Although most of the ambitious goals of the Lisbon agenda were not attained, it formed the basis for the present

---

10 COM (2010)553 ‘Regional policy contributing to smart growth in Europe 2020’
policy framework and framework programmes. In the remaining sections of this chapter, we briefly outline what we believe are the most important initiatives and programmes for the topic of innovation systems at European level.

2.2.1 Policy and strategy

The European Commission’s growth strategy for the period 2010-2020 is called Europe 2020. It aims at delivering more jobs and better lives, thereby achieving a more sustainable future by concentrating on the long-term effects instead of the short ones. The strategy is about offering the European Union a sustainable sense of direction by working towards delivering smart, sustainable and inclusive growth, which would involve effectively investing in education, research and development, and climate issues, moving towards a low-carbon society, and emphasising job creation and poverty reduction. Seven flagship initiatives have been designed that commit both the EU and the Members States to keeping the Europe 2020 strategy direction.

The flagship initiative of the European Commission for developing and delivering innovation policies is the Innovation Union. The Innovation Union is part of the Europe 2020 Strategy and comprises over 30 action points, some of which are of specific relevance for regional innovation systems. These points include developing knowledge and skills through the modernisation of education and training systems and by encouraging innovative companies to improve the interoperability of products and innovative systems. Furthermore, in pursuing increasing social and territorial cohesion, structural funds are to target innovation activities, e.g. through financing innovation systems and smart specialisation strategies. A ground-breaking proposal within the Innovation Union is the European Innovation Partnerships, which promotes collaboration between regional, national and European stakeholders involved throughout the chain of research and innovation.

2.2.2 Framework programmes

The European Union possesses five key funding opportunities to support research and innovation: 1) the Research Framework Programme, 2) the Competitiveness and Innovation Framework Programme (and its successor COSME), 3) the Structural Funds and 4) the Cohesion Fund, as well as 5); the European Agricultural Fund for Rural Development and the European Fisheries Fund. Some of these programmes are outlined below, both concluded programmes and those running at the time of writing (2014). As a majority of the projects we analysed carried out their activities while the now concluded programmes were still running, it is of benefit to include these programmes as well.

The Seventh Framework Programme

The Seventh Framework Programme (FP7) was one of the key pillars for the European Research Area (ERA), which brings all research-related EU funding aimed at growth, competitiveness and employment together under one roof. The objectives were grouped under four categories: Cooperation, Ideas, People and Capacities, working together to promote European scientific excellence. The programme started in 2007 and lasted until 2013. The overall budget was just over €50 billion, which was granted to finance research, technological development and demonstration projects.

The category ‘Capacities’ was of distinct interest for innovation and innovation systems. This is mainly because it was designed to enhance and ensure the optimal use of knowledge, research and innovation capacities. The programme embraced seven specific knowledge areas, including Research infrastructures, Research for the benefit of SMEs, Regions of knowledge and support for regional research-driven clusters, Research potential of Convergence Regions, Science in society, and Support to the coherent development of research policies and International cooperation.

Horizon 2020

The next Framework Programme implementing the Innovation Union flagship initiative is called Horizon 2020. Running from 2014 to 2020, with an overall budget of €80 billion, it will combine all former research and innovation funding of the research framework programmes, the innovation related activities of the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT).

Much like FP7, the programme’s objectives are grouped under three categories, or pillars: Excellent Science, Industrial Leadership, and Societal Challenges. Topics of interest for innovation and innovation systems can be found across the three pillars, especially in the first two. The objectives of Excellent
Science include support to collaborative research in future and emerging technologies, and development of European research infrastructure. Industrial Leadership, apart from strictly technology-focused objectives, contains efforts aimed at access to risk finance for R&D and innovation-driven companies and projects, and support for innovation in SMEs. Furthermore, Horizon 2020 contains measures for spreading excellence and widening participation across member states of different levels of performance concerning research and innovation. Also, there is the aim to build effective cooperation between science and society, e.g. in terms of opening up further research and innovation activities.

**Competitiveness and Innovation Framework Programme (CIP)**

The Competitiveness and Innovation Framework Programme (CIP) supported innovation activities targeting small and medium sized enterprises (SMEs). The programme, which ran from 2007 to 2013 encouraged and provided support at the sector level and promoted the use of information and communication technologies (ICT). The programme had an overall budget of €3.6 billion and was divided into three operational programmes that each had its specific objective, but all of them aimed at contributing to the innovative competitiveness of their specific area, such as ICT or sustainable energy.

The different operational programmes 1) The Entrepreneurship and Innovation Programme (EIP), 2) The Information Communication Technologies Policy Support Programme (ICT-PSP) and 3) The Intelligent Energy Europe Programme (IEE) supported and financed projects dealing with best practices, pilot actions, networking etc. involving both public and private organisations.

**COSME**

The successor of CIP, COSME, is the new programme for the Competitiveness of enterprises and SMEs which will run from 2014 to 2020 with a planned budget of €2.3 billion. The programme supports SMEs in four different areas: 1) Better access to finance for SMEs – the budget will fund guarantees and counter-guarantees for financial intermediaries, as well as venture capital for growing SMEs; 2) Access to markets, through the services of the Enterprise Europe Network; 3) Supporting entrepreneurs, e.g. through entrepreneurship education and outreach to specific groups; 4) More favourable conditions for business creation and growth, e.g. through reduction of administrative and regulatory burden, and exchange of best practices for improving SMEs policy.

### 2.2.3 Programmes and Initiatives

**PRO INNO Europe**

Financed by The Competitiveness and Innovation Framework Programme (CIP) the PRO INNO Europe was an innovation policy initiative of the Directorate-General for Enterprise and Industry support running from 2006 to 2012. Pro Inno Europe mainly analysed and benchmarked regional & national innovation performance and innovation trends. In this respect, it was part of the overall policy coordination of the Commission with the Member States in the field of innovation and was intended to become the focal point of innovation policy analysis and development throughout Europe. PRO INNO was based on three pillars that accommodated eight modules, together forming a wider integrated policy approach intended to develop new and better innovation policies founded on sound policy analysis, reliable statistics as well as on cooperation between policymakers and principal actors.

**Europe Innova**

Running from 2006 to 2012, Europe INNOVA, also financed through CIP, was a laboratory for the development and testing of new tools and instruments in support of innovation. The focus was on helping enterprises to innovate faster and better but also on bringing together public and private innovation support providers such as innovation agencies, technology transfer offices, business incubators, financing intermediaries, cluster organizations, etc.

Europe INNOVA was designed to identify and analyse the drivers and barriers to innovation within specific sectors and thereby lead to sound and targeted support policy measures. Its sector-based approach reinforced cooperation between business clusters, finance and standardisation practitioners in Europe through the establishment of networks, i.e. learning platforms for exchanging experiences, best practices and knowledge to better serve SMEs.
Regions of Knowledge

The Regions of Knowledge initiative in the category ‘Capacities’ in The Seventh Framework Programme (FP7) was oriented towards supporting and strengthening research potential across Europe. This was undertaken by encouraging and supporting development of the capacities for excellent research, both on local, regional and European levels. Funding was directed towards research-driven clusters, associating universities, research centres, enterprises and regional authorities. The programme budget was €126 million over the duration of FP7. Regions of Knowledge was implemented in close relationship with the EU’s regional policy and the Competitiveness and Innovation Programme (CIP). Selected project and activities incorporated: analysis, development and implementation of research agendas for regional or cross-border clusters, mentoring of regions with a less-developed research profile by highly developed ones, initiatives to improve integration and dissemination through activities such as conferences, workshops, publications, etc.

Regions for Economic Change

Regions for Economic Change is a learning platform for EU regions intended to emphasise and share good practices focusing on innovation in urban and regional development. Activities include the annual Regions for Economic Change Conference and RegioStars Awards, a Policy Learning Database and interregional fast track networks that test innovative ideas and initiate the transfer to policy and programmes. It supports the EU policy objectives of smart, sustainable and inclusive growth, as outlined in the EU’s 2020 strategy and funded by programmes such as INTERREG IVC and URBACT II.

To help achieve these aims, Regions for Economic Change introduces a thematic scheme in which one of the themes: ‘Improving the capacity of regions for research and innovation’ is of special interest. Within this theme, support is provided to projects that deal with how to create efficient regional innovation systems by analysing research capacities, industrial and employment structure, human resources, infrastructure (including virtual infrastructure), financial markets, education and training facilities, business and innovation support services, etc.

Research and Innovation Strategies for Smart Specialisation (RIS) – Smart Specialisation Strategies

The S³ Platform (S³P) supports Member States and regions to develop, implement, and review Research and Innovation Strategies for Smart Specialisation (RIS³). The S³P was established in 2011 and contributes to smart growth by providing and supplying information, methodologies, expertise and advice to regional & national policy actors, as well as contributing to the academic debate on the concept of smart specialisation. Hosted by the Institute for Prospective Technological Studies (IPTS) in Seville, which is part of the European Commission’s Joint Research Centre, S³P contains three parts: 1) project management and a research team at the IPTS, 2) a Steering Team bringing together representatives from several Commission Services and 3) a Mirror Group composed of leading academics and experts in the fields of innovation and regional development, as well as representatives of different networks.

2.3 Added value of interregional co-operation for Innovation systems policies (triple helix & open innovation)

A negative effect of increasing competition for skilled workers, investments and companies could very well be that regions, in particular the more successful ones, fence off their territories from competitors leading to further fragmentation of the European ‘innovation area’. Luckily, this seems to be a quite limited problem in reality.

The success of the Innovating Regions of Europe Network (over 100 members when it closed in 2008) and the opening up of the trans-national and interregional cooperation programmes (INTERREG) to the topic of innovation in the past programming period has clearly proved that the willingness and commitment to co-operate, to share experiences and to joint action is strong among European regions.

Depending on the framework provided by the individual European programmes, regions can benefit in many different ways from interregional co-operation. In this respect, Innovation systems (triple helix & open Innovation) is a topic that is particularly suited to the sharing of policies and practices on how to

---

11 URBACT is a European exchange and learning programme (*) promoting sustainable urban development. [http://urbact.eu/](http://urbact.eu/)
foster innovation at regional level. The individual themes addressed by such policies and practices can be of quite a different nature as we will show in this report. The important insight, however, is that there is a significant learning potential embedded in interregional exchange, as facilitated by the INTERREG IVC programme; learning that will result not only in the uptake of new practices by a number of regions but also in a more profound integration of modern innovation policies better suited for enhancing the efficiency of regional innovation systems. This, in turn, will make European companies more sustainably competitive, thus improving the wellbeing of European citizens.
3  Analysis

The analysis chapter represents the main contents of this report on the capitalisation of Innovation systems (triple helix & open innovation). The chapter is divided into the individual project analysis section where detailed description, clarification and recommendations can be found and into the aggregated analysis section where the capitalisation questions and different subjects of interest are addressed. In addition to the ten ‘core’ projects directly linked to innovation system issues, we have also analysed a number of other INTERREG IVC projects. Part of these projects’ content is of interest and relevance to the innovation systems theme, and including them in the analysis serves to enrich our discussions further. The description of these projects and their good practices is more concise compared to that of the ten main projects.

3.1  Individual project analysis

3.1.1  CLIQ - Creating Local Innovation through a Quadruple Helix

Project challenges and innovation system functions addressed

CLIQ focused on the role of local authorities of medium-sized cities (50 000 – 250 000 inhabitants) in driving innovation, and how local authority policy can be strengthened to better support innovation, thereby creating jobs and growth. Its core focus is the importance of local quadruple helix partnerships between key innovation actors, i.e. universities, science & technology parks, innovation centres; business; civil society; and local and regional authorities. Particular attention was given to the involvement of citizens in innovation and innovation processes. Apart from striving to integrate innovation, entrepreneurship and internationalisation processes to improve the competitiveness of local SMEs and entrepreneurs, CLIQ sought to develop close and sustainable links between local quadruple helix partners as well as exploring and exchanging models of how to engage civil society in innovation.

In this respect, CLIQ targeted a fundamental innovation system problem primarily related to lock-in effects caused by the limitation of the dimensions of innovation addressed by the traditional stakeholders (industry, academia and public sector) involved in innovation policy development and implementation. In the view of CLIQ, the triple helix approach is not sufficient to foster innovation in modern society.

In terms of innovation system functions, CLIQ was primarily aimed at improving the creation and diffusion of knowledge created within public systems to SMEs and also at strengthening the entrepreneurship capabilities of cities/regions. For this purpose, CLIQ produced CLIQBoost, a baseline inter-regional research report functioning as a reference document for the CLIQ project partners. Furthermore, inter-regional exchange in the form of study visits, master classes, round tables and network meetings have been organised and pilot projects started. In addition, CLIQ developed the CLIQ-o-Meter self-evaluation tool for local government and innovation agencies, which can be used to assess their current system and effectiveness in supporting innovation, and the CLIQ Toolkit based on the results of the Pilot Project and exchange events, outlining ideas and examples on how to improve innovation performance and cooperation.

CLIQ contributed to improving regional innovation systems by advancing the knowledge with regard to the involvement of citizens in innovation processes.
Good practices and transfer success

Overall, CLIQ identified 60 good practices. Of these, 28 are described in a standard format available for download from the project’s website. An analysis of these good practices with regard to what policy field they address is shown by the chart. It should be noted that almost one third of the good practices taken up by CLIQ do not relate to the ‘standardised’ areas.

A highly interesting feature of CLIQ is the model for facilitating the transfer of good practice, namely pilot projects related to the question of “How can/should the actors of Quadruple Helix interact to enhance innovation in the region?” Ten out of the 16 project partners participated in a pilot. In each case, the partner focused on a quadruple helix relationship between two or three relevant actors, investigating e.g. knowledge transfer issues, academic incubation or citizen participation in the design of services. Roughly half of the CLIQ partners had good practices transferred from other partners and implemented in their own town or region.

Two particularly interesting good practices are the Sussex Innovation Centre (SINC): ‘Make Brighton Rock – engagement of civil society through social media to generate new ideas’ and City of Leeuwarden, the Netherlands: ‘Open Innovators of the Future: Combining student excellence with social responsibility’. The first example must be considered as a very interesting good practice in light of the significant acknowledgement it received from the other project partners and because it is a very good example of how a well-established institution such as the SINC has managed to renew its service portfolio and reached further entrepreneurs by integrating social media approaches. Due to the relative ease of reproducing contextual factors and other framework conditions, the feasibility of transferring the good practice to other regions should be high. There has already been a successful transfer to Cadiz, Spain.

The good practice ‘Open Innovators of the Future: Combining student excellence with social responsibility’ is a further interesting good practice verified by the project partners. In particular the way students are introduced to methods of identifying and refining ideas is considered to be highly innovative. The transfer potential is probably the highest if the methods can be introduced in master programmes or in research training.
The Sussex Innovation Centre: ‘Make Brighton Rock – engagement of civil society through social media to generate new ideas’

The aim of this pilot was to generate ideas from the citizens of Brighton on how to improve life in the city. The project used a website where contributors could submit their ideas, comment on other ideas and vote. The top 30 ideas were presented to a jury of nine judges, who selected a winner. Local media as well as social media were used to promote the project; through the involvement of citizens, previously unknown problems were highlighted and new ideas could be generated. Through the exchange process in CLIQ, the methodology was subsequently transferred and implemented in Cadiz.

City of Leeuwarden: ‘Open Innovators of the Future: Combining student excellence with social responsibility’

This pilot revolved around the challenge of achieving openness, entrepreneurship, connectivity with industry and recognition of the regional role of innovation. It showcases two different curriculum units at the local NHL University, namely the Excellence programme and the Undergraduate Entrepreneurship minor elective. Both of these rely on a process model called ‘WowPowHowNow’, a model covering the entrepreneur’s heart and feelings (Wow), ability to spot promising ideas and events in the outside world (Pow), insight into how to control unpredictability (How), and the mindset needed to be able to carry out a plan (Now). The outcome is students with professional skills and the ability to build bridges between actors representing all four pillars of the quadruple helix, as well as graduates with a strong sense of social responsibility.

Policy relevant conclusions and recommendations

- Major contributing factors to the success of the project have been the partnership itself, and the fruitful networking that the project partners have participated in.
- The leadership of the project has been pointed out by participants as an important factor, not least the supporting role of the senior management and its understanding of the local context.
- The project benefited from partners skilled in innovation support that have built a shared understanding from a Local Administration perspective, through exchange activities and benchmarking.
- The importance of successfully arranged exchange events and inclusion of the right players was highlighted.
- Knowledge of social media and the fostering of cooperation between Quadruple Helix (QH) agents at the local level were other important success factors.
- A new structure like the quadruple helix concept needs sufficient time to be successfully implemented.

3.1.2 ERMIS - Effective Reproducible Model of Innovation System

Project challenges and innovation system functions that are addressed

ERMIS focused on the innovation capacity of Small and Medium Enterprises (SMEs) and the role that these enterprises play in regional economic growth. However, the return on investments from public sector financial and technical innovation support programmes and policies to foster innovation within SMEs is often considered insufficient. As a response, the objective was to develop a governance model for Local Innovation Systems (LIS), ensuring that the competitiveness and sustainable growth of SMEs can be fostered in an effective manner. Local innovation policies supporting specific tools or instruments are generally not enough to increase SME growth and competitiveness; interaction between available support structures is more important than the individual performance of each measure.

ERMIS addressed the innovation system problem of fragmentation, both concerning the functions of the system, but also when it came to how the institutional framework is composed. In particular, lack of
coordination between the activities in the LIS, e.g. the variety of public support programmes for SME innovation, and results and synergy effects not materialising.

In terms of innovation system functions, the project focused on knowledge development and diffusion. In line with these objectives, an initial study of the innovation systems, including how these systems leverage SME performance was carried out in the project partners’ countries. This review in turn served as the basis for a context-specific SWOT analysis methodology. The SWOT tool has been used to identify what best practices could contribute to a region’s strengths, or what best practices of other regions should be studied and possibly adapted as a way to remedy the weaknesses identified in the SWOT analysis. Thus the SWOT instrument shows the relevance and the effectiveness of regional policy actions in enhancing the innovative capacities of local SMEs. The outcome of this activity was a comprehensive analytical framework with a description of the different steps to follow so as to achieve a conclusion, i.e. the actual SWOT analysis.

ERMIS highlighted the importance of relevant policy actions and the interaction of supporting organisations to foster innovation within SMEs.

Good practices and transfer success

In ERMIS, the label good practice, is used for a practice that can be shown to bring value to a territory, whether it is in terms of more jobs, increase in business, strengthened innovation, improved infrastructure, etc. Also, to count as a good practice, one must be able to link the particular practice to a minimum of one of the dimensions in the SWOT analysis of both the originating region and the transferes. A total of 25 good practices were identified, along with an action plan for each good practice outlining the added value for a territory.

Among the 25 best practices proposed for transfer by partners, no fewer than 19 have actually been transferred. In this context, transfer refers to the transfer of know-how upon initial interest from a receiving region in possibly implementing a certain practice; i.e. a transferred practice may not always have been implemented. 68 visits were organised designed to facilitate transfers by letting potential transferes gain a deeper understanding of the specific practice and its potential implementation. Two good practices where the transfer has been described are French Riviera Chamber of Commerce: ECOBIZ Collaborative Platform, targeting SMEs and the focus of considerable interest from other project partners, and the Instituto Pedro Nunes Incubator: IPN Model, promoting low-level cooperation of SMEs with local R&D centres.
Policy relevant conclusions and recommendations

The project had the right target group in mind. The model created can be applied by any kind of policymaker aiming to develop an innovation strategy - the rules for strategy development were created with policymakers in mind, not experts.

The adaptability of a practice is related to its level of specificity, how specific to a certain industry context or application the good practice is. This can be determined by assessing how dependent a successful implementation is on a) a number of elements and/or on a sequence of actions that cannot be changed or b) the content and the mechanism that cannot be adjusted to different local contexts.

The ability for a transferee partner to obtain similar performance to the partner region where the good practice originates is described as reproducibility. The level of reproducibility depends on a) the complexity of the implementation, determined by e.g. reliance on certain infrastructure or the number of stakeholders and institutions involved in the process; b) cost of implementation affected by infrastructure and human capital.

A Positive impact of the good practice on the local innovation system is dependent on a) diffusion of the practice, i.e. the number of companies, institutions and people using the practice, which in turn is affected by the specificity b) the practice’s effectiveness in relation to the initial objectives.
The likelihood of a successful good practice transfer increases when there are synergies with existing practices.

3.1.3 EURIS - European Collaborative and Open Regional Innovation Strategies

Project challenges and innovation system functions addressed

The focus of the EURIS project was to contribute to the opening up of innovation ecosystems of EU regions. Open Innovation accelerates the exchange of knowledge and technology transfer between innovation stakeholders such as research centres and companies, as well as among EU Regions. Such transfer contributes to the creation of new business opportunities in both traditional and new emergent sectors. This is necessary for the EU to become more competitive in a global economy. The project focused on five policy areas (Networking and collaboration; Human capital and entrepreneurship culture; IP management and technology markets; Access to finance; and Knowledge, science and technology base.) considered to positively affect collaboration and Open Innovation frameworks, and to be the most influential in shaping regional innovation ecosystems’ attractiveness for the development of consistent Open Innovation practices by companies and innovation actors.

EURIS primarily addressed the innovation system problem of lock-in effects hampering change and adaptation to new ways of looking at innovation. Moving from the traditional ‘closed’ concept of innovation towards ‘Open Innovation puts demands on co-opetition (cooperation/competition) and experimentation between companies, universities, research centres, consumers and public authorities. Open innovation is a broad subject, as evidenced by the five different policy areas addressed. EURIS focused on the development and diffusion of knowledge. Within the project, there have been six inter-regional sub-projects addressing a wide range of Open Innovation-related policy areas, with particular focus on companies and SMEs.

EURIS’ unique contribution to improving regional innovation systems has been the application of Open Innovation thinking to regional innovation strategies.

Good practices and transfer success

Within the five policy areas selected by EURIS, the partners identified good practices in their own regions and at national level. Overall, 35 good practices were shortlisted and studied in more detail through desk research and on-site visits, and have been described in a guide document. Through an evaluation considering the impact and results of the assessed good practices, a total of 18 best practices were chosen.

At the time of writing (spring 2014) there have not been any transfers of good practices, but regional policy recommendations have been produced. Designed as a mini-programme, EURIS has not had the time to focus on the transfer of good practices. However, there has been enough time for the development of a call for sub-programmes, and the implementation of these sub-programmes.

Two interesting good practices are Aalto University: Aalto Design Factory, providing a collaboration environment for students, researchers and business practitioners within design, and Stuttgart region: ‘Competence Centres’ showing how cross-sectoral activities and the integration of triple helix actors can be fostered.
Policy relevant conclusions and recommendations

General success factors identified for the good practices include the presence of soft support structures, e.g. coordinators, networks and intermediaries.

Important success factors highlighted in the Stuttgart region’s good practice are the importance of having qualified staff and management resources within the network.

Also, inter-partner communication is essential, but this communication also needs to be well moderated.

Lastly, institutionalising the cooperative network ensures that a financial contribution is received from all the partners involved.

3.1.4 INNOPOLIS - Innovation Policy in University City Regions

Project challenges and innovation system functions addressed

The participating partners of INNOPOLIS all represented university city-regions, i.e. cities with at least three multi-departmental universities and at least 60,000 students. Exploiting the innovative potential of universities, and facilitating the co-creation of knowledge between academia and enterprises are important for regions seeking to increase their competitiveness and economic growth. The goal of INNOPOLIS was to identify regional best policy practices related to how to achieve knowledge exchange between universities and enterprises. Partners in the project included regions that have achieved such exchange, but also regions that have met with obstacles and where regional policy has been less successful in stimulating the dissemination of knowledge.
INNOPOLIS focused on the problem of a lack of resources within the innovation system, as a result of actors within the system not focusing resources where they are most needed, or of the insufficient quality of the services offered.

The primary innovation system function addressed by the project was the creation of knowledge and how knowledge and information can be exchanged between different members of the innovation system, in this case between universities and enterprises. INNOPOLIS achieved this by identifying cases of successful knowledge exchange and examining the policy context within which the successful cases take place. For this purpose, an audit of Knowledge Exchange (KE) practices was performed in the project, resulting in the production of ten best practice cases in a multimedia format. Partners also researched best policy practices (BPP), both in the participating regions and through worldwide benchmarking. Each region performed an audit of their BPPs, and cases were selected on the basis of their effectiveness in enhancing KE, and a collection of four cases, one from each region, was produced to form the basis of the BPP guide.

INNOPOLIS had an innovative approach to university-enterprise interaction, focusing on two-directional knowledge exchange instead of the commonly applied unidirectional knowledge transfer approach.

Good practices and transfer success

The INNOPOLIS project documented over 25 ‘Best Policy Practices’ that promote Knowledge Exchange. Twenty of these are taken from the university-city regions of its four partner cities (five from each region), and these are supported by a further five international examples. The 12 shown on the pie chart consist of five from Manchester and Helsinki respectively, and two from Thessaloniki. One good practice was transferred, and is described in greater detail below. Transfers as such were not a specific deliverable, but instead most of the project’s benefits consisted in knowledge and experience exchange between partners.

An interesting feature of INNOPOLIS was the development of a Policy Transfer Methodology, aimed at providing decision-makers with a structured framework when assessing the likelihood of successful policy transfers between regions. The criteria of policy alignment, social context, business context, and the Higher Education Institutional context are applied to determine the likelihood of success and potential stumbling blocks to the policy transfer. During one of the simulation exercises, the methodology was applied in a case assessing the possibility and suitability of transferring Manchester’s ‘Knowledge Transfer Partnership’ good practice to Thessaloniki in Greece.

Success stories from the INNOPOLIS project include for example the appointment of an innovation officer in the Lodz region, Poland. The inspiration for this came from the Helsinki region, the practice was implemented in 2012. Inspiration was also drawn from other sources outside the project partners; Manchester developed approaches for maximising the economic potential and supporting the university, modelled on a practice from San Francisco.

Here, two interesting good practices are highlighted. The ‘Knowledge Transfer Partnerships’ from the Greater area of Manchester, and the ‘Innovation Officer’ from Helsinki University mentioned above. The former matches recent graduates with businesses for mutual benefits, while the latter is intended to help researchers to commercialise their ideas and research results.
Investing in human resources within R&D can clearly act as an ‘igniting spark’ for innovative processes, as these resources are important for the overall innovation capacities.

Best practices for knowledge exchange between business and academia should be promoted among companies to get them to participate to a higher degree; very often, universities are the initiating partner in the exchange practices.

Successful knowledge exchange practices are often characterised by third party involvement in addition to the business and scientific partners. The cooperation can advance with the support of intermediary bodies, while the need for a third party gradually diminishes. Thus, less advanced regions stand to benefit the most from additional partner involvement.

In regions where cooperation between business and academia is less advanced, actors from both sides tend to view such cooperation as risky. The effective promotion of successful cases is necessary as an educational instrument to disseminate knowledge and mitigate the hesitance towards cooperation.

What is achievable in a project like INNOPOLIS is highly reliant on what level and mandate the partners represent, e.g., if it is in their power to shape policies and strategies. Also, transfers in particular are affected by the differences in context between regions, concerning the level of bureaucracy, etc. Transfers cannot be expected to be ‘1:1’ transfers.
3.1.5 INOLINK - Connecting the territory through the innovation network

Project challenges and innovation system functions addressed

The INOLINK project focused on how regional policies and practices should be designed in order to promote the diffusion of innovation. Some areas and companies are far more innovative than others, most European firms, generally SMEs, never undertake innovation. The aim of INOLINK was to improve the knowledge of the needs for innovation services in peripheral areas, and of instruments and policies designed to respond to those needs; increased awareness among actors in the regional innovation systems of the demand and supply of innovation services from the other actors in the system and of the potential for cooperation and collaboration; and strengthened competence in public institutions regarding the tools, methods and policies for the regional diffusion of innovation, entrepreneurship and technology. The INOLINK project also took on one of Europe’s key competitiveness problems, the inability of EU economies to take full advantage of the scientific output, ideas and knowledge that it generates, the so-called ‘European paradox’.

INOLINK addressed the fundamental innovation system problem related to fragmentation in the system, caused by a lack of coordination between the different actors; but also the problem of a lack of resources in the system, in this case the low level of innovation in certain areas.

Looking at the innovation system functions, INOLINK primarily aimed to improve the diffusion of knowledge within the innovation system, and to some extent the creation of system infrastructure, making actors in different areas of the system aware of each other and also of the possibilities for cooperation.

INOLINK put important focus on regional innovation system actors located in the more peripheral and backward areas, when aiming to improve the reach of policies through better connections between actors.

Good practices and transfer success

Overall, the INOLINK project presented close to 50 practices, classified according to a number of project specific themes: applied research/commercialisation of research, cluster/park management, finance, graduate retention, ideas selection, internationalisation, IP-rights, network/clusters, proposal/partnering support, technology transfer and training/qualifications; where the network/clusters and technology transfer theme were the most prominent ones with 17 and 14 good practices respectively.

Two examples of good practices to be highlighted are West Midlands, UK: ‘Technology park/CUE Ltd’, through which Coventry University runs much of its commercial, income-generating and business partnership work; and the ‘UIPP Network’ of Algarve, Portugal, which are small support units providing information and facilitating promotion of intellectual property to Portuguese companies.
Policy relevant conclusions and recommendations

- In interregional cooperation, different levels of development of innovation policies between regions does not necessarily hamper cooperation, but can prove to be an opportunity for developing innovation systems to learn from the more mature ones.

- Conclusions drawn in the project confirm that the committed involvement of the relevant stakeholders is a crucial success factor; without active participation on their part, a project like this will not succeed.

- A well-established cooperation between businesses, the public domain and the research community proves to be of great importance for a successful project outcome.

- In terms of barriers to the transfer of good practices, adaptability on the receiving region’s side is key. A number of other regional conditions are also relevant, e.g. size of companies in the region, the kind of financing measures available, the regional level of R&D investments, and not least, the level of interaction between people in knowledge sharing.
3.1.6 IPP - The Interregional Partnership Project

Project challenges and innovation system functions addressed

The IPP project aimed to improve regional innovation capacity by increasing the performance of innovation intermediaries at local and regional levels in European cooperation and innovation programmes. Innovation and regional cooperation can help regions gain in efficiency and promote mobility and cooperation among public sectors. The innovation capacity of regions and firms depends on their ability to create, diffuse and exploit knowledge from outside the region within and through their own innovation system. Public innovation intermediaries, such as business parks, innovation centres and innovation policy units at local and regional levels play an important role in increasing the level of innovation. The lack of external links and limited cooperation of innovation intermediaries at local and regional level are major obstacles to a higher rate of innovation and therefore for generating growth and employment at regional level.

In the attempt to increase the performance of innovation intermediaries and foster international cooperation between such actors, IPP addressed a fundamental innovation system problem related to lock-in effects due to actors of the regional innovation system not being part of international networks.

The innovation system functions that IPP aimed to strengthen include the development and diffusion of knowledge in terms of: knowledge transfer to SMEs and large enterprises; the internationalisation of R&D&I efforts; and resource mobilisation, where the IPP regions are in need of competitive renewable energy solutions as a complimentary resource.

IPP’s unique contribution to improving regional innovation systems was the project’s focus on the needs and possibilities that internationalisation can bring to actors.

Good practices and transfer success

There are 17 best practice examples described in the IPP information material. All of these 17 practices can be categorised as focusing on the internationalisation aspects. Within the IPP project several problem areas were addressed, and for each problem area, one or more instruments were developed. These instruments are each in turn illustrated with at least one example of a best practice. During the project, two good practices were transferred; these are described below. The project noticed that transfer according to the terms set by the EU was difficult to achieve, mainly due to regions being too different in terms of their organisation.

In addition to the best practices, an interesting feature of IPP is the two pilot projects carried out. The first was entitled ‘EU Funds Advisory Service Agencies’, which had the objectives of optimising networking among the agencies themselves and exchanging know-how on consortium-building and partner search. For this purpose, the ‘Match Making Matrix’ instrument was used. The matrix aids the match-making process by gathering information about the different stakeholders, their strength and experiences. The second pilot project, entitled ‘Internationalisation Strategies for Local Authorities’, emphasised the benefits of an international approach. Within this project, an eight-step programme was developed that describes the steps in an internationalisation process for municipalities. Two interesting good practices, which were also transferred, from the project are Saxony-Anhalt, Germany: ‘Saxony-Anhalt Interregional and Paterna, Italy: ’City marketing strategy – City of Business’ respectively. The former lowers the entry barriers for local actors to participate in interregional cooperation, while the latter
provides ideas on differentiation and the international promotion of a municipality by highlighting the favourable location factors for business.

*Saxony-Anhalt: ‘Saxony-Anhalt Interregional’*

The programme, which was initiated in 2008, supports interregional cooperation for municipalities and other public bodies and organisations working with at least one partner from another member state. S-A Interregional addresses the complicated application procedures for EU programmes which can act as a barrier for local organisations to apply, thereby allowing less experienced organisations to gain experience in interregional cooperation and project management. The programme uses funding from the European Development Fund and European Social Fund, all expenditures directly related to the project can be financed. A large variety of topics can be financed and the programme allows flexibility in regard to the rate of co-financing. It does require close relationships with partners from other member states, since they need to fund their own regions involved in the cooperation.

This good practice was successfully transferred to the Latvian State Regional Development Agency (SRDA). The fact that the transferee region was a national-level actor was one of the key success factors. The involvement of decision-makers is considered crucial for all transfers; higher administration must be involved if policy would be transferred.

*Paterna: ‘City marketing strategy – City of Business’*

The ‘City of Business’ strategy is a branding scheme aimed towards national and international investors, business tourism, and to ‘show off’ Paterna as an excellent location for investment and creative activity. Locally, actors such as the City Council along with industry, trade, catering and hospitality located in the municipality are involved. A common, unifying brand has been created for the participating stakeholders to use in external communication. The goal is to achieve increased competitiveness compared to other regions and territories on a global level, thereby promoting local SMEs internationally and encouraging job creation.

This good practice was successfully transferred to both Magdeburg in Germany and Daugavpils in Latvia. Success factors identified by the originating region include creating a ‘favourable environment’ for territorial development and establishing a new business culture through public-private collaboration and local innovation capacity. Furthermore, city leaders must participate as active agents and integrate their individual efforts in a common process. The Strategy as a whole must be coordinated with other objectives, such as those brought forward in e.g. development plans.

**Policy relevant conclusions and recommendations**

- Internationalisation strategies should include a system of specific targets and benchmarks to obtain a realistic view of the necessary task and to define clear indicators to measure the success of the policy.
- Internationalisation at regional level should involve a holistic strategy taking into account the governmental level, the innovation intermediaries, business associations, local and regional agencies, as well as research and development facilities, innovation centres and most importantly the wider business and research environment.
- It is important for prospective participants to make an inventory of their own goals and what they wish to learn.
- It is crucial that the participants think about what specific results they want and identify both the weaknesses as well as the strengths in their environment at local, regional and national level.
- Highly committed participation is important in order to get the most out of the pilot cases.
Partners, especially smaller regions, from countries with highly centralised decision-making, have a difficult time achieving successful transfers.

3.1.7 KNOW-HUB - Enhancing the regional competences in strategic management of innovation policies

Project challenges and innovation system functions addressed

KNOW-HUB is focused on the importance of the ‘how-competence’ in the strategic management of innovation policies. The lack of adequate implementation know-how in European regions has a negative impact on the results of, for example, Structural Funds operations. However well the strategies developed specify the objectives which are to be achieved, they often fail to be fully implemented. KNOW-HUB addresses this lack of know-how and seeks to overcome the shortage of knowledge, skills and experience in European regions, thereby helping the regions to help their respective economies to develop and gain competitive advantages. For this purpose, the project emphasises two themes: smart specialisation strategies and policies as well as effective instruments for delivering innovation policies.

In its efforts to strengthen regions’ capabilities in policymaking and implementation, KNOW-HUB addresses the innovation system challenge of lacking resources.

KNOW-HUB aims to provide support and insight to regional policymakers in general and their capabilities to design and implement structural funds programmes in particular. KNOW-HUB strives to achieve this by collecting, integrating and communicating experience (partly in the form of toolboxes and good practice guides) for regional governance.

KNOW-HUB’s unique contribution to improving regional innovation systems lies in its approach of focusing on the skills of regional policymakers (also in the field of ensuring the effective delivery of policies).

Good practices and transfer success

Within the KNOW-HUB project, about 30 good practices have been identified by peer reviews, 15 of these are documented at the time of writing (spring 2014). A majority have been labelled as ‘Other’, however it is worth noting that some of these good practices cover several policy areas. According to the project, transfers are taking place, but they are not 1:1 transfers; all partners are designing their own practices. Also, the transfer of good practices is not necessarily an aim during the project, but rather afterwards. The good practices generally take a holistic system view, thus ensuring relevance, a focus on delivery and critical mass. Two of the good practices most discussed among the project partners are the Nord-Pas de Calais, France: ‘ASTRIDE online platform’, an online tool and database and the Castilla y León, Spain: ‘T-CUE Project’, which uses Knowledge Transfer Offices to improve university-business collaboration.
Policy relevant conclusions and recommendations

The KNOW-HUB project is still running (until December 2014) and therefore the conclusions and recommendations put forward are primarily founded on our experiences of comparable past initiatives. Based on such experiences, our recommendations are:

- Ensure that policymakers are motivated to further develop their skills and make use of new tools and methodologies. Formal training by consultants or trainers is not likely to be appealing. Instead, one should design mutual learning platforms where policymakers can learn with (not just from) peers. Such platforms or arenas should be professionally facilitated.

- Raise policymakers’ awareness of the necessity to achieve impact. A good outline of the causal chains from policy to visible success (e.g. jobs created) will motivate and enable policymakers to plan for implementation early on, by, for example, making use of triple-helix foresight processes to support definition and the implementation of policies. Furthermore, we recommend strengthening all dimensions of impact assessment (ex-ante and ex-post) and to plan for policy adoptions and sanctioning incentives depending on the impact achieved.

- It is important to create a strong innovation system identity, which implies that all members should be aware that they are members and representatives of the system (and not one saying I am from cluster A, a second one saying I am from Municipality B, a third saying I am from region C etc.). Such an identity boosts visibility and attractiveness for, for example, external investors and people considering relocating into the region. Also, it provides image support for all types of export activities.

Nord-Pas de Calais: ‘ASTRIDE online platform’

Designed by Nord France Innovation Développement, ASTRIDE is a collaborative online tool and database used to coordinate the J’innove network of regional innovation stakeholders. The platform provides the network members with a number of support tools such as: a database of the region’s high potential SMEs; information on what activities the support organisation carries out with particular SMEs; company information relating to IP and financial data, participation in innovation initiatives, and innovative potential as assessed by the Innoscope methodology; and a platform for collaborative work. The platform has 3 300 users that have access to 2 000 shared documents.

Castilla y León: ‘T-CUE Project’

The project is part of the University-Business Strategy of Castilla y León, which in turn is an essential component of the Regional Innovation Strategy. Launched in 2008, the project aims to facilitate interaction between universities and business, mainly by establishing professional Knowledge Transfer Offices (KTOs) at the universities. Furthermore, the project strives to align the university science and technology offer with the needs of the region’s business sector. Also, the universities of the region should increase their registration and commercialisation of intellectual property rights, as well as spin off more technology-based companies.

The success of this practice depends on the pre-existence of Knowledge Transfer Offices in the universities, or a strong commitment to create such structures; support from university governance structures is critical. For transferring this good practice to another region, the transferee is recommended to have a body in place that coordinates the activities of the Knowledge Transfer Offices.
Project challenges and innovation system functions addressed

The aim of the KNOW-MAN project was to improve policies in favour of innovative SMEs. In order for the project to reach its aims, KNOW-MAN implemented Knowledge Management instruments such as knowledge atlases, benchmarking and action reviews. These instruments were used to identify and connect regional cross-sector and cross-institutional knowledge potentials within the areas that were involved in the project. KNOW-MAN aimed to improve the competitiveness of the knowledge-based economy in Europe by linking knowledge and innovation. The problems addressed in the project are based on the observation that large parts of Europe lack the necessary conditions for knowledge-based economic activities. The focus of this project was on triple helix structures and the connection between different stakeholders in the knowledge economy; in order to create links between them. The stakeholders in the triple helix are public authorities, economic actors represented by technology parks and academic representatives.

KNOW-MAN addressed the innovation system problem related to fragmentation, where there is a lack of coordination between different activities in the RIS, and where actors representing different parts of the triple helix structure are poorly connected.

In terms of innovation system functions, KNOW-MAN primarily aimed at improving the creation and diffusion of knowledge, the creation of system infrastructure, and also at strengthening entrepreneurship capabilities in regions. To achieve this, KNOW-MAN employed instruments intended to enable participants to learn from each other’s experiences and perspectives. The Demand Analysis instrument was based on the exchange of experiences and good practices in knowledge network management (KNM) in science and technology parks and was the central part of the Demand Analysis project. Benchmarking was used to help identify weaknesses in the links between different stakeholders, i.e. between industry, academia and the public. Lastly, the Knowledge Atlas instrument provided answers to the question of who provides what kind of knowledge and where it can be found, as well as information regarding where to find business support, networking institutions, training, and academic & research organisations. The Atlas visualised the linkages between the academic, public and economic sector.

KNOW-MAN’s unique contribution was the project’s testing of different tools and methodologies for knowledge management in an innovation system context.

Good practices and transfer success

In total, 43 different good practices were identified during the KNOW-MAN project. On a general level each of the good practices addresses knowledge transfer between enterprises public authorities, technology parks and research institutes. KNOW-MAN classified its projects under four thematic categories: Human Capital, Networking, Decision-Making, and Social Infrastructure. An analysis of these good practices with regard to what innovation policy field they address is shown in the pie-chart.

Two good practices of particular interest that were transferred between regions are the Science and Technology Park Cartuja 93: ‘Working breakfasts’ and the Humboldt-Universität zu Berlin: ‘Ideas to Reality – Wiwex Course’. The first good practice is an example of how to create an interface between different actors, with relative ease. This provides an opportunity for partners to present projects or discuss other activities with a multitude of participants. The Wiwex course provides an excellent opportunity for students interested in starting a business or writing a business plan to receive help and
guidance. The focus is on how to apply theoretical knowledge in practice. The course also serves as a platform where the students can find partners for spin-off projects.

**Science and Technology Park Cartuja 93: ‘Working breakfasts’**

‘Working breakfasts’ was developed in Seville, Spain. It is to be transferred in the form of a ‘recipe book’ that brings together and compares several different regional approaches. The core of the project is regular meetings among companies, research centres or other organisations at the Science and Technology Park. During these meetings, a project can be presented or other activities can take place. The participants involved have no common profile and can be from anywhere. The breakfast meeting gives all participants an opportunity to meet new partners, clients, suppliers or ideas for future projects. The idea of the working breakfast is described as easy, simple and cost-effective. The business breakfasts have already proved successful and have the potential to be transferred to other geographical areas.

**Humboldt-Universität zu Berlin: ‘Ideas to Reality – Wiwex Course’**

The Wiwex course is a young forum where students who are interested in starting a business or in writing a business plan can get help. The focus is how to apply theoretical knowledge in practice. The course also serves as a platform where the students can find partners for spin-off projects. The main objectives for the students is to learn how to develop a sustainable business idea of any sort (non-technology or technology-oriented). Students also learn how to assess the feasibility and quality of their business ideas, how to develop a business plan (USP, competition / market analysis, marketing etc.) and how to present their business idea to an audience, confidently, and convincingly. They also learn to overcome their inhibitions in explaining a new idea and learn new skills relating to idea creation, assessment, and development. The main message is to learn entrepreneurship ‘by doing’.

The Slovenian region of Koroška decided to transfer the practice. After working in tandem with the Humboldt-Universität and Wiwex student organization, the first successful ‘Ideas to Reality’ workshop was held in Koroška in May 2012.

**Policy relevant conclusions and recommendations**

- Successful best practices rely on preparation; having precise and well-defined goals is crucial.
- Clear and transparent communication, externally as well as internally, is of great importance, not least to ensure that stakeholders stay fully engaged and involved.
- When there is little demand for the best practice, it is a challenge to involve and engage the right people and stakeholder institutions in large enough numbers.

### 3.1.9 UNICREDS – University Collaboration in Regional Development Spaces

**Project challenges and innovation system functions addressed**

The aim of UNICREDS was to transform regions with underperforming economies into centres of research and innovation. At the centre of the project was the mitigation of factors that limit the development of peripheral areas in Europe, thus helping them to become high-value knowledge economies (such factors include areas displaying low average incomes, low skill and qualification levels, a culture of low participation in higher education, high drop-out and failure rates, predominance of micro-businesses, seasonal economies, out-migration of well qualified and young people and ageing populations. In response, support to collaborative university developments from regional and local authorities may prove successful in counteracting some of these problems. UNICREDS sought to enable the network of partners to construct a transferrable model that can link education and research with the needs of local authorities, business and communities.

The innovation system problems addressed by UNICREDS relate to a lack of resources in the regions with underperforming economies, where the necessary resources are not in place. As for functions
provided by the innovation system, UNICREDS aimed to strengthen the system infrastructure; in this case the focus was on establishing educational resources in peripheral areas.

**UNICREDS unique contribution to improving regional innovation systems was its focus on the importance and transformative power of educational institutions.**

**Good practices and transfer success**

The project has listed best practices in the following policy action areas: 1) Getting together, 2) Seeing the benefits, 3) Meaning business and 4) Aiming for excellence. A majority of the practices have been labelled as ‘Skills’. (See pie-chart)

A highly interesting good practice that demonstrates how access to higher education can be provided to regions and people is the ‘Multi-university campus’ led by the municipality of Skellefteå, Sweden. It offers a smart solution to widening access to higher education with limited investment in new infrastructure. This is beneficial for both the university in question, connecting with students otherwise out of reach, and for the local students who gain access. The University of South Bohemia’s ‘Agency of professional development’ good practice aims at complementing students’ theoretical knowledge with the necessary practical skills.

Also, after the project ended, the Bulgarian city of Pleven was interested in establishing a university. Sofia University, a partner of the project, suggested a multi-institute campus instead, based on insights from the UNICREDS project.

**Skellefteå municipality: ‘Multi-university campus’**

Many parts of Europe have no university, and few new universities are being established. This good practice aims to facilitate the establishment of universities in areas that lack higher education. The idea is that it might be possible (and easier) to open a campus instead of a brand new university. This arrangement can be beneficial both for the university and the area that sets up the campus. One main advantage for the region is that local students, who might not otherwise have entered higher education, can go to university. One main advantage for the university is that they can reach students they would not otherwise reach and that this can be done with little investment in infrastructure. There can be several universities involved in one single campus.

**University of South Bohemia: ‘Agency of professional development’**

When students graduate they have the theoretical knowledge, but can lack practical skills. This might make them less employable in the job market. In the Czech Republic, there is a programme that aims to counter this problem. The Agency of Professional Development (Agentura profesního rozvoje – APR) provides students in the Faculty of Economics, University of South Bohemia with links between the theoretical knowledge acquired during their university education and the practical skills that are essential for graduate employability in skilled jobs. In 2012, 3,500 students attended the APR Careers Centre’s international work trade fair. Several trainee programmes and graduate positions were created in the first half of the year.
Policy relevant conclusions and recommendations

- Higher education best contributes to regional economic development when it works together with the public sector and regional business.
- National policy should motivate and help universities to contribute to regional development, and it ought to be done in collaboration with regional government and businesses.
- One size does not fit all; flexibility is important to make one region's model of collaborative higher education work with the preconditions of another region.
- In the transfer of good practices, content often changes too much to still be considered the same good practice. While the methodology is the same, it is applied differently.

3.1.10 URMA – Urban-rural partnerships in Metropolitan Areas

Project challenges and innovation system functions addressed

Traditionally, there have been conflicts in quite a number of cases between an urban area and its surroundings. Typically, the neighbouring regions surrounding a metropolis often felt and acted as if they had more in common with each other than with the metropolitan area in between. The URMA project addresses this challenge and focuses on the promotion of urban-rural partnerships as a tool to strengthen the potential for innovation and the exploitation of this potential in metropolitan areas as well as their respective surrounding hinterlands. Building on the findings of a preceding project on regional disparities (called ‘Supra-Regional Partnership Northern Germany/ Hamburg Metropolitan Region’, integrated into the German Federal Government’s programme ‘Demonstration Projects of Spatial Planning’), the objective of URMA is to make use of, and eventually develop further, urban-rural cooperation schemes previously developed and tested. The ultimate aim is to establish a policy agenda for a sustainable development of metropolitan areas and their surroundings, with lasting and balanced positive effects on the competitiveness of these areas. An important aspect of the schemes applied within URMA is that urban and rural areas benefit on equal terms, neither area gains competitiveness at the expense of the other.

With this approach to urban-rural partnerships, as a new way for metropolitan areas to improve innovation capabilities through cooperation with surrounding areas, URMA can be said to address the system innovation problem of lock-in effects that are perpetuated by old structures.

As for the innovation system functions strengthened, URMA’s primary focus is on facilitating and creating synergies, in this case cooperation between urban and rural areas.

URMA’s unique contribution to improving regional innovation systems is the approach on how urban and rural areas can cooperate for mutual benefit.

Good practices and transfer success

In three regions (Hamburg, Lombardy and Twente), scientifically monitored pilot implementation studies concerning the application of urban-rural partnerships have been carried out. The focus is on validating the feasibility of the good practices. The pilot experience aims at providing learning effects for the project partners on how to develop the urban-rural partnerships. All the project partners, including those not involved in pilot implementation studies, are
tasked with identifying good practices; 12 such good practices, some of which are incorporated in the pilot studies, have been documented. These have all been categorised as ‘Other’. The identification of good examples of urban-rural partnerships is not an easy task. The project partners have developed a ‘dictionary’ to have a common ground on definitions.

**Hamburg pilot implementation**

The Hamburg pilot focuses on transnational cooperation among regions along the ‘Jutland route’, i.e. along the highway E45 between Hamburg and Gothenburg on the Swedish West coast. The pilot investigates the potentials of this geographical area, obstacles to further development, existing cooperative projects, and any common aims & objectives shared by the regions that can be built on. Secondly, the pilot looks into how more rural regions may benefit from an intensified cooperation between urban areas along the E45.

Experiences of how cross-border cooperation can create urban-rural cooperation beyond the narrower cross-border corridor have been shared with the partner from Pleven, Bulgaria, for them to apply in cooperation with Romanian counterparts.

**Lombardy region pilot implementation**

The pilot aims to formulate a definition of peri-urban areas, based on an understanding of landscape, territorial and socio-economical context; communication and exchange with stakeholders involved in discussions concerning the issues, roles and values of peri-urban areas; and analysis and synthesis of guidelines for plans and programmes. Based on the work done in the pilot, a set of ‘Guidelines for the peri-urban areas management’ will be developed. These guidelines could be integrated into the planning/programme framework and also support local and bottom-up initiatives.

Experiences of how to develop a typology and guide book for different areas to support sustainable development and avoid urban sprawl have been transferred to West Pomerania, Poland.

Also, an Internet-based platform for exchange between regional food producers and restaurants will be implemented by Dutch partners, based on an original found in Lombardy.

**Twente region pilot implementation**

The pilot implementation in Twente, the Netherlands, aims to restore the regional food chain, thereby strengthening the urban-rural relations through the acknowledgement of mutual benefits. Government, entrepreneurs, NGOs and regional schools and universities cooperate through the ‘Green Knowledge Portal Twente’ in coordinating the pilot implementation. Work is carried out in three business cases: 1) Regional food strategy – cooperation initiatives and common brand for actors of the local and regional food chains; 2) Regional food market/distribution centre – combination of food distribution centre, food store and tourist information centre located in the middle of the region; and 3) Urban farm Enschede – a modern local farm producing food for the urban area and offering practical experiences for students of different educational levels.

Based on this pilot, experience on the topic of regional food supply as a theme for urban-rural cooperation has been exchanged with the partner from Krakow, Poland.

Policy relevant conclusions and recommendations

The URMA project will finish in December 2014 and there are still more outcomes to be expected. As a result the synthesis still remains to be undertaken. The conclusions and recommendations offered here are to be viewed as informed ideas, to a large extent based upon the experts’ experience from previous work.

"Urban-rural co-operation is meaningful: A substantial number of key development issues can be better addressed jointly (or at least coordinated) by the urban and surrounding rural region rather than isolated or in competition. Cooperation between a metropolitan area and neighbouring rural areas does not only ensure critical mass but also a diversity of resources..."
and offers. A prominent example is inward investment, i.e. attracting and hosting individuals and institutions where there is a combined offer drawing on the strengths of the city and the surroundings which allows for attractive work-life packages in respect to e.g. jobs, accommodation, infrastructure incl. education and smooth transportation systems etc.).

Urban-rural cooperation demands new types of governance arrangements which are adapted to a functional understanding of regions (instead of a purely administrative one). Also, it means that specific budgets should be dedicated towards an intensified cooperation and not strictly limited to a part of the functional area only (which has sometimes been the case when identifying objective areas for structural funds).

In urban-rural cooperation, it is important to maintain a balance between the parties involved, i.e. to create mutual trust and a win-win situation so that both urban and rural parties can enjoy benefits from the cooperative arrangement.

When building urban-rural partnerships, focusing initial cooperative efforts around less complex topics can build trust between stakeholders so that it can later gradually address the more complicated areas and topics.

3.2 Analysis of additional projects

3.2.1 Cross-Innovation – Promoting Cross-Innovation in European Cities and Regions

The project at a glance

The project promotes collaborative and user-driven innovation across sectoral, organisational, technological and geographic boundaries. The focus is on policies and support measures that enable cross innovation and creative spill-overs between creative sectors and other industries. Within the project, practices are grouped into four sub-themes: ‘Smart Incentives’, innovative financing for cross-innovation; ‘Culture-based Innovation’, innovation through introduction of artistic and creative practices; ‘Brokerage’, bridge-building between sectors; and ‘Spatial Cross-Collaboration’, services offered to companies in co-working spaces, incubators, fab-labs, science parks and to local clusters.

A total of 46 good practices across the four sub-themes are presented by the project. These are of varying scope and with varying relevance from an Innovation systems perspective. One good practice we believe could spark an interest is the ‘EnLabs’ from Rome, which focuses on building an ecosystem involving start-ups, universities, corporations, mentors and advisors, entrepreneurs, business angels, and venture capital companies. ‘EnLabs’ encourages an open environment in support of sharing and dialogue among the different types of participants. This would typically be beneficial for open innovation processes.

3.2.2 ERIK Action – Upgrading the innovation capacity of existing firms

The project at a glance

ERIK Action represents the capitalisation of an earlier ERIK project carried out by the same partnership. The project’s focus was the limited competitiveness and innovation capacity in European enterprises, and how these issues can be countered through financial and non-financial support measures. Each partner within the project developed a Regional Action Plan for the implementation of the good practices identified in previous projects.

As one of the first INTERREG IVC Capitalisation projects, the experiences gathered from transfer activities in ERIK Action could possibly be valuable sources of information and inspiration to any partner involved in a transfer of good practices. These experiences have been collected in the ERIK Action Mainstreaming Guide, which describes the process from identifying and choosing good practices all the way to implementation. The ERIK ACTION transfer methodology is highlighted as one of the project’s strong points. Briefly, the methodology consists of the formation of a transfer group linked to the chosen good practice in question. This group goes through a number of steps, starting with transfer workshops, via study visits, to staff exchanges. During the whole process, there is support from a help desk organised by the region exporting the good practice.
3.2.3 INNOHUBS – Innovation Hubs for Edge Cities

The project at a glance

This project dealt with support and promotion of local entrepreneurship and innovative SMEs in so-called ‘edge cities’, cities situated on the edge of European capitals. This was achieved through the creation of innohubs, defined by the project as “an open counselling, advising and mentoring resource staffed by local experts from the academia and business environment, available for private individuals as well as businessmen and other entrepreneurs, for commercialising ideas from start to finish, from an invention to an innovation”. The innohub concept builds on the experience of the Swedish lead partner Nacka municipality.

We find the innohub concept, catering not only to entrepreneurs in an early stage of the company creation process, but also giving support to SMEs regarding business development and internationalisation, to be useful from an innovation system perspective as well. There is a plethora of support measures and resource centre solutions aimed at this segment of the innovation system. However, given the acclaim of innohub as a vantage point for the INNOHUBS project content, this particular concept stands out. The good practices presented in the project are divided into six categories, all related to supporting innovative entrepreneurship. The ‘promoting mind-set’ category is particularly interesting, with a number of practices aimed at promoting a positive attitude towards innovation and entrepreneurship among different groups of individuals, e.g. teenagers, women, young students etc.

3.2.4 Mini Europe – Mainstreaming Innovative Instruments for SME development in Europe

The project at a glance

The focus of the Mini Europe project was to improve the infrastructure to support innovation in SMEs. This entailed enhanced cooperation and knowledge exchange between SMEs and knowledge institutes, and provision of innovation infrastructure to new entrepreneurs. In the project, six areas of intervention were defined: Clusters (weaknesses in networking), Extending Entrepreneurship, Financial Instruments (lack of funding for Innovation), Internationalization (insufficient marketing of innovation), Knowledge Transfer (lack of research capabilities) and Support for Innovation (mainly non-technological innovation, or shortages in skills to manage innovation, IPR and knowledge.

The Mid Sweden ‘Summer Design Office’ good practice is interesting in how it provides a framework for different entities of the innovation system to meet, influence each other and cooperate. Basically, a Summer Design Office consists of a group of 4-8 design students working together for seven weeks on concept-oriented assignments, primarily for an SME or a municipality. Through this, companies see the advantage that design can create in business development, while students learn to combine their skills and show their talent to real clients.

3.2.5 SMART+ - Mini-Programme for SME Innovation and Promotion of RTD

The project at a glance

SMART+ was structured as a mini-programme containing seven separate sub-projects all addressing the innovation capacity of SMEs. The programme covered the topic in a broad sense, viewing innovation capacity as a long-term objective. SMART+ focused mostly on networking and promoting cooperation; creating and managing clusters in particular is considered to be an effective way to increase the innovation capacity of SMEs.

Four of the seven sub-projects addressed ‘weaknesses in networking and cooperation with external parties’, and a particular emphasis on cluster policies concerning either cluster creation or cluster management. From an innovation systems perspective, we would like to highlight two projects in particular. First, INNOFIN focused on the seed and venture capital market, aimed to strengthen the competences of early stage finance managers and supporting public/private institutions in establishing their own financing officers. Second, regioNet is interesting for its focus on clusters and networks as successful drivers of competitiveness and innovation. The project aimed to strengthen the capacity of regional network and cluster managers as well as of economic developers, innovation consultants and SMEs in establishing and developing networks and clusters.
3.2.6 DISTRICT+ - Disseminating Innovative Strategies for Capitalisation of Targeted Good Practices

The project at a glance

The DISTRICT+ project covered the areas of clusters and business networks, SMEs innovating with universities and Technology Centres, and innovation financing. The project’s approach to this was both to identify good practices among the partners, as well as a mini-programme containing sub-projects selected through an open call. In addition, the project developed a tool to inter-connect good practices and share knowledge among project partners.

Three of the sub-projects, ‘Next Generation Science Park’, ‘Science Park Without Walls’ and ‘Improved Definition and Profiling for Sustainable Technology Park’ are of particular interest from an innovation system perspective as they focus on science and technology parks. Such parks are important members of the innovation system, and these sub-projects looked into, inter alia, how they can support regional development, their importance for the next generation of entrepreneurs, and the contribution from virtual technology parks.

3.2.7 InnoMot – Improving Regional Policies promoting and motivating non-technological Innovation in SMEs

The project at a glance

InnoMot focuses on non-technological innovation in SMEs, e.g. innovation related to business-models and marketing strategies. An important objective of the project is to improve the factors related to the motivation of SME owners and managers to implement such innovation.

The Valencia region ‘Innocamaras Programme’ targets SMEs, encouraging them to incorporate innovation in their strategies and everyday business activities. This is achieved by changing people’s attitude towards innovation, helping the implementation of an innovation culture, and supporting the formation of business networks for knowledge dissemination. We believe this good practice to be inspirational to other regions where the regional innovation system would benefit from a boost to SME innovativeness.

3.2.8 PERIA – Partnership on European Regional Innovation Agencies

The project at a glance

PERIA aimed at creating a network of Regional Innovation Agencies (RIAs) in order for them to share knowledge and experiences, as well as to develop joint guidelines and methodologies. The overall objective was to contribute to collaboration between local and regional agents. The role of RIAs is to foster a smooth functioning of the innovation system, carrying out the tasks determined by authorities in charge of regional innovation policy. The target group of RIAs are regional innovators, e.g. SMEs, but also the innovation partners of those firms, such as research institutions, training organisations, and suppliers of finance.

RIAs have an interface with other members of the innovation system and play an important role in implementing regional innovation policies. Therefore, any efforts aimed at developing the RIAs and the collaboration among themselves as well as with Regional Authorities is interesting for our analysis. Also, the PERIA project’s approach to exchange of good practices is well worth looking closer at. The participating regions worked in pairs to conduct feasibility studies on the transferability of selected practices. The pairs worked together as ‘receiving region and ‘sourcing region’, meaning that each region from these pairs would give a practice and receive a practice.
3.3 Aggregated analysis

The aggregated analysis not only addresses the capitalisation questions but provides reference to the individual project analysis, where this is beneficiary for understanding the context.

3.3.1 Common features and challenges of the projects

Problems of regional innovation systems

The generic problem-approach is helpful for establishing a baseline to identify the projects’ common features and challenges. By relating the projects’ objectives and the challenges they address to a generic problem (a project can address more than one problem), we get a clearer picture of which projects seemingly address similar issues and which are ‘outliers’.

1. Lack of resources

At the heart of INNOPOLIS is realising the potential of a greater use of university knowledge endowments at the regional level. INNOPOLIS has recognised that in supporting innovation, some local & regional authorities have access to strong knowledge endowments (the term is used to capture both physical and human capital), and some university city-regions have been particularly successful in exploiting this whilst others have not. This challenge is certainly due to problems in the governance of the regional resources for supporting innovation that are available, i.e. it is a challenge related to lack of resources at the system level but not necessarily at actor level.

UNICREDS is also related to this problem. UNICREDS addresses the issue that peripheral regions of Europe experience a particular set of limiting factors in achieving the development of high-value knowledge economies. Flexible, multi-centred, collaborative universities which link education and research with the needs of local authorities, business and communities are believed to remedy this situation. This challenge is mainly one of lacking resources in peripheral areas, this could be on system level, but is more likely to be a problem on actor level, i.e. there are simply no actors present in the areas in question.

KNOW-HUB can also be said to address challenges related to lack of resources. In this case missing resources refer to a lack of policymaking (and implementation) capability rather than organisational resources.

2. Fragmentation

Fragmentation or more precisely ‘Functional mismatch’ means, in innovation system terms, weak coordination between different activities in a regional innovation system resulting in loss of synergies of resources held by different actors.

KNOW-MAN strives to enhance networks among companies and research and technology organisations. The challenge identified is that in many European regions, technology parks were developed in order to support cluster and network initiatives, but these were not always successful. Usually, networks and linkages among enterprises as well as among R&D-facilities were established, but rarely between them. This challenge is primarily due to the problem of fragmentation within the innovation system – actors and resources are in place but are not utilised in a co-ordinated way.

ERMIS is based on the observation that most European regions maintain innovation support structures (knowledge centres, incubators, venture capital) but that the return on investments and actions to foster innovation within SMEs is generally unsatisfactory or low. The missing systemic approach to this issue, i.e. not involving the whole value chain of political and economic actors dedicated to SMEs, is considered to be the main cause of failure. This implies that ERMIS mainly addresses the problem of fragmentation of regional innovation systems.

INOLINK tackles the challenge that innovation activities are usually concentrated on a small number of innovative firms, while most European firms never innovate. Through an improved link between organisations in the regional innovation systems, the INOLINK project seeks to tackle the inability of the EU economies to take full advantage of the scientific output, ideas and knowledge that it generates. The scope of INOLINK is very wide and ambitious, and it is not
clear which problem it is mostly related to. However, as INOLINK seems to assume that the regional innovation system does offer reasonable support, but does this in a biased way, we can assume that the main problem addressed relates to fragmentation at system level.

3. **Lock-ins**

The approach taken by URMA (using urban-rural partnerships and unlocking potentials for growth within large-scale metropolitan areas) is quite different from the other projects and, it is therefore not clear which problem the project most clearly addresses. Our view is that it is nearest to lock-in effects at system level, as the assumption is that most European cities (which are relatively small in global terms) need, in order to maintain or gain global visibility, to start cooperating in new ways with their surrounding non-metropolitan and rural hinterlands.

CLIQ aims at strengthening the role of authorities in smaller cities with regard to fostering innovation and entrepreneurship based on the quadruple helix, i.e. civil society engagement in innovation. It can be argued that CLIQ therefore is about reducing fragmentation in the innovation system, but when looking more closely at the objectives of the project it, seems more focused on the problem of lock-in effects caused by a too narrow a view on how innovation processes work today.

EURIS is a further project that is difficult to classify in terms of the problem it addresses. Arguably, EURIS strongly addresses resource and fragmentation issues, however, the focus of the project is on policies and schemes promoting open innovation, and open innovation is mainly seen as a way to avoid lock-ins in innovation processes.

Finally, IPP is founded on the notion that the innovation capacity and capability of firms and regions depend on their ability to create, diffuse and exploit knowledge from outside the region through the regional innovation system. The lack of external links and limited co-operation of innovation intermediaries is a barrier to innovation and therefore for generating growth and employment at regional level.

To summarise and visualise the above the projects have been placed in a matrix as follows:

<table>
<thead>
<tr>
<th>Problems and challenges</th>
<th>System/functional dimension</th>
<th>Structural dimension (actor-focused)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of resources</td>
<td>Poor performance INNOPOLIS</td>
<td>Insufficient organisational power KNOW-HUB UNICREDs</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Functional mismatch KNOW-MAN ERMIS INOLINK</td>
<td>Structural / institutional mismatch</td>
</tr>
<tr>
<td>Lock-ins</td>
<td>Functional inertia CLIQ EURIS URMA</td>
<td>Structural inertia IPP</td>
</tr>
</tbody>
</table>
effects in the coming Structural Funds period (2014-2020) is a joint European effort to tackle this problem.\textsuperscript{12}

The second challenge receiving much attention from the projects is lock-in effects. Lock-ins can appear both on actor level and on system level. It is the system level that is of primary interest to the projects. Of particular importance is the need to enlarge the regional ‘innovation community’. In CLIQ this means involving citizens in innovation-related processes, in EURIS lock-ins are managed by fostering open innovation practices. URMA has a somewhat different but still related approach: the lock-in effects are considered to come from the lack of interaction between urban and rural parts of a region and policies to remedy this are the focus of the project.

The projects focussing on resource deficiencies are outliers, when it comes to problems addressed. Both KNOW-HUB and UNICREDS have a quite specific, but different, definition of the project challenge. KNOW-HUB aims at strengthening the capabilities of the regional authorities responsible for implementing structural funds programmes in order to align these (programmes) with effective innovation policies. UNICREDS focuses on the barriers to innovation-based growth or rural regions lacking universities or higher education facilities. INNOPOLIS also addresses resource deficiency but on a more systemic level.

In this context, IPP deserves a specific comment. The project clearly addresses lock-in effects caused by insufficient international networks of regional innovation system actors. However, the lock-ins are more an organisational issue than a system problem - hence the position of IPP in the table.

Functions of innovation systems

As outlined in chapter 1, a regional innovation system is a “…set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies.” The question remains however as to what an innovation system is actually designed to do. As outlined in the analytical framework presented in chapter 1, an innovation system can be said to perform certain functions. This means that the projects covered by this analysis also contribute to these functions, but to which ones and in what way?

First of all, it should be stated that not all functions mentioned in the analytical framework are relevant to the projects. A first analysis shows that a majority of the projects aim at improving the function ‘Knowledge development and diffusion’. See table below.

\textsuperscript{12} For more information about RIS3 please refer to http://s3platform.jrc.ec.europa.eu/home;jsessionid=1w4vR3QL7LkN6GNn16mILQdpv8iZf5h2Ppd5dShrl9z;k338NK2Ghn!-3440749871366790216417
The projects INNOPOLIS, EURIS, IPP, INOLINK, ERMIS, and KNOW-MAN are all related to the function ‘Knowledge development and diffusion’. Although the projects are quite different in terms of the challenge and problem addressed, what they all have in common is that they strive to improve, in particular, the dissemination and uptake of knowledge within the system. It is striking how often universities or other research institutions are considered as a key actor whose potential is not ultimately utilised within the regional innovation system. A further angle on this is the perceived need to create a more seamless ‘value’ chain of services and information for the good of SMEs and entrepreneurs.

A few projects do not focus on knowledge development and diffusion, however. UNICREDS is classified as targeting ‘System infrastructure creation’. The reason for this is that the project’s main aim is to bring higher education capacities to very sparsely populated areas. UNICREDS therefore enables rural and peripheral regions to offer a university education that meets the needs of local target groups who are far away from academic centres. CLIQ has many facets and can arguably also be said to aim at the function ‘Knowledge development and diffusion’. However, the more fundamental aspect of CLIQ is the ambition to widen the group of stakeholders involved in regional innovation from ‘triple helix’ actors to ‘quadruple helix’, i.e. also including citizens. In terms of the function addressed, we therefore consider CLIQ more to be addressing ‘legitimation’ than any other function.

URMA is related to ‘Facilitation/creation of synergies’. This classification is justified as URMA strives to connect different settings (urban and rural) through joint projects at a systemic level. Finally, KNOW-HUB differentiates itself from the other projects, as it focuses strongly on regional policymakers and their ability to design effective strategies within the structural funds programme. The function nearest to this is probably ‘Guidance of search/Regional governance’.

When matching the projects against functions, the spread indicatively becomes smaller than when relating the projects to perceived problems of the regional innovation systems as outlined earlier in this section. This means that the projects often strive to strengthen the same functions of the innovation systems but differ in their views on what the key challenges are that need to be addressed.

Policy challenges and approaches taken

When analysing the common features of the projects, we believe it is also valuable to review the nature of the challenges the projects have defined for themselves and the approach selected to find solutions. In general, a project can have a wider or narrower challenge and a wider or narrow approach to tackle the challenge (low focus vs. high focus). Typically, a project with a narrower challenge or approach focuses on a single, well defined type of actor or problem.

The table below illustrates our analysis of the projects with respect to the nature of the challenges addressed and the approach taken to tackle these challenges.
<table>
<thead>
<tr>
<th>Project</th>
<th>Key policy challenge defined</th>
<th>Scope of challenge</th>
<th>Approach</th>
<th>Scope of approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIQ</td>
<td>Involve citizens in processes aiming at enabling local SMEs &amp; entrepreneurs to benefit from centres / innovation facilities so that they can become more innovative and compete in the global marketplace.</td>
<td>Wide</td>
<td>Strengthening the role of authorities in smaller cities with regard to fostering innovation and entrepreneurship based on quadruple Helix, civil society engagement in innovation.</td>
<td>Wide</td>
</tr>
<tr>
<td>ERMIS</td>
<td>Most European regions benefit from innovation support structures (knowledge centres, incubators, venture capital) but the return on investments and actions carried out by territories to foster innovation within SME is generally considered as unsatisfactory or low.</td>
<td>Wide</td>
<td>Leverage effect of local innovation policies and systems through a systemic approach involving the whole value chain of political and economic actors dedicated to SMEs.</td>
<td>Wide</td>
</tr>
<tr>
<td>EURIS</td>
<td>Utilising the complementary strengths of different regions and trans-regional RTDI cooperation and Technology and Knowledge Transfer is necessary in order to manage the ongoing regional competition for funds, brains and resources as well as the increasing globalisation of RTDI.</td>
<td>Wide</td>
<td>EURIS focuses on the exchange of collaborative policies at the regional and interregional level among Innovation Stakeholders conducive to Open Innovation schemes.</td>
<td>Intermediate</td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>In supporting innovation, some regional and local authorities have access to strong knowledge endowments and some university city-regions have been particularly successful in exploiting this whilst others have not. Realising the potential impact of greater use of university knowledge endowments at the regional level is at the heart of INNOPOLIS.</td>
<td>Intermediate</td>
<td>INNOPOLIS is about identifying &amp; diffusing good policy practice from well-performing to less well-performing university city-regions.</td>
<td>Intermediate</td>
</tr>
<tr>
<td>INOLINK</td>
<td>Innovation activities are usually concentrated on a small number of innovative firms, while most European firms never innovate. Through an improved link between agents in the regional innovation systems, the INOLINK project tackles the inability of the EU economies to take full advantage of the scientific output, ideas and knowledge that they generate.</td>
<td>Wide</td>
<td>Sharing policies and practices that aim to involve a higher share of regional firms in innovation activities, through a better connection between those non-innovative firms dispersed throughout the territory and the innovation centres/agents.</td>
<td>Wide</td>
</tr>
<tr>
<td>IPP</td>
<td>The innovation capacity and capability of firms and regions depend on their ability to create, diffuse and exploit knowledge from outside the region through the regional innovation system. The lack of external links and limited co-operation of innovation intermediaries is a barrier to innovation and therefore for generating growth and employment at regional level.</td>
<td>Intermediate</td>
<td>Improve the capacity of regions for innovation by increasing the performance of innovation intermediaries in European co-operation and EU innovation programmes.</td>
<td>Intermediate</td>
</tr>
<tr>
<td>KNOW-HUB</td>
<td>There is insufficient competence in European regions in strategic management of innovation policies, which negatively impacts the effectiveness of the Structural Funds operations.</td>
<td>Intermediate</td>
<td>KNOW-HUB focuses on two themes: smart specialisation strategies and policies as well as effective innovation policy instruments.</td>
<td>Intermediate</td>
</tr>
<tr>
<td>KNOW-MAN</td>
<td>In many European regions, technology parks were developed in order to support cluster and network initiatives. These instruments were not always successful. Usually, networks and linkages among enterprises as well as among R&amp;D-facilities were established, but rarely between them.</td>
<td>Intermediate</td>
<td>KNOW-MAN addresses the issue of knowledge network management (KNM) instruments that improve the capacity of technology parks to better support industry-research linkages.</td>
<td>Intermediate</td>
</tr>
<tr>
<td>UNICREDS</td>
<td>Peripheral regions of Europe experience a particular set of limiting factors in achieving the development of high-value knowledge economies. Flexible multi-centred, collaborative universities which link education and research with the needs of local authorities, business and communities can help in reducing these factors.</td>
<td>Narrow</td>
<td>Exchange of experiences, dialogue and solution-finding to effect a change in thinking in Europe on the value to regional development of multi-centred (university), triple helix partnerships.</td>
<td>Narrow</td>
</tr>
<tr>
<td>URMA</td>
<td>As most European cities are relatively small in global terms, they need, in order to maintain or gain global visibility, to start cooperating in new ways with their surrounding non-metropolitan and rural hinterlands.</td>
<td>Wide</td>
<td>Using urban-rural partnerships and unlocking potentials for growth within large-scale metropolitan areas.</td>
<td>Wide</td>
</tr>
</tbody>
</table>
Very few projects can be characterised as ‘narrow’ (high level of focus) in terms of the challenges addressed or approaches taken, but there are exceptions. UNICREDS’ challenge is very precisely defined. The stakeholder groups are specific and the approaches to solving the challenge very precise. CLIQ addresses very broad thematic challenges but does so through a very specific approach, i.e. by involving citizens. IPP has a semi-focused challenge and approach, which probably could have been narrower if the partnership had been more homogeneous with regard to experience in managing the project topic.

A majority of projects aim at a quite broad set of challenges (low focus). However, the wide range of targeted challenges does not automatically mean that the projects take a mainstream approach. Projects such as EURIS, URMA and KNOW-MAN are original in their approaches to the challenges and also regarding the thematic areas addressed, even though the ‘essence’ of the problems are shared with many of the other projects.

### 3.3.2 Good practices in common and transferability

Altogether, the projects have identified over 500 good practices from the partner regions. After a first shortlisting as described in chapter 2, some 250 good practices were selected for an in-depth analysis and documentation in this report. Of these 250 good practices, approximately 80 are considered to be of such potential that further transfer efforts are warranted. A further transfer effort can be anything from a bilateral meeting between core stakeholders to a multi-day training exercise. The figure below visualises this funnelling process.

Before we can look closer at the good practices in the later stages of the funnel, we need to classify them according to what themes they address. Our aim has been to carry out this exercise for all good practices in the mid-range stage, i.e. for approximately 250 good practices. For this purpose, we have developed a taxonomy of themes that are addressed by the good practices (please refer to the analytical framework of chapter 1 for more information). Our analysis reveals that the good practices are distributed across the themes as follows:

---

13 We have chosen to analyse the mid-range stage as we think the number of practices present at this level is suitable for statistical purposes.
The pie chart shows that the among the specific policy areas, the most commonly addressed by the good practices are 1) Technology transfer/Research commercialisation (47), 2) Spin-offs and incubation (40) and 3) Cluster development and management (24). A large number of good practices (61) are classified under ‘Other’ for different reasons. It may be that they do not easily relate to any of the policy areas, as is the case in e.g. URMA, or that the good practices cover a combination of policy areas, making it difficult to choose one over the other.

Equally important is to note in which areas there are fewer good practice cases available. These are in particular ‘Financing/VC’ and ‘Internationalisation’ (with the exception of the IPP project’s good practices). ‘Patenting/IPR’ also has few good practice examples, but this is not surprising as it is a quite specific area with possibly less relevance to innovation systems at regional level.

Good practices

When looking at how good practices distribute over theme and project (see table below), it becomes clear that the areas mentioned not only have the highest number of good practices but also are those with the highest generic degree of interest across the projects. That is, if there is a large number of good practices in a thematic area there also tend to be many of the projects showcasing good practices in this area. The exception to this is the policy area ‘Finance/VC’ where there are relatively few practices but where these come from six different projects.

<table>
<thead>
<tr>
<th>Project</th>
<th>Technology transfer/Research commercialisation</th>
<th>Spin-offs and incubation</th>
<th>Cluster development and management</th>
<th>Finance incl. VC Funding</th>
<th>Internationalisation</th>
<th>Tech. transfer/Research commercialisation</th>
<th>SME-Academia links</th>
<th>Skills</th>
<th>Patenting/IPR</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIQ</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERMIS</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EURIS</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>12</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INOLINK</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>12</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPP</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KNOW MAN</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KNOW-HUB</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNICREDs</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URMA</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No/area</td>
<td>40</td>
<td>24</td>
<td>13</td>
<td>11</td>
<td>47</td>
<td>21</td>
<td>22</td>
<td>3</td>
<td>61</td>
<td>242</td>
<td></td>
</tr>
</tbody>
</table>
This said, it should be pointed out that most projects are quite broad insofar as they address several of the policy areas listed. In fact, many projects cover half or more of the thematic areas of the table and, consequently, the same themes are addressed by many of the projects. In this context, it should once more be pointed out that knowledge-producing organisations such as universities in their role as sources of ideas, inventions and knowledge very often play a central role in the projects.

In the later stages of their implementation, most projects are able to showcase examples of good practices that are in a ‘process of transfer’. According to interviews carried out with Lead Partner representatives, transfer processes were initiated for approximately 40 good practices. This does not mean that there were 40 good practice transfers fulfilling the requirements laid down by the INTERREG IVC programme manual but that at least bi- or tri-lateral exchange processes between project partner regions have started. There are also some examples of practices that have been transferred according to the strict definition of the INTERREG programme. The exact number of such completed transfers is difficult to map, but we estimate that it is not more than 10-15. Below are a few examples of successful transfer, more information on these practices can be found in the individual project analysis section.

<table>
<thead>
<tr>
<th>Project</th>
<th>Good practice</th>
<th>Region/organisation of origin</th>
<th>Region of reception</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIQ</td>
<td>Make Brighton Rock – engagement of civil society through social media to generate new ideas</td>
<td>Sussex Innovation Centre, UK</td>
<td>Cadiz, Spain</td>
</tr>
<tr>
<td>ERMIS</td>
<td>ECOBIZ</td>
<td>French Riviera Chamber of Commerce</td>
<td>Samos, Greece</td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>Innovation officer</td>
<td>Helsinki, Finland</td>
<td>Lodz, Poland</td>
</tr>
<tr>
<td>INOLINK</td>
<td>UIPP Network</td>
<td>Algarve, Portugal</td>
<td>Extremadura, Spain</td>
</tr>
<tr>
<td>IPP</td>
<td>City Marketing strategy</td>
<td>Paterna, Italy</td>
<td>Magdeburg, Germany and Daugavpils, Latvia</td>
</tr>
<tr>
<td>KNOW-MAN</td>
<td>Ideas to Reality – Wiwex Course</td>
<td>WIWEX GmbH Humboldt-Universität Berlin, Germany</td>
<td>Koroška, Slovenia</td>
</tr>
</tbody>
</table>

From this specific outcome of the analysis, we can draw the conclusion that the transfer of good practices is a challenging task, even if many projects share challenges, objectives and even look for similar types of good practice. There are a number of reasons for the difficulties of actually transferring a practice, and many of the projects have themselves spent quite a lot of time analysing this problem. If one assumes that the practical issues related to a transfer can be resolved (e.g. budgets, host organisation, etc.), the key barrier seems to be the absorption capacity of regional policymakers. In many cases, there is also insufficient involvement of policymakers in the projects. This was a particular problem raised frequently during the Brussels thematic workshop of November 2012. Moreover, it should be pointed out that there may be a conflict between:

a) innovativeness of a practice,

b) proven success, and

c) transferability

For example, we have observed that it is often the simpler (and often less innovative) practices that are transferred between regions whereas highly successful practices with proven impact often have developed in a specific context over a long period of time - something that tends to make quick transfer less feasible.

Although hard evidence of transfer success is somewhat limited, we can assume that a wider spread and uptake of practices could take place, now that most of the projects have closed. In this respect, it may be argued that it would be beneficial to invest additional resources in supporting wider

---

14 Most projects list more policy areas than those included in the table. However, to illustrate the fact that many projects share priorities in terms of policy areas, we have opted to list the areas targeted by at least three projects.
dissemination. As for policies addressed and influenced, this seems to be less monitored by the projects. In fact, it is probably true that a certain share of the practices that projects claim to be ‘in transfer’ is more likely to influence policies (strategies, guidelines, etc.) rather than become stand-alone regional programmes or initiatives. The actual results will be difficult to monitor though.

### 3.3.3 Same problem – different solutions

In sections 3.3.1 and 3.3.2, we illustrated that many projects shared and addressed similar problems and challenges. When looking at the good practices put forward by the projects, it is also clear that there are many similar examples of how identified problems can be addressed, not only when comparing one project with another, but also within individual projects, i.e. similar good practices can be found within a project and in different projects. This holds true in particular for themes with a high number of good practices such as ‘Cluster development & Management’, ‘Technology transfer & research commercialisation’ and ‘Incubation’. However, there are also examples of quite different approaches to tackle very similar issues. This is best outlined by comparing some good practices under the theme ‘Technology transfer and research commercialisation’, as this is a theme with both a high number of individual practices and a higher number of projects presenting good practices. This comparison is presented in the table below, which illustrates the wide variety of different good practices that can be found in this policy area.

<table>
<thead>
<tr>
<th>Project</th>
<th>Example of good practise</th>
</tr>
</thead>
</table>
| CLIQ    | Example: Services and Applications across Converged Next Generation Network the VITAL++ project.  
There are more and more computer based Peer to Peer applications today, e.g. Skype. The idea of the VITAL++ project is to converge Peer to Peer technology and IP Multimedia Subsystem technology into future next generation networks. A critical success factor in this project was scientific research. The cooperation between the stakeholders was also crucial since the development has many different technical stages. |
| ERMIS   | Example: IPN model, Instituto Pedro Nunes is the technology transfer organisation from Coimbra University.  
The IPN model addresses the issue of low levels of cooperation between SMEs and local R&D centres. IPN’s aim is a strong relationship between universities and enterprises in order to promote innovation. IPN provides support in the form of specialised services. IPN also has a business and idea incubator and provides training as well as international connections. The IPN model is a self-sustained business model and claims to generate a return on public funds. The organisation also claims to have created many jobs for the region. |
| EURIS   | Example: Technology Transfer Centre of the Technical University of Lodz.  
TTC TUL Ltd. is a company owned by the Technical University of Lodz. The idea was to help scientists to commercialise potentially valuable inventions. TTC TUL can help look for licences, negations, create spin-offs and offer other transfer-related services. |
| INNOPOLIS | Example: HE, Biomedicum Helsinki.  
Biomedicum Helsinki is a collaboration programme between basic scientists and physician scientists. The programme consists of six research programs aiming to promote collaboration between academia and the industry. The long-term goal is to become an internationally recognised institution reputed for its commercial exploitation of basic research. |
| KNOW- MAN | Example 1: Transfercafé.  
Transfercafé is a virtual platform that serves as a communication platform. This enables SMEs to make contact with potential collaborators such as academic researchers and other experts in a confidential way. The success factors for this project include the simplicity of the system and the access to experts and researchers that can assure well-directed information and discussions.  
Example 2: Joint professorship.  
This project aims to bridge the gap between universities and other research intuitions. The professor can get access to information both from the university and the other research institution. The aim is to create a win-win situation for all stakeholders involved, including the researcher, since they can only receive the professorship from a university. |
3.3.4 Particularly interesting good practices

During the analysis, we have filtered out around 80 good practices that are considered to be of particular interest according to the criteria outlined in the analytical framework. Reasons for selecting a good practice could be extraordinary innovativeness or outstanding implementation success. We have also identified close to 40 good practices that are in the process of transfer. Interviews with Lead Partner representatives indicate that the views on what characterises a good practice varies considerably and is also context-dependent. In the following table, we list three good practices per project that we think, based upon a thorough review of existing reports, interviews and our own assessment, deserve to be made available to a broader range of European regions. The selection does not mean that there are no further good practices from the projects that are of general interest. However, we have opted to highlight a limited range of practices that we believe best represent the variety of problems, functions and thematic areas addressed by the projects.
<table>
<thead>
<tr>
<th>Project</th>
<th>High potential good practices</th>
<th>Innovation system, problem addressed</th>
<th>Innovation system function supported</th>
<th>Thematic area</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIQ</td>
<td>Brighton / SINC super-incubation and Inqbate concept</td>
<td>Fragmentation</td>
<td>Entrepreneurship</td>
<td>Spin-offs and incubation</td>
</tr>
<tr>
<td></td>
<td>Leeuwarden model for financing innovation</td>
<td>Lack of resources</td>
<td>Entrepreneurship</td>
<td>Finance / VC funding</td>
</tr>
<tr>
<td></td>
<td>Mikkel method for user-driven development of the city and its services</td>
<td>Lock-ins</td>
<td>Knowledge development and diffusion</td>
<td>Open innovation</td>
</tr>
<tr>
<td>ERMIS</td>
<td>ECOBIZ - Promoting networking and channelling information to SMEs</td>
<td>Lock-ins</td>
<td>Facilitation/creation of synergies</td>
<td>Cluster development</td>
</tr>
<tr>
<td></td>
<td>IPN model - RDI infrastructure and cooperation serving SMEs</td>
<td>Lock-ins, Fragmentation</td>
<td>Facilitation/creation of synergies</td>
<td>Tech-transfer</td>
</tr>
<tr>
<td></td>
<td>Holst centre - RDI infrastructure and cooperation serving SMEs</td>
<td>Lock-ins, Fragmentation</td>
<td>Facilitation/creation of synergies</td>
<td>Tech-transfer</td>
</tr>
<tr>
<td>EURIS</td>
<td>High Tech Campus Eindhoven</td>
<td>Lock-ins</td>
<td>Facilitation/creation of synergies</td>
<td>Spin-offs and incubation, Tech-transfer</td>
</tr>
<tr>
<td></td>
<td>Business Angel Region Stuttgart (BARS)</td>
<td>Lack of resources</td>
<td>Entrepreneurship</td>
<td>Spin-offs and incubation</td>
</tr>
<tr>
<td></td>
<td>Competence Centre Stuttgart region - cooperation and networking with a cross-sectorial technology-oriented focus.</td>
<td>Lock-ins, Fragmentation</td>
<td>Facilitation/creation of synergies</td>
<td>Tech-transfer</td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>Knowledge Transfer Partnerships, KTP</td>
<td>Lock-ins, Fragmentation</td>
<td>Knowledge development and diffusion</td>
<td>SME-academia links</td>
</tr>
<tr>
<td></td>
<td>Higher Education Innovation Fund</td>
<td>Lack of resources</td>
<td>Knowledge development and diffusion</td>
<td>Finance / VC funding</td>
</tr>
<tr>
<td></td>
<td>Aait Design Factory – An experimental platform for education, research and application of interdisciplinary product design.</td>
<td>Lock-ins</td>
<td>Knowledge development and diffusion</td>
<td>Spin-offs and incubation, Tech-transfer</td>
</tr>
<tr>
<td>INOLINK</td>
<td>Coventry University tech transfer model</td>
<td>Fragmentation, Lack of resources</td>
<td>Knowledge development and diffusion</td>
<td>Tech-transfer</td>
</tr>
<tr>
<td></td>
<td>Specific Unit of Identification and Monitoring of European and International consortia</td>
<td>Lack of resources</td>
<td>Knowledge development and diffusion</td>
<td>Internationalisation</td>
</tr>
<tr>
<td></td>
<td>Revolving funds of Andalucia</td>
<td>Lack of resources</td>
<td>Entrepreneurship</td>
<td>Finance / VC funding</td>
</tr>
<tr>
<td>IPP</td>
<td>Leonardo Mobility for the Internationalisation of civil servants</td>
<td>Lock-ins</td>
<td>Knowledge development and diffusion</td>
<td>Internationalisation</td>
</tr>
<tr>
<td></td>
<td>Attraction of foreign investments for Daugavpils City</td>
<td>Lock-ins</td>
<td>Knowledge development and diffusion</td>
<td>Internationalisation</td>
</tr>
<tr>
<td></td>
<td>Common Internationalisation strategy for Valmiera, Cēsis and Smiltene</td>
<td>Lock-ins</td>
<td>Knowledge development and diffusion</td>
<td>Internationalisation</td>
</tr>
<tr>
<td>KNOW-MAN</td>
<td>Veneto Start Cup – International business plan competition</td>
<td>Lack of resources, Lock-ins</td>
<td>Entrepreneurship</td>
<td>Spin-offs and incubation, Finance</td>
</tr>
<tr>
<td></td>
<td>Working Breakfast – Open platform for meeting new partners, clients and suppliers</td>
<td>Lock-ins, Fragmentation</td>
<td>Facilitation/creation of synergies</td>
<td>Tech-transfer, clustering, networks</td>
</tr>
<tr>
<td></td>
<td>Humbold Innovation – Tech transfer / commercialisation office</td>
<td>Lock-ins, Fragmentation</td>
<td>Knowledge development and diffusion</td>
<td>Spin-offs and incubation</td>
</tr>
<tr>
<td>KNOW-HUB</td>
<td>ASTRIDE Online platform</td>
<td>Fragmentation</td>
<td>Facilitation/creation of synergies</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>T-CUE Project</td>
<td>Fragmentation</td>
<td>Knowledge development and diffusion</td>
<td>Tech-transfer</td>
</tr>
<tr>
<td></td>
<td>Innovation Assistant</td>
<td>Fragmentation</td>
<td>Knowledge development and diffusion</td>
<td>Skills</td>
</tr>
<tr>
<td>UNICREDS</td>
<td>Bringing university education to central Finland</td>
<td>Lack of resources</td>
<td>Infrastructure creation</td>
<td>SME-academia links</td>
</tr>
<tr>
<td></td>
<td>Multi-university campus</td>
<td>Lack of resources</td>
<td>Infrastructure creation</td>
<td>SME-academia links</td>
</tr>
<tr>
<td></td>
<td>Sabhal Mor Ostaig (UHI Scotland)</td>
<td>Lack of resources</td>
<td>Infrastructure creation</td>
<td>SME-academia links</td>
</tr>
<tr>
<td>URMA</td>
<td>Urban Farm de Viermarken</td>
<td>Fragmentation</td>
<td>Entrepreneurship</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>Rice Field Park Lombardy</td>
<td>Fragmentation</td>
<td>Entrepreneurship</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>BuonMercato</td>
<td>Fragmentation</td>
<td>Entrepreneurship</td>
<td>Other</td>
</tr>
</tbody>
</table>
3.3.5 Cross-regional relevance of project results and up-scaling possibilities

Generally speaking, the proportional distribution of good practices over thematic areas could be expected to relate closely to the general interest of European regions. Consequently, we are likely to find generically interesting results primarily among projects that focus on certain themes such as Technology transfer, Incubation and Cluster development. We are also more likely to find a significant interest from other regions in adopting good practices in these thematic areas. Projects with a large number of good practices covering these themes are KNOW-MAN, INOLINK, ERMIS and EURIS.

A particularly interesting outcome of KNOW-MAN worthy of further dissemination is the so-called ‘Service Blueprint’ entitled ‘Regional approaches to business plan competitions’. The blueprint includes a detailed description of the standard practice as well as insights into how to better adapt and fine-tune the services in different and heterogeneous contexts. The blueprint is based on analyses of the good practices: Veneto Innovazione/University of Padova: ‘Start cup competition’, Wista management/Die Investitionsbank Berlin (IBB): ‘BusinessPlan Wettbewerb, Berlin-Brandenburg’, TRC Koroška: ‘Competition for (the) Best Business Idea’ and Lower Silesia Voivodeship/WCTT: ‘Idea for own business based on innovations/findings of scientific research’.

INOLINK showcases, through a good practice brochure, a large number of good practices in the field of clusters and technology transfer. Regardless of regional context and regional maturity, the interested policymaker is certain to find one or more inspiring examples in this document.

ERMIS presents generally good quality and interesting good practices. Through the Regional Action Plans, the project partner regions outline which good practices they intend (or are considering) integrating in their regional innovation system. The regional Action Plans do not only provide a bridge to actual transfer of the practices, but also an inspirational source for other regions by facilitating the understanding of the contextual preconditions for adopting a good practice.

EURIS, similar to ERMIS, presents a series of high-quality good practices with a cross-cutting focus on open innovation within thematic fields such as Venture Capital, Human Resource management, Networking and collaboration and Knowledge, the Science and Technology base. EURIS has already presented a useful guidelines document for the assessment and transfer of best practices. The guide comprises a structure, step-by-step instructions and checklists that may be of significant value to any region that is reviewing and renewing its portfolio of innovation policy measures.

In narrower areas there are results that should be of interest to other regions. In particular, peripheral regions may find great interest in the results of UNICREDS, which provides inspiration for solutions to the specific problem of access to educational institutions.

In addition to individual good practices, some projects have developed tools and methodologies that are suitable for up-scaling. Compared to specific practices that may be dependent on certain pre-requisites, tools and methodologies can be of a more general nature and therefore prove easier to scale up. Below, we highlight a couple of examples we find interesting.

The ERMIS methodology was based on the creation of a regional profile through an assessment of the region’s economic environment, with the use of a self-evaluation check list, and collection of quantitative and qualitative data. The regional profile focuses on the level of industrial specialisation and the level of industry maturity of regional clusters. The next step is a process of regional benchmarking, comparing innovation performance with either best performing regions or regions with similar structural patterns. Based on the regional profile and benchmarking, a SWOT analysis is performed, and the outcome is an understanding of the regional innovation capacity.

The CLIQ project has developed the CLIQ-o-METER Benchmarking Methodology, a self-evaluation tool for local and regional authorities and service providers to assess their current systems and effectiveness in supporting innovation; the emphasis is on the Quadruple helix. The CLIQ-o-METER is linked to the project’s good practices that function as examples of concrete actions that can be taken.

The INNOPOLIS Policy Transfer Procedure is a methodology to simulate and assess the potential for successfully transferring a knowledge exchange policy from one region to another. The outcome of running the ‘simulation’ is either that the necessary conditions for successful policy transfer are not present; that transfer is possible if enablers are put in place; or that all conditions are present. The assessment takes into consideration policy alignment with regional priorities; and social, business and
Higher Education Institution context of the regions. In the process, blockers and enablers of a successful transfer are identified.

3.3.6 Core pre-requisites for a successful implementation of regional policy in the field of innovation systems

Reviewing the outcomes and conclusions drawn on a project level, although these are often closely connected to the contents of good practices and their successful transfer between partners, it is possible to identify recurring factors that are of wider significance, that influence policy implementation in a general context. These can be considered to constitute core pre-requisites of the innovation system, its structures and actors, for successful implementation of the regional policies at the centre of the individual projects.

First, the implementation of regional policies requires an understanding of the region’s characteristics, its potential and strengths, but also its needs and possibly weaknesses, both in terms of actors and structures. New policies may be met with suspicion from those affected or may be held up by institutional structures reluctant to change and dismissive of input from the outside. Therefore, regional knowledge is crucial, along with a clear understanding of the goals of a new policy and the results desired once it has been implemented. This we have heard from for example ERMIS, EURIS, IPP and CLIQ project partners.

Related to this is the importance of stakeholder involvement and commitment. This is true for good practice transfer and regional policy implementation alike. Understanding the region includes understanding what motivates those affected by new policy to embrace or reject the changes; building commitment and engagement relies on a demand for policy change among stakeholders and clearly understandable benefits from implementing the new policy. INOLINK, KNOW-MAN and IPP are examples of projects where representatives mentioned these pre-requisites.

Stakeholder involvement and commitment is closely related to the power and mandate of the individual partner, and the greater bureaucratic structure as a whole. Project partners who themselves can make policy decisions and implementation as they see fit, have less of a gap from plan to action compared to those that in turn must convince regional decision-makers. It could also be that partners come from member states where many of the policy decisions are made on a centralised level, leaving regions with little freedom to make policy changes independently. Such conditions were brought up by representatives in EURIS, INNOPOLIS and IPP.

As is the case with both good practices and regional policies, there are rarely universal solutions readily implementable, which are independent of the specific regional conditions. As highlighted above, knowledge of these circumstances is essential, but so is the capability to adapt and adjust accordingly to regional structures and conditions. Flexibility of policies, but also of the stakeholders, is noted as a necessary condition for successful policy implementation, in for example the UNICREDS and KNOW-MAN projects.

3.3.7 Influence on Smart Specialisation Strategies

The work carried out in the INTERREG IVC projects exerts influence on regional Smart Specialisation Strategies in two main ways. First, many of the prerequisites for successful transfer of good practices and implementation of regional policy that are in general identified in the projects, e.g. stakeholder involvement and commitment, understanding of regional characteristics etc., also apply to successful shaping of specialisation strategies. Regional agents involved in the INTERREG IVC projects are often also involved in the smart specialisation work and the projects. For example INNOPOLIS, INOLINK and UNICREDS have provided insight into the necessary involvement of agents and opportunities for learning and to develop cooperative relationships between them.

Second, the projects and their good practices can influence the content and focus areas of the Smart Specialisation Strategies. There has been interest from regional partners to incorporate good practices as elements of these strategies. For example, the Stuttgart Competence Centres presented as a good practice in EURIS could potentially be an approach for regions when identifying their strong areas. Also, in some cases, as exemplified in IPP, the projects have served as platforms for exchange of information on the state-of-play of Smart Specialisation Strategies between regions. In the URMA project, there is an example of interregional cooperation promoting the identification of and focus on strengths that could be applied within Smart Specialisation Strategies. Within the project, a study on opportunities, objectives
and tools of intensified trans-national cooperation on the Jutland route corridor has been carried out, involving partners from Hamburg, Schleswig-Holstein and three Danish regions in Jutland. The aim is to develop a common strategy for a smart specialisation of the Jutland corridor. Potential fields of cooperation stem from already existing strong economic branches and clusters in the region, e.g. renewable energy, health care, food and logistics. The KNOW-HUB and INOLINK projects are additional examples where good practices are recognised as potentially influential on the smart specialisation of the involved regions.

3.3.8 Synergies\textsuperscript{15} among the projects

Synergies among the projects include those that can be realised by an exchange of project-specific experiences and lessons learnt. One such aspect is raising the awareness of the limits of one’s own insights. Different projects pursue their objectives in different settings and circumstances. Comparing one’s own lessons to the lessons of known and trusted exchange partners (i.e. representatives from sister projects) will demonstrate that the solutions found are not universal, but are heavily dependent on contextual factors. Thus, the understanding of when to act and how is substantially increased. As in any mutual learning process, the exchange of questions and approaches to solve challenges will lead to more than a mere adding of knowledge, it will also stimulate new questions and new answers. Collaboration between projects will stimulate inter-project learning not only from others (transfer of know-how) but also bring new insights and solutions (real innovation) as well as prepare the grounds for the implementation of these new tools and approaches.

Synergies among the projects can include, for example, using one project’s focus on a single type of innovation system member or problem as an input to another project with a wider content. The approach taken by UNICREDS, focusing on the value of a multi-university campus for regional development by reducing the limiting factors experienced by peripheral regions, links with the challenge defined by URMA with regard to promoting cooperation between cities and the surrounding non-metropolitan and rural areas. Here, a specific focus on education can contribute to a larger set of challenges involving the urban-rural relationship. From a different perspective, the identification of good policy practice in well-performing university city-regions, as in INNOPOLIS, could potentially contribute to the work performed by UNICREDS. The concept of open innovation and its effects on exchange of knowledge and technology transfer, and what it implies for stakeholders in the innovation system, as covered in EURIS, has relevance for projects like INOLINK and IPP, where particular members within the innovation system are concerned, e.g. innovation intermediaries and innovation centres. Likewise, the CLIQ project with its specific niche of civil society engagement in innovation has a perspective that may also contribute to projects with a low focus on innovation.

Talking to the Lead Partner representatives, most of them say there has been some, but usually not a lot of interaction with other INTERREG IVC projects; this could for example entail participating in the closing conference of another project. This goes for the additional INTERREG IVC projects analysed in this report as well. DISTRICT+, INNOHUBS, ERIK Action are examples where interaction or exchange has taken place.

In some cases, one partner organisation or region has been involved in more than one project, thereby coming into contact with related projects. For example, the Andalusian Technology Network RETA has had members participating in INOLINK, CLIQ and KNOW-MAN. One project Lead Partner mentioned it had been difficult to find consolidated information on other projects, when an interesting project was found, it was by chance. Therefore, we find it plausible that the reason why there are so few instances of interaction might be due to a lack of information, rather than lack of interest for cross-project interaction.

Synergies can be realised by integrating the project-specific insights into a wider body of experience and communicating it to third parties interested in innovation systems. There is a multitude of good practice guides available. Most of them are hardly read and even less often are the insights implemented. A comprehensive guide based upon a pretty wide variety of INTERREG projects in neighbouring fields could make a difference for a number of reasons. The existence of the guide would

\textsuperscript{15} In this context, the concept of ‘synergies’ refers to projects potentially sharing useful information and benefitting from each other’s experiences. It is not linked to the practice of combining different sources of EU funding, made possible in the programming period 2014-2020.
be known to many relevant stakeholders due to the combined network dissemination activities of all engaged partners. Furthermore, the individuals and institutions that are aware of its existence would be tempted to read the guide and take it seriously, because it would offer a comprehensive overview of good practices to study. It would not just be one more guide, but would become a compendium. Lastly, the readers would be motivated to consider and implement the ideas and recommendations as they would be sure that the published good practices will have been thoroughly studied and cross-validated not only by field experts, but also by other practitioners.

3.3.9 Links to Europe 2020 and the flagship initiatives

Because of the strong link between innovation and growth, on a general level, all the projects belonging to the Innovation systems theme can be said to contribute to the implementation of the Europe 2020 strategy and its focus on smart, sustainable and inclusive growth. Looking on a more detailed level, this is also true for the Innovation Union flagship initiative and the Horizon 2020 framework programme. The Innovation Union action points include e.g. support to business-academia collaborations and spreading the benefits of innovation across the EU; Horizon 2020 objectives, on the other hand, are directly related to the focus of some of the projects we have analysed.

The development of European research infrastructure, one of the objectives of the Excellent Science in Horizon 2020, is closely linked to the development of overall innovation system infrastructure promoted by regional partners. Institutions like universities and research institutes are cornerstones of the research infrastructure, while at the same time they also represent key members of regional innovation systems through their individual actions and interaction with other members. Thus, strengthening their position in the innovation system infrastructure is beneficial for the more narrowly defined research infrastructure as well.

The Industrial Leadership pillar objective of support for stimulating innovation in SMEs is in line with the objectives of e.g. the ERMIS project. The project’s focus on policy actions and support structures for fostering innovation in SMEs exemplifies how INTERREG IVC projects fit with the overarching intentions on European level.

The measures introduced in Horizon 2020 for spreading excellence and widening participation, e.g. teaming actions, linking advanced research institutions to other institutions, agencies or regions; twinning between knowledge institutions to strengthen defined fields of research; and not least the policy support facility aiming to improve the design, implementation and evaluation of research and innovation policies bear resemblance to the ideas of interregional cooperation and transfer of good practices promoted in INTERREG IVC. The idea of sharing knowledge between those that have succeeded to those that have faced obstacles is clearly exemplified in the INNOPOLIS project where the partners represent both sides.

The focus on open innovation and greater involvement of civil society in innovation activities, i.e. the quadruple helix approach, in projects like EURIS and CLIQ is similar to parts of what the ‘Science with and for Society’ programme linked to Horizon 2020 aims to achieve. This programme too encourages societal actors to get involved in the research and innovation processes to improve their alignment with societal values, needs and expectations.

The COSME programme, and CIP before that, both specifically target SMEs, which of course constitute a crucial category of members in the innovation system. In COSME, the support is of a practical nature with concrete efforts related to e.g. financing and access to markets; similar to actions in some of the INTERREG projects regarding e.g. the promotion of interaction between universities and SMEs. There is also an element of SME policy focus in COSME, and how best policy practices can be exchanged, aligning it with the approach and content of several of the INTERREG IVC projects we have looked into.

3.3.10 Synergies with European Territorial Co-operation programmes and other Capitalisation themes in INTERREG IVC

In response to the European Commission report entitled ‘Cities of Tomorrow – Challenges, visions, ways forward’, published in 2011, URBACT launched six work streams dealing with themes corresponding to the threats identified by the report. Each work stream gathered evidence from URBACT projects as well as a wide range of European stakeholders.
The output of the Capitalisation process of URBACT II comprises a series of thematic reports: ‘Cities of Tomorrow: Action Today’ related to the six work streams. The key message also includes conclusions of a more general nature that we find relevant for INTERREG IVC projects as well, including those we have analysed within the Innovation systems theme.16

The first conclusion stresses the need to develop an appropriate knowledge base. Although targeted at cities, this should be of equal importance on a regional level. It is crucial to collect evidence about the real situation and explore the underlying dynamics. Second, resources need to be combined and concentrated on the most important problems, and the ones where change is most likely to be achieved. Third, reinforcement of vertical linkages between different policy levels, as well as in a horizontal sense of strengthening the multiplier effects between environmental, social and economic pillars. Lastly, the report highlights the attitude and mind-set at an individual level; strategies for change need to focus on overcoming the real barriers that have to be faced in each city (or region).

The synthesis report ‘Territorial insight: Where to focus what types of investments’ is based on reports from European Observation Network for Territorial Development and Cohesion (ESPON) projects undertaken up to the start of 2013. The ESPON 2013 Programme supports policy development in relation to EU Cohesion Policy by researching European territorial structures, trends, perspectives and policy impacts. The report’s section on ‘Smart growth in a territorial perspective’ contains a number of notes on policy that we believe to be of relevance to the projects of the Innovation systems thematic context, both adding to our conclusions and raising additional good points.

First, each region must analyse its regional innovation system and recognise that it has its own ‘pattern of innovation’, to which policies and investments should be shaped accordingly. This reasoning has bearing on the transfer of good practices; as we have discussed, it is rarely possible or meaningful to copy another region’s good practice directly. Instead, a good practice needs to be adapted to the specific context.

Furthermore, in regions with limited R&D levels, increased investments in R&D are not necessarily the most important measure. Instead, deliverance of higher levels of knowledge output can be helped through organisational and structural assistance. Also, to fully exploit a region’s different types of innovation potential there has to be enough administrative and institutional capacity to link the various processes. This implies the importance of a well-functioning regional innovation system with members that are not only individually strong, but can also be coordinated in interaction.

The report on the proceedings of the joint Intelligent Energy Europe and INTERACT event ‘Accelerating change at local and regional level for effective delivery of sustainable energy solutions’ (15-16 May 2013), devotes a section to peer learning and how it enhances project results. The report is based on good practices seen in projects. The value of peer learning is stated as:

“Where there is a need for policy to embrace a diversity of actors, to recognise existing practice and to foster delivery of quality results, peer learning helps to think out-of-the-box and, ultimately, leads to better results.”18

In peer learning, practitioners from one region or organisation learn from the experiences of their counterparts in other regions or organisations, through direct contact and practical cooperation. The strong points of peer learning are the promotion of reflection, development and enhancement. It goes beyond simply gathering information; instead peer learning encourages constructive dialogue and reflection between practitioners and other key actors. Examples of commonly adopted peer learning techniques include: staff exchange, i.e. exchange visits to acquire a better understanding of the culture in which partners operate; work shadowing, which resembles staff exchange; site visits; partner-to-partner mentoring; peer review and assessment; and discussion groups.

In the report, successful peer learning is exemplified with the experiences from the INTERREG IVC project Regions4GreenGrowth, which has used peer review as a tool. In short, each region in the project

16 URBACT (2013), ‘Cities of Tomorrow – Action Today, URBACT II Capitalisation, Key messages’
18 INTERACT (2013), ‘Accelerating change at local and regional level for effective delivery of sustainable energy solutions’ (p. 5)
employed a team of 10-15 experts who assessed the region’s policies and practices in the field of sustainable energy, and gave advice on improvements. Results show that, through this practice, all regions discovered either blind spots or problems that other regions already had a solution for.

We have seen the use of peer reviews in some of the Innovation systems projects as well. The findings from INTERACT support that this and other peer learning practices are well worth considering, both for finding and evaluating regional good practices, but also in the transfer process of good practices from one region to another.

INTERACT has also evaluated data coming from projects across the European Territorial Co-operation community, between 2007-2013, on the benefits and results delivered to the participating territories. The outcome shows for example that the top three additional effects of cooperation to the partnerships are: 1) Knowledge transfer, 2) Extended networks, 3) Development of new ideas. Also, 80% of the respondents from interregional cooperation partnerships say it is possible to transfer the achievement to other organisations/regions/countries outside the current partnership. Thus, there is a clear indication that a programme such as INTERREG brings value on different levels.

Regarding the capitalisation done within other themes of the INTERREG IVC programme, we consider the findings and recommendations of the ‘Innovation capacity of SMEs’ capitalisation analysis most relevant to the partners of the Innovation systems projects as well. Small and medium-sized enterprises are crucial components of the regional innovation system, and we have seen several good practices addressing them, e.g. the various efforts to strengthen the ties between SMEs and academia.

Some of the recommendations we believe to be particularly valuable to consider, from an innovation system perspective, concern funding for innovation through e.g. the implementation of voucher schemes and support to regional VC funds; support for innovation management skills; and support of R&D capabilities, both through technology transfer and the hiring of qualified research staff. Since these are topics touched upon in the projects of our analysis as well, we believe a number of regions could benefit from looking into full capitalisation analysis.

3.3.11 Synergies with other EU-programmes

Synergies are understood primarily as opportunities of enlarging the operative framework of the INTERREG projects, by making use of funding or other opportunities offered by other EU-programmes, so as to make further advancements in policy knowledge and policy implementation possible.

The main actors at the EU-level are the General Directorates Enterprise and Industry (DG Enterprise) and Regional Policy (DG Regio). Also, DG Research and Innovation (DG RTD) provides useful information, which, however may be less relevant for regional policy-making.

On its website http://ec.europa.eu/enterprise/policies/innovation/index_en.htm DG Enterprise presents its offer of information and other assets in the field of industrial innovation. Regional policymakers can make good use of this resource. In addition, DG Regio presents useful information on its website http://ec.europa.eu/regional_policy/activity/research/index_en.cfm.

With regard to synergies, it is necessary to understand the position that the projects occupy in the policy ‘value chain’. The INTERREG IVC programme principally enables the analysis and sharing of good practices among project partners but not for the development of new policy measures or implementation. Synergies with other EU-programmes are therefore most likely if these can add operative components to policy development efforts (Implementation synergies). This said, there is always scope for further knowledge input as well; this might be the case, for example, when a project partner has a profound interest in a very specific policy issue and when the INTERREG project does not allow for sufficient depth on this topic, or if the knowledge within the partnership was not sufficient (Knowledge synergies). Before highlighting some possible synergies it should be pointed out that, as the major relevant

European framework programmes, including the structural funds, came to an end in 2013, we will, to a degree, be speaking about past opportunities.

In regard, first, to implementation synergies, the FP7 programme ‘Regions of Knowledge’ has certainly provided a suitable platform for developing and testing system-related innovation policies. Regions of Knowledge (see chapter 2 for more information) has provided funding to research-based clusters for the purpose of developing joint research and innovation agendas. Furthermore, the RIS³-platform, which was established in 2011 following the Communication ‘Regional Policy contributing to smart growth in Europe 2020’, assists Member States and regions in developing, implementing and reviewing Research and Innovation Strategies for Smart Specialisation (RIS³). The role of the S³ Platform is to provide information, methodologies, expertise and advice to national and regional policymakers, as well as to contribute to academic debates on the concept of smart specialisation. In particular, by participating in peer review exercises, regions can receive assistance in implementing regional innovation strategies.

In addition, the PRO INNO Europe initiative offered funding for policy development and implementation through the INNO-Net and INNO-Action projects. Although this fund was mainly intended for national level actors, a number of regions have been involved in such projects, which have offered valuable resources for implementing innovation policies.

Second, when it comes to knowledge synergies, the RIS³ platform offers a wide range of guides and other supporting material that may be of high interest to regional policymakers. Much of this material is located in the repository maintained by the Regional Innovation Monitor, RIM. RIM was established in the wake of the objectives set out by the Europe 2020 strategy and specifically the Innovation Union flagship action. The Regional Innovation Monitor project provides a useful platform for sharing knowledge and know-how on the major innovation policy trends in EU regions. RIM provides detailed information on regional innovation policies for 20 EU Member States. The core of the RIM service is a knowledge base of information on some 200 regions. This includes 1) an ‘inventory’ of regional innovation policy measures, policy documents and organisations, b) a single access point for good practice dissemination on regional innovation policy in Europe, c) an online interregional comparison of innovation performance and governance trends by means of a benchmarking tool, and d) a new communication platform for innovation stakeholders.

In addition, the European TrendChart on innovation policies also has the potential to offer knowledge synergies for the INTERREG IVC projects even if its main focus is the national level. TrendChart is the longest running policy benchmarking tool at European level. Since its launch in 1999, it has produced annual reports on national innovation policy and governance, created a comprehensive database of national innovation policy measures and organised a series of policy benchmarking workshops. The European innovation policy-monitoring database was first developed under a series of TrendChart contracts from the mid-1990s to early 2009 including policy analysis and thematic reports. The coverage was expanded to include research policy with the launch of the parallel ERAWATCH initiative in 2004. The INNO Policy TrendChart and ERAWATCH databases have been merged, and a joint Inventory of Research and Innovation Policy Measures has been created by the European Commission with the aim of facilitating access to information on research and innovation policies within Europe and beyond.

Finally, the PRO INNO Europe initiative also constituted a platform for a number of actions that resulted in useful knowledge for innovation policy development at regional level. In particular, this included a) Benchmarking of innovation performance (INNO-Metrics), b) Analysis of major innovation trends (INNO-Policy Trendchart) and c) Pooling of world-wide knowledge and contacts with regard to innovation policy and business innovation and facilitating dialogue between public authorities, industry and academia on innovation policy (INNO-GRIPS).

INTERREG IVC in general and the innovation system projects in particular occupy a vital position in the value chain of European innovation-supporting programmes. Acting mainly upstream of programmes in the same way as ‘Regions of Knowledge’, IVC constitutes an important bridge between such implementation-oriented instruments and pure passive knowledge-disseminating initiatives like TrendChart. This said, there is still a need for inter-regional programmes that allow for joint development to a larger extent than IVC does. The INTERREG B-strand theoretically provide such an instrument; however innovation policy and innovation policy measures in particular are not optimally suited to be handled in a cross-border setting – it is here that there is potential to further strengthen synergies both with other INTERREG programmes and with other EU instruments.
Influence on the projects still running

Within the Innovation systems theme there are two projects still running at the time of writing (spring 2014). For these two projects, KNOW-HUB and URMA, which both finish in December 2014, there could potentially be influences from both ETC programmes and other EU programmes worth incorporating, or at least taking notice of for the remainder of the project period.

As mentioned above, the INTERACT programme has highlighted the value of peer learning and some of the commonly practiced techniques. The activities in KNOW-HUB have included peer policy reviews in the ten partner regions, where practitioners have collaborated in reviewing policies and practices to identify issues to improve good practices. Therefore, we believe that the findings of INTERACT could be interesting to the KNOW-HUB partners as well, even if the stage of peer reviews has been completed. Also related to KNOW-HUB, the project’s link to smart specialisation will be maintained and therefore the collaboration with and influence from the Smart Specialisation Platform will continue.

Regarding other thematic similarities that could be of interest, we would like to point out that the 15 projects from the 3rd call of URBACT II continue to run until 2015. The overall theme of sustainable urban development and particular projects, e.g. ENTER.HUB (addressing the issue of railway hubs/multimodal interfaces of regional relevance in medium sized cities), should have bearing on the topics covered in URMA.

As a side note, we would like to address the circumstances for the still running projects, moving into a new programming period. The projects end before the new programming period really takes off, but at that time, the representatives of the partner regions will be knowledgeable about each other having worked together for the last few years. This should be beneficial if all or some of the regions decide to attempt new collaborations within e.g. Horizon 2020, making use of the ‘momentum’ that could potentially still remain from the INTERREG IVC projects.
4 Key Policy Messages and Conclusions

4.1 Relevant findings for other EU regions

1. INTERREG IVC projects provide a valuable contribution to the development of regional innovation systems

Our analysis has put forward evidence that the projects under the topic ‘Innovation systems (triple helix & open innovation)’ have contributed in positive ways to enhancing the capability of participating regions to develop and improve regional innovation systems. In particular, we would like to highlight the following areas where we believe that impacts are the clearest:

a) **Helping regions to overcome lock-in effects**

The static regional innovation system has been recognised as a key problem for many regions and the INTERREG projects have provided a good tool for bringing movement and change into the systems!

“33% of project partners claimed that the reasons why they decided to transfer and tried to deploy a best practice, the necessity to overcome barriers to business growth by giving opportunities to SMEs to upgrade skills and human capital and to increase access to technical or strategic information.”

(ERMIS Best Practice transfer Report)

b) **Increasing the capability to design effective innovation policy**

This is probably the most significant effect of the projects on regional innovation policy and ultimately on regional innovation systems. A vast majority of project participants have, according to our investigations, made advancements in the capability to design effective policy!

“73% of the project partners have influenced innovation policy and practice on the local or regional level through the project.”

(CLIQ final evaluation report)

c) **Increasing the capability to implement better innovation policy measures**

Although policy implementation is not at the heart of the INTERREG IVC programme, it is clear that many of the participating regional policymaking organisations have also profited when it comes to delivering policy measures. This is a very positive side-effect of the projects!

d) **Good complementarity and potential synergies with other EU-programmes**

Stronger connectivity among regional policymakers would lead to a better utilisation of European funding opportunities and to a better impact of European funds. There are today a number of programmes that complement INTERREG IVC, and many of the partners of the reviewed projects have made use of other programmes. However, even more could be done to utilise potential synergies!

e) **Creating a pan-European network of professionals**

Regional innovation policymakers constitute a community of professionals that benefits from forums and platforms for co-operation. Such a forum has not been in place since the Innovating Regions of Europe Network (IRE) was closed in 2007. To some extent, the INTERREG IVC programme fills this gap, but more could be done to create links and interaction across projects!

2. **The bottom line challenges in developing regional innovation systems are very similar for many regions**

Most projects share issues related to ‘problems’ affecting their regional innovation systems and projects tend, at least partly, to address similar basic ‘functions’ of innovation systems. In particular, projects aim at:
a) Reducing fragmentation in regional innovation systems that are characterised by numerous actors, initiatives and projects, but which suffer from a lack of common goals and weak alignment.

b) Strengthening insufficient resources/focus to support vital innovation system functions, such as technology transfer, innovating SMEs, etc.

c) Improving system functions related to the dissemination of knowledge - primarily to SMEs.

d) Supporting the creation of synergies between actors and initiatives on a systemic level.

It is not surprising, but the fact that many projects share common basic challenges and address similar difficulties confirms the assumption that knowledge exchange on regional innovation systems and open innovation should be able to create a transfer of knowledge and practices that will help both inexperienced and advanced regions to improve their innovation policies.

To conclude:

A lack of resources in regional innovation systems is not normally considered to be a key barrier, the challenge lies more in a lack of governance structures and dynamics for change. Governance in this context should be understood as the ability of a region to ensure optimal efficiency of the innovation system, in particular by aligning regional resources to work in joint strategic directions. The prevailing financial crisis is likely to have had an influence in the necessity to address this issue.

A lack of dynamics for change is related to the challenge of renewing the innovation system by integrating new ideas or working models. For the publicly funded organisations of innovation systems, the issue of static structures, under-critical resources and insufficient inter- organisational exchange are common.

3. There is a wealth of good ideas and wisdom out there...

Our analysis indicates the existence of a number of conceptually similar thematic areas that are addressed in many of the projects. These policy areas are:

- Spin-offs and incubation
- Cluster development and management
- Finance incl. VC Funding
- Internationalisation
- Tech-transfer / Research commercialisation
- Linking SME to knowledge providers
- Patenting / IPR

The projects have identified approx. 500 good practices; and around 250 related to the above policy areas were selected for in-depth analysis and have been described in reports and brochures. The thematic areas most commonly addressed by good practice are 1) Technology transfer/Research commercialisation, 2) Spin-offs and incubation, 3) Cluster development and management, and 4) Linking SMEs to knowledge providers. A relatively large number of good practices are alike in terms of purpose and how they work. Although conceptually similar, few, or no, schemes are identical, though.

In most policy areas, the projects have identified a large number of good practices, and although there are many similarities between the practices, there are also quite different approaches within the same policy area. This can be illustrated by the area ‘Technology transfer and research commercialisation’: the area boasts over 40 good practices, but there are several examples of very varying approaches to tackle the topic.

Of the above-mentioned 250 cases, some 80 good practices can be considered (based on a number if selection criteria) as particularly promising in terms of their potential for improving regional innovation systems. There are even examples of one good practice being acknowledged by two projects independently. The Netherlands, UK and Finland seem to be well represented when it comes to being originator regions of high-potential practices. A further
filtering of these practices highlights 30-40 good practices that potentially are of such quality that they should be considered for dissemination on a wider European scale.

It should be mentioned here, however, that there also are thematic areas which are not so well covered by good practices, although they receive a great deal of attention in the European debate. Two such themes are ‘Venture and early stage funding’ and ‘Internationalisation’. The INTERREG projects we have reviewed do provide some examples of good practices in these fields, but not in proportion to the attention given in debate.

To conclude:

The INTERREG IVC projects in the field of Innovation systems (triple helix & open innovation) have identified a significant number of highly interesting good practices with good potential for complementing and renewing regional innovation policies around Europe. In particular, there are a number of practices addressing themes such as ‘Quadruple Helix’ collaboration and, more generally, models for linking innovation support providers with small and medium-sized companies. Regional policymakers looking for inspiration are advised to consult in particular, the good practice brochures produced by the projects.

4. …but the transfer of good practices requires time and the right level of commitment

From the analysis, we can draw the conclusion that transferring good practices is a challenging task even if many projects share challenges, objectives and even look for similar types of good practices. There are a number of factors that explain the difficulties involved in transferring a practice, and many of the projects have themselves spent quite a lot of time analysing this problem. If one assumes that the practical issues related to a transfer could be resolved (e.g. budgets, host organisation, etc.), the key barrier seems to be the absorption capacity of regional policymakers. In many cases, there is also insufficient involvement of policymakers in the projects. This has been a particular problem, and was raised frequently during the Brussels thematic workshop of November 2012. In addition, it should be pointed out that there may be a conflict between:

a) the innovativeness of a practice,
b) proven success and
c) transferability

For example, we have observed that it is often the simpler (and often less innovative) practices that are transferred between regions whereas highly successful practices with proven impact have often developed in a specific context over a long period of time - something that tends to make quick transfer less feasible.

To conclude:

Regional contextual factors must always be considered, and a pure copying of good practices is seldom successful. In general, the issue of transfer is discussed at length within the projects, and several have developed their own ‘good practice transfer guides’. Common observations put forward in these guides include the need for time and commitment, as well as favourable framework conditions and a contextual fit. The difficulty of actually transferring a practice within the framework offered by the INTERREG programme is often highlighted. In fact, it is probably true that a certain share of the practices that projects claim are ‘in transfer’ will most likely influence policies (strategies, guidelines, etc.) rather than become stand-alone regional programmes or initiatives. In any case, the actual results will be difficult to monitor as they are likely to occur long after the conclusion of the projects.

5. The emerging good practice portfolio needs to be chosen on the basis of the nature of the challenges identified by the projects

The nature and content of the good practices that projects have identified is likely to depend on the character of the policy challenge addressed and the approach taken to tackle it. The projects can, in this respect, be divided into four groups: 1) projects with a non-specific approach targeting a wide range of challenges, 2) projects with a non-specific approach targeting a narrow
challenge, 3) projects with a specific approach targeting a wide range of challenges, and 4) projects with a specific approach targeting a narrow challenge. Most projects under the theme Innovation systems (triple helix & open innovation) fall into categories 1 & 3. Only one or two projects can be said to be narrow both in terms of policy challenge and the approach taken to tackle this challenge.

**To conclude:**

Projects with narrow challenges and/or narrow approaches identify relatively fewer good practices but partners’ practices also show fewer overlaps. Projects addressing a wider range of policy challenges and wider approaches are more likely to put forward a high number of good practices with a higher likelihood of significant redundancies.

There is no indication that there are ‘better’ good practices coming from either of the cases outlined above. However, it is important to understand that the nature of the projects significantly determines how policy influences and/or transfer might happen. Projects with wide challenges/approaches with a large number of good practices can hope that the sheer volume of cases will lead to some finding a recipient region. In projects with narrow scope, the likelihood that a specific good practice can actually be transferred may be higher. Should this fail, however, there is little room of manoeuvre to find alternative solutions.

### 6. Policy influence may be the most imminent impact of the projects

The transfer of good practices has received very much attention from the projects. Policy influence may however be a more realistic achievement in the short to medium term. Yet, policy influence receives, with some exceptions, considerably less attention in the reports provided by the projects. CLIQ highlights achievements such as, for example, the Cadiz Pilot Case methodology that will be integrated into the Bay of Cadiz Foundation for Economic Development’s Strategy. Some other projects also highlight examples of policy influence, but not very extensively.

**To conclude:**

Policy influence is an important but less highlighted impact of the INTERREG IVC projects. A reason for this is likely to be the difficulty of actually validating such influence as it may take a long time to appear. Still, policy influence may be more important than the transfer of good practices, as it leaves room for adaptation to specific regional context factors and frameworks conditions.

#### 4.2 Policy recommendations

**4.2.1 Framework conditions of a successful innovation system**

The recognition that innovation is key to competitiveness has in turn resulted in increased competition between places to be the most innovating. The statements made in Europe 2020, Innovation Union and in the regulations for the next Structural Funds period are further developments towards this trend. Consequently, policymakers in many regions and nations have declared an intention to develop and foster effective and efficient innovation systems as a key priority in their industrial policies. As a result, in order to boost the economic development of existing systems and their members, and to attract new members, a global competition amongst place-based innovation systems has ensued.20

---

20 Cities, regions and nations often claim to be the best in innovation. Examples include (1) Ottawa, the innovation capital of Canada: “With the highest level of research and development spending per capita in the country, Ottawa has become the home of leading economic clusters in telecommunications, software, semiconductors, photonics, life sciences and professional services. An economic powerhouse with a quality of life second to none, Ottawa is one of North America’s fastest growing economies, and one of the world’s most progressive centres of innovation.” (2) Wellington [http://www.wellington.govt.nz/aboutwgtn/innovation/index.html]: Innovation Capital Wellington: Wellington’s creativity and innovation can be demonstrated by looking at the success of Wellingtonians in business,
As knowledge, its diffusion and use have become more important for innovation and innovation systems, the earlier linear model of innovation has revealed its weaknesses. The systemic (or interactive) model of innovation is currently broadly accepted as a representative picture of how the innovation-driven economy works. This is a fundamental insight forming the basic rationale for all of the projects analysed within the capitalisation analysis. What does it mean in practice, however? What does regional innovation policy need to do in order to optimise the performance of innovation systems? This question is only indirectly answered by the projects themselves as their areas of intervention differ significantly (from venture capital to Intellectual Property protection).

However, it is possible to extract a set of generic framework conditions that decision-makers should strive to put in place for policies in the field to be effective. These are:

1.) The systemic approach postulates the need for **dynamic and flexible organisational arrangements and processes** that facilitate the diffusion of knowledge throughout the economy. The importance of this requirement has been acknowledged in particular by the projects CLIQ, in its efforts to promote Quadruple Helix cooperation, and EURIS, promoting Open Innovation.

2.) Successful innovation systems are **networked mutual learning systems**. All members of a regional innovation system should closely interact and learn from and in cooperation with each other, not (exclusively) from each other. In particular, clusters of firms are created, nurtured and promoted. The projects INOLINK and ERMIS gave special attention to the importance of networked systems.

3.) Successful systems are both **sustainable and flexible in responding to modified/new challenges** and contextual factors. Systems are developed and grow over time. Experimenting with quick changes (e.g. new organisations, closing down organisations, new laws) prevents learning about causal mechanisms and does not allow the players to learn about other players nor to build up trust-based relationships with them. Instead, in order to allow for an adaptable model, the following should be considered:

   i. Ensure the effective coordination and coherence of innovation policy.
   
   ii. Perform systematic appraisals of the institutions themselves in order to ensure that they are working towards and are adapting to market needs and policy goals.
   
   iii. Ensure good communication.
   
   iv. Promote the early involvement of stakeholders in a systematic debate on innovation policy.

Sustainability is a common pre-condition in all projects, however, URMA and UNICREDS show particular commitment to this issue.

4.) Successful innovation systems **possess a substantial amount of resources and critical mass**. Such systems have well developed links with external systems from which they can access complementary know-how and competencies. Regions trying to catch up can, in particular, benefit from a strong international network, where close links to international research teams and institutions can help assist and speed-up internal innovation processes and profit from existing networks.

The achievement of critical mass through a better alignment of resources has been a key issue for most of the projects, in particular in light of the ongoing financial crisis. However, the ‘internationalisation’ of regional systems has not shown to be a major issue, possibly with the exception of IPP.

5.) Successful innovation systems have a **demand orientation** and provide the firms with knowledge and resources in respect to all the key success factors in innovation processes, in technology, and the arts. Some places are particularly aggressive in communicating their ambitions, e.g. Cambridge is striving to become the innovation capital of Europe.
particular (but not exclusively) in respect to technology, management, marketing, and financing matters.

At the heart of most projects was the goal of making the innovation system’s services more demand-orientated, a goal that was explicitly addressed by, for example, ERMIS, KNOW-MAN and KNOW-HUB. However, there are also thematic areas that are still insufficiently addressed by innovation policy. For example, our analysis indicates that it is still necessary to increase the attention paid to areas such as the early stage funding of ideas and the internationalisation of clusters, SMEs and innovation support organisations.

6.) More recently, attention has increasingly turned to the need for governments to change and develop institutional capabilities and governance practices more in line with a dynamic, innovation-driven economy. A third-generation innovation policy (going beyond the linear and systemic models) is emerging. It draws attention to institutional adaptation in the area of science, technology and innovation (STI) policy as well as to the need to develop innovation policy components across ministerial boundaries and thus to redefine innovation policy horizontally. By implication, this will require new government capabilities. The more an economy needs to break lock-ins and develop new development paths, the more will be demanded of governmental institutions and policy-making to accommodate these changes.

4.2.2 Targeted recommendations

The following recommendations are aimed at four categories of stakeholders linked to regional innovation systems: national level policymakers, regional level policymakers, research institutes and universities, and implementation support bodies. These recommendations stem from the themes we have seen exemplified in projects and good practices. It is our intention that the approaches suggested here will help in attaining the abovementioned favourable framework conditions and dealing with the fundamental problems in relation to innovation systems.

While the evaluation focuses on regional innovation systems and their members, regions are affected by national level policymakers to varying degrees as well; some regions are comparatively self-governing while others operate in a highly centralised structure with less direct influence over regional policies.

How can national level policymakers contribute to the regional innovation system?

1.) When it comes to support initiatives directed at innovation system members, we believe the expected return on investment and the success potential of the receiver should be the guiding principle; i.e. policymakers should not base their decisions on ‘pity’ for individual system members in need of support, but on a firm belief in positive outcomes.

2.) The evaluation team would like to point out that support for innovation activities, e.g. the commercialisation of ideas in research organisations or SMEs, does not necessarily have to be financial support in a traditional sense. We advocate public procurement as a support measure, where national level institutions can take the role of a demanding lead client; the logic being that ‘turnover is better than subsidy’. This approach of providing support in perhaps a new and different way compared to ‘how it is usually done’ is related to the lock-in problems of innovation systems which our analysis shows a number of projects have focused on.

3.) We believe it is important that policymakers engage in system-building measures. By this, we mean that support should not be directed only at individual members of the innovation systems, but instead towards different frameworks and mechanisms for cooperation, e.g. clusters.

A good example of such a framework is the ‘ECOBIZ Collaborative Platform’, the good practice that received most of the interest from the partners of the ERMIS project. With presence through 40 individual networks in the whole of France, ECOBIZ promotes cooperation and cross-fertilization between clusters and fosters networking, synergies and economic development. This way, the members are still responsible for the ‘action’, but are provided with a facilitating structure which could potentially benefit all members.

4.) Lastly, in order to create competitive regions, the evaluation team believes that national level policymakers need to ‘force’ regions to compete with each other, thereby increasing their
international competitiveness. Instilling a sense of competition regarding e.g. support to regions incentivises them to focus on specialisation and search for best practices.

From the analysis, we have seen that knowledge development and diffusion is commonly addressed by the projects. We believe that a competitive environment can be inductive to the positive development of this and other innovation system functions, with regions more inclined to make an effort.

The national level recommendations may very well be applicable to policymakers at a regional level as well, depending on the mandate of the policy body. But in addition to these, the evaluation team presents a number of recommendations specifically targeted at the regional level.

How can regional level policymakers contribute to the innovation system?

1.) Regional policymakers should take a mentoring and supporting role towards members of the innovation system. We encourage regions to help the individual members to develop their strengths the best they can, however this does not imply that all members must necessarily receive equal amounts of support.

2.) The evaluation team firmly believes that regional policymakers should work for international profiling and positioning of their region, and ‘dare’ to specialise in the region’s strong points, something that takes courage.

The KNOW-HUB project collaborates with the Smart Specialisation Platform and links the content of the project’s good practices to the different steps of the Smart Specialisation Strategies. We think this approach could be of interest to policymakers of other regions as well, potentially providing a better perspective on the regional specialisation efforts.

As for internationalisation, we believe the IPP project has brought forward a number of good practices on how regions can approach this challenge. For example, the city of Paterna’s ‘City of Business’ strategy with the involvement of a number of different stakeholders working under a unifying brand is a good practice worth highlighting. Measures such as the programme for guiding municipalities in their internationalization, developed in a pilot project in IPP, is another type of action we consider to be helpful in the internationalization of regions.

3.) The regional innovation system and its members do not operate in isolation from other issues at a regional level. We see that policymakers can contribute to the regional innovation system indirectly by acknowledging and tending to e.g. living conditions such as housing opportunities in the region, public transportation etc.

These are not issues we have seen addressed in any of the projects, which of course is not surprising given that they lie outside the thematic area of innovation systems, but nevertheless we advise keeping them in mind.

Research institutes and universities play a special role in innovation systems in that many of the ideas transformed into innovation originate from these types of institutions. Therefore, we find it appropriate to address these members with a separate set of recommendations.

How can research institutes and universities contribute to the regional innovation system?

1.) It is important that these institutions adopt an attitude where they ‘think and act’ innovation, not just research. We find it important to couple research with practical applicability and business opportunities from an early stage, to increase the odds of ideas making it all the way to become innovations.

We have seen examples of this way of thinking, e.g. in the KNOW-MAN project’s good practice ‘Humboldt Innovation GmbH’ from the Humboldt university. In addition to facilitating research cooperation between the university and external organisations, Humboldt Innovation provides support technology and knowledge-intensive university spin-off companies as they make their way through the business development process.
2.) Partly linked to the first point, but with additional benefits as well, the second recommendation from the evaluation team is for universities and research institutes to interact and cooperate with businesses. We see several advantages to this, e.g. businesses can communicate their needs early and provide direction in research, while in return business can be boosted by competence and creativity coming out of the research institutions.

The ‘Knowledge Transfer Partnerships’ is a good practice found in the INNOPOLIS project we consider worth mentioning in this context. Recent graduates inject skills and expertise into business organisations while the graduates improve their business skills; in addition, the partnerships increase the relevance of the education and research of the knowledge-base. In our view, this model for two-directional knowledge exchange is well worth a closer look for universities and businesses seeking deeper cooperation.

We also wish to show that interaction can take place on virtual platforms, as is the case in the good practice ‘Transfercafé’ found in the KNOW-MAN project. Hosted by the TSB Innovation Agency Berlin GmbH, the platform facilitates contact between scientific institutions and companies. SMEs are provided with a communication platform to address confidential enquires concerning technology and R&D projects to regional scientific institutions. This practice shows one possible solution to how barriers for communication can be reduced; something we believe to be important step in strengthening interaction between members of any innovation system.

3.) Provide motivating incentive mechanisms for sub-systems and individuals. This could entail the personal recognition of staff through awards, monetary incentives etc. based on e.g. the amount of external funding attracted by the individual researcher. Similarly, financial rewards can be given to faculties and departments.

Implementation support bodies work closely with other members of the innovation system, putting policies into practice, and their performance affects the overall system performance in a way that warrants recommendations targeting this group specifically:

How can implementation support bodies contribute to the regional innovation system?

1.) Our analysis shows that the challenge of fragmentation in the innovation system is addressed by ERMIS, INOLINK and KNOW-MAN. We believe it is important that the individual implementation support bodies of the innovation system maintain clear strategies and division of responsibilities related to their overall mission. This creates transparency of the system, clarifies who covers which areas and makes it easier to understand the system and to spot inefficiencies.

2.) Implementation support bodies should take a system approach in their operations and work for the benefit of the whole innovation system and avoid sub-optimization within their own field of work.

In our view, the ‘ASTRIDE online platform’, highlighted as a good practice in the KNOW-HUB project, showcases an efficient way to maintain a system perspective for all the stakeholders involved, providing them with both tools for collaboration and useful information on regional businesses. A solution like this, built around an extensive database, is likely to be of great value to any region trying to coordinate support to a large number of SMEs.

3.) Similar to what we pointed out above about universities and research institutes interacting with businesses, we also believe it is beneficial if implementation support bodies engage with companies and listen to their needs. We consider such input to be very valuable in shaping the activities of the implementation bodies, helping companies ensure a critical mass within necessary competence areas.

The ‘UIPP Network’ good practice found in the INOLINK project caters to the needs of companies regarding information on intellectual property & its use and the companies’ legal rights, as well as assistance in application processes for registration. We consider this a good example of a measure directly targeted at a competence area valuable to the individual company, but one the company might not be able to take on its own.
## 5 Annexes

### Annexe 1: Innovation systems (triple helix & open innovation) projects overview

### 10 Projects:

<table>
<thead>
<tr>
<th>Project acronym</th>
<th>Project name</th>
<th>Detailed topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIQ</td>
<td>Urban-rural partnerships in metropolitan areas</td>
<td>Generation and transfer of innovation in metropolitan areas through urban-rural partnerships</td>
</tr>
<tr>
<td>ERMIS</td>
<td>Effective Reproducible Model of Innovation Systems</td>
<td>Governance models for local innovation systems for SMEs</td>
</tr>
<tr>
<td>EURIS</td>
<td>Creating Local Innovation through a Quadruple Helix</td>
<td>Improvement of the relations between the different actors to support open innovation</td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>European Collaborative and Open Regional Innovation Strategies</td>
<td>Development of an open innovation environments</td>
</tr>
<tr>
<td>INOLINK</td>
<td>Innovation Policy in University City Regions</td>
<td>Enhancement of the cooperation between businesses and universities</td>
</tr>
<tr>
<td>IPP</td>
<td>Interregional Partnership Platform</td>
<td>Support to innovation intermediaries</td>
</tr>
<tr>
<td>KNOW-HUB</td>
<td>University Collaboration in Regional Development Spaces</td>
<td>Triple helix as assistance for transformation of failing peripheral regions into centres of excellence</td>
</tr>
<tr>
<td>Know-Man</td>
<td>Knowledge Network Management in Technology Parks</td>
<td>Strengthening of the knowledge-business-public triangle</td>
</tr>
<tr>
<td>UNICREDs</td>
<td>Enhancing the regional competences in strategic management of innovation policies</td>
<td>Smart specialisation strategies and effective instruments of innovation policies to develop Regions' own comparative advantages</td>
</tr>
<tr>
<td>URMA</td>
<td>Connecting the territory through the innovation network</td>
<td>Ensuring a good repartition of innovation between centres and peripheral areas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project acronym</th>
<th>Number of partners</th>
<th>Country of the LP</th>
<th>ERDF funding (€)</th>
<th>Total budget (€)</th>
<th>Starting date</th>
<th>Ending date</th>
<th>Type of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIQ</td>
<td>16</td>
<td>FINLAND</td>
<td>1,472,603</td>
<td>1,944,475</td>
<td>01/11/2008</td>
<td>31/01/2012</td>
<td>RIP</td>
</tr>
<tr>
<td>ERMIS</td>
<td>16</td>
<td>FRANCE</td>
<td>1,675,357</td>
<td>2,152,580</td>
<td>01/01/2010</td>
<td>31/12/2012</td>
<td>RIP</td>
</tr>
<tr>
<td>EURIS</td>
<td>5</td>
<td>SPAIN</td>
<td>3,240,461</td>
<td>4,130,511</td>
<td>01/01/2010</td>
<td>31/12/2013</td>
<td>RIP</td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>9</td>
<td>UNITED KINGDOM</td>
<td>1,249,466</td>
<td>1,579,135</td>
<td>01/01/2010</td>
<td>31/12/2012</td>
<td>RIP</td>
</tr>
<tr>
<td>INOLINK</td>
<td>10</td>
<td>SPAIN</td>
<td>1,473,927</td>
<td>1,889,494</td>
<td>01/01/2010</td>
<td>31/12/2012</td>
<td>RIP</td>
</tr>
<tr>
<td>IPP</td>
<td>5</td>
<td>GERMANY</td>
<td>890,565</td>
<td>1,137,700</td>
<td>01/01/2010</td>
<td>31/03/2013</td>
<td>RIP</td>
</tr>
<tr>
<td>KNOW-HUB</td>
<td>12</td>
<td>POLAND</td>
<td>1,708,919</td>
<td>2,172,032</td>
<td>01/01/2012</td>
<td>31/12/2014</td>
<td>RIP</td>
</tr>
<tr>
<td>Know-Man</td>
<td>15</td>
<td>GERMANY</td>
<td>1,669,198</td>
<td>2,136,192</td>
<td>01/01/2010</td>
<td>31/12/2012</td>
<td>RIP</td>
</tr>
<tr>
<td>UNICREDs</td>
<td>16</td>
<td>UNITED KINGDOM</td>
<td>1,710,861</td>
<td>2,173,658</td>
<td>01/01/2010</td>
<td>31/12/2012</td>
<td>RIP</td>
</tr>
<tr>
<td>URMA</td>
<td>9</td>
<td>GERMANY</td>
<td>1,506,431</td>
<td>1,939,528</td>
<td>01/01/2012</td>
<td>31/12/2014</td>
<td>RIP</td>
</tr>
</tbody>
</table>

113 | 16,597,786 | 21,255,307 |

---

21 Representing 22 Member states + Norway
22 LP: Lead Partner
23 RIP: Regional Initiative Project
### Indicators - as of end 2013

<table>
<thead>
<tr>
<th>Project acronym</th>
<th>End date</th>
<th>Outputs</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of regional / local policies and instruments addressed</td>
<td>No. of good practices identified by Regional Initiative Projects*</td>
</tr>
<tr>
<td>CLIO</td>
<td>31/01/2012</td>
<td>14</td>
<td>73</td>
</tr>
<tr>
<td>ERMIS</td>
<td>31/12/2012</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>EURIS</td>
<td>31/12/2013</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>INNOPOLIS</td>
<td>31/12/2012</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>INOLINK</td>
<td>31/12/2012</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>IPP</td>
<td>31/03/2013</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>KNOW-HUB</td>
<td>31/12/2014</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>Know-Man</td>
<td>31/12/2012</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>UNICREDs</td>
<td>31/12/2012</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>URMA</td>
<td>31/12/2014</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

* Projects (RIP) do not always result in the transfer of good practices, but they always have to identify good practices with view to improving policies.

---

**Partners legal status**

- **Bodies governed by public law**: e.g. Regional and local development agencies, Public universities etc.

**Public Authorities Governance level**

- **Local Public Authority**
- **Regional Public Authority**
- **National Public Authority**

**Number of partner per country**

- Partners
Annexe 2: Innovation systems (triple helix & open innovation) project partners Map
Annexe 3: Innovation systems (triple helix & open innovation) projects factsheets

Improvement of the relations between the different actors

**CLiq**
Creating Local Innovation through a Quadruple Helix

**PROJECT DETAILS**

**Priority:** Innovation and the knowledge economy  
**Theme:** Innovation, research and technology development

**TYPE OF INTERVENTION**

**Type of intervention:** Regional Initiative Project  
**Duration:** 01/11/2008 - 31/01/2012  
**Website:** [www.cliqproject.eu](http://www.cliqproject.eu)

**BUDGET**

**Total budget:** EUR 1,944,474  
**ERDF contribution:** EUR 1,472,602.52

**PARTNERSHIP**

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Finland City of Jyväskylä, Jyväskylä</td>
</tr>
<tr>
<td>2</td>
<td>Finland City of Mikkeli, Mikkeli</td>
</tr>
<tr>
<td>3</td>
<td>France Pau Chamber of Commerce, Pau</td>
</tr>
<tr>
<td>4</td>
<td>Germany Business- and Innovation-Center Lippe-Detmold, Detmold</td>
</tr>
<tr>
<td>5</td>
<td>Germany City of Ulm, Ulm</td>
</tr>
<tr>
<td>6</td>
<td>Greece Centre for Technological Research Crete, Heraklion</td>
</tr>
<tr>
<td>7</td>
<td>Italy Chamber of Commerce of Cremona, Cremona</td>
</tr>
<tr>
<td>8</td>
<td>Netherlands Municipality of Leeuwarden, Leeuwarden</td>
</tr>
<tr>
<td>9</td>
<td>Portugal Beira Atlantic Park Incubator Association – BiC</td>
</tr>
<tr>
<td>10</td>
<td>Portugal Beira Atlantic, Aveiro - Coimbra</td>
</tr>
<tr>
<td>11</td>
<td>Spain Manresa City Council, Manresa</td>
</tr>
<tr>
<td>12</td>
<td>Spain Girona City Council, Girona</td>
</tr>
<tr>
<td>13</td>
<td>Spain Government of Catalonia, Barcelona</td>
</tr>
<tr>
<td>14</td>
<td>Spain BIC Bay of Cadiz (Bay of Cadiz Foundation for Economical Development), El Puerto de Santa María (Cádiz)</td>
</tr>
<tr>
<td>15</td>
<td>Sweden Eskilstuna Municipality, Eskilstuna</td>
</tr>
<tr>
<td>16</td>
<td>Sweden Municipality of Gävle, Gävle</td>
</tr>
<tr>
<td></td>
<td>United Kingdom Sussex Innovation Centre, Brighton and Hove</td>
</tr>
</tbody>
</table>

Lead partner:  
City of Jyväskylä  
Kilpistenkatu 1  
40100, Jyväskylä  
FINLAND
ERMIS
Effective Reproducible Model of Innovation Systems

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2010 - 31/12/2012
Website: www.ermisproject.eu

BUDGET
Total budget: EUR 2 152 580
ERDF contribution: EUR 1 675 357

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Chamber of Commerce French Riviera, Nice</td>
</tr>
<tr>
<td>France</td>
<td>Sophia Antipolis Communauty Agglomeration, Sophia Antipolis Cedex</td>
</tr>
<tr>
<td>Italy</td>
<td>Cesena Municipality, Cesena</td>
</tr>
<tr>
<td>Italy</td>
<td>CISE, Forli</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Eindhoven Municipality, Eindhoven</td>
</tr>
<tr>
<td>Portugal</td>
<td>Penela Municipality, Penela</td>
</tr>
<tr>
<td>Portugal</td>
<td>IPN Incubator - Ideas and Business Incubator, Coimbra</td>
</tr>
<tr>
<td>Hungary</td>
<td>Miskolc Municipality, Miskolc</td>
</tr>
<tr>
<td>Hungary</td>
<td>Miskolc Holding Plc., Miskolc</td>
</tr>
<tr>
<td>Spain</td>
<td>ADEuropa Foundation, ARROYO DE LA ENCOMIENDA</td>
</tr>
<tr>
<td>Greece</td>
<td>Region of North Aegean, Mytilene</td>
</tr>
<tr>
<td>Greece</td>
<td>Samos Chamber of Commerce, Samos</td>
</tr>
<tr>
<td>Denmark</td>
<td>The Municipality of Hørsholm, Hørsholm</td>
</tr>
<tr>
<td>Denmark</td>
<td>Copenhagen Regional Agency (Erthvervnet), Hillerød</td>
</tr>
<tr>
<td>Romania</td>
<td>Iasi Municipality, Iasi</td>
</tr>
<tr>
<td>Spain</td>
<td>Castilla y León Innovation and Financing Business Agency, Valladolid</td>
</tr>
</tbody>
</table>
Development of an open innovation environment

**EURIS**
European Collaborative and Open Regional Innovation Strategies

**PROJECT DETAILS**

**Priority:** Innovation and the knowledge economy  
**Theme:** Innovation, research and technology development

**TYPE OF INTERVENTION**

**Type of intervention:** Regional Initiative Project  
**Mini-programme:** yes  
**Duration:** 01/01/2010 - 31/12/2013  
**Website:** [www.euris-programme.eu](http://www.euris-programme.eu)

**BUDGET**

**Total budget:** EUR 4 130 512  
**ERDF contribution:** EUR 3 240 460.8

**PARTNERSHIP**

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Spain</td>
<td>DG Enterprise and Innovation, Dept. of Rural Dev., Industry, Employment and Environment, Pamplona</td>
</tr>
<tr>
<td>2 Germany</td>
<td>Stuttgart Region Economic Development Corporation, Stuttgart</td>
</tr>
<tr>
<td>3 The Netherlands</td>
<td>Brainport Development NV, Eindhoven</td>
</tr>
<tr>
<td>4 Hungary</td>
<td>West-Transdanubian Regional Development Agency Non-profit Limited Liability Company, Sopron</td>
</tr>
<tr>
<td>5 Poland</td>
<td>Lodz Region, Lodz</td>
</tr>
</tbody>
</table>

**Lead partner:**

DG Enterprise and Innovation, Dept. of Rural Dev., Industry, Employment and Environment  
Parque Tomás Caballero, nº 1, 6º planta  
31005, Pamplona  
SPAIN
INNOPOLIS
Innovation Policy in University City Regions

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2010 - 31/12/2012
Website: www.knowledgecities.eu

BUDGET
Total budget: EUR 1 579 134
ERDF contribution: EUR 1 249 465.57

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>United kingdom</td>
<td>The University of Salford, Salford</td>
</tr>
<tr>
<td>Greece</td>
<td>Aristotle University of Thessaloniki (URENIO Research Unit), Thessaloniki</td>
</tr>
<tr>
<td>Greece</td>
<td>Decentralised Administration of Macedonia - Thrace, Thessaloniki</td>
</tr>
<tr>
<td>Finland</td>
<td>Aalto University Foundation, Espoo</td>
</tr>
<tr>
<td>Finland</td>
<td>City of Helsinki, Urban Facts Department, City of Helsinki</td>
</tr>
<tr>
<td>Poland</td>
<td>University of Lodz, Management Faculty, Lodz</td>
</tr>
<tr>
<td>Poland</td>
<td>Lodz Region, Lodz</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Manchester Knowledge Capital, Manchester</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Manchester City Council, Manchester</td>
</tr>
</tbody>
</table>

Lead partner:
The University of Salford
43, The Crescent
M5 4WT, Salford
UNITED KINGDOM
INOLINK
Connecting the territory through the innovation network

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2010 - 31/12/2012
Website: www.inolink.eu

BUDGET
Total budget: EUR 1 766 120
ERDF contribution: EUR 1 381 396.56

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spain The Andalusian Technology Network (R.E.T.A.), Campanillas</td>
</tr>
<tr>
<td>2</td>
<td>Italy Etruria Innovazione S.C.p.A., SIENA</td>
</tr>
<tr>
<td>3</td>
<td>Slovenia Maribor Development Agency, Maribor</td>
</tr>
<tr>
<td>4</td>
<td>Germany cc-NanoBioNet e. V., Saarbrücken</td>
</tr>
<tr>
<td>5</td>
<td>Portugal University of the Algarve, Faro</td>
</tr>
<tr>
<td>6</td>
<td>Spain Foundation for the Development of Science and Technology in Extremadura, Badajoz</td>
</tr>
<tr>
<td>7</td>
<td>Romania North-East Regional Development Agency, Piatra Neamt</td>
</tr>
<tr>
<td>8</td>
<td>Bulgaria Regional Agency for Entrepreneurship and Innovations - Varna (RAPIV), Varna</td>
</tr>
<tr>
<td>9</td>
<td>United Kingdom Coventry University Enterprises Limited (CUE Ltd), Coventry</td>
</tr>
<tr>
<td>10</td>
<td>Italy Abruzzo Region, L’Aquila</td>
</tr>
</tbody>
</table>

Lead partner:
The Andalusian Technology Network (R.E.T.A.)
C/ Severo Ochoa 21 - Edif. Norte - Bajo - Ofic. 5
29590, Campanillas
SPAIN
Support to innovation intermediaries

IPP
Interregional Partnership Platform

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2010 - 31/03/2013
Website: www.i-p-p.eu

BUDGET
Total budget: EUR 1 137 700
ERDF contribution: EUR 890 565

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ministry of Science and Economy of Saxony-Anhalt, Magdeburg</td>
</tr>
<tr>
<td>2</td>
<td>Fundación Comunidad Valenciana Region Europea, Valencia</td>
</tr>
<tr>
<td>3</td>
<td>State Regional Development Agency, Riga</td>
</tr>
<tr>
<td>4</td>
<td>INNOVA Észak-Alföldi Regional Development and Innovation Agency, DEBRECEN</td>
</tr>
<tr>
<td>5</td>
<td>Municipality of Paterna, Paterna</td>
</tr>
</tbody>
</table>

Lead partner:
Ministry of Science and Economy of Saxony-Anhalt
Hasselbachstrasse 4
39104, Magdeburg
GERMANY
KNOW-HUB
Enhancing the regional competences in strategic management of innovation policies

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2012 - 31/12/2014
Website: www.know-hub.eu

BUDGET
Total budget: EUR 2 172 032
ERDF contribution: EUR 1 708 919.17

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>Adam Mickiewicz University Foundation, Poznan Science and Technology Parkul, Rubież 46 PL-61-612, Poznan POLAND</td>
</tr>
<tr>
<td>Belgium</td>
<td>European Association of Development Agencies, Bruxelles</td>
</tr>
<tr>
<td>Hungary</td>
<td>INNOVA Eszak-Alföld Regional Development and Innovation Agency Nonprofit Ltd, Debrecen</td>
</tr>
<tr>
<td>Spain</td>
<td>Industry, Innovation Commerce and Tourism Department, Basque Government, Vitoria-Gasteiz</td>
</tr>
<tr>
<td>France</td>
<td>North France Innovation Development (NFID), Lille</td>
</tr>
<tr>
<td>France</td>
<td>Méditerranée Technologies, Marseille Cedex 01</td>
</tr>
<tr>
<td>Austria</td>
<td>Lower Austrian Government, Dept. Economic Affairs, Tourism, Technology, St. Pölten</td>
</tr>
<tr>
<td>Germany</td>
<td>Association of Counties and Cities in the Weser-Ems, represented by the District Ammerland, Westerstede</td>
</tr>
<tr>
<td>The Slovak Republic</td>
<td>Banská Bystrica Self-governing Region, Banská Bystrica</td>
</tr>
<tr>
<td>Spain</td>
<td>Castilla y león regional government – the Castilla y león universities foundation, Valladolid</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Applied Research and Communications Fund, Sofia</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Municipality of Gabrovo, Gabrovo</td>
</tr>
</tbody>
</table>
Smart specialisation strategies and effective instruments of innovation policies to develop Regions’ own comparative advantages

KNOW-MAN
Knowledge Network Management in Technology Parks

**PROJECT DETAILS**
*Priority:* Innovation and the knowledge economy  
*Theme:* Innovation, research and technology development

**TYPE OF INTERVENTION**
*Type of intervention:* Regional Initiative Project  
*Duration:* 01/01/2010 - 31/12/2012  
*Website:* [www.know-man.eu/](http://www.know-man.eu/)

**BUDGET**
*Total budget:* EUR 2 136 192  
*ERDF contribution:* EUR 1 669 197.72

**PARTNERSHIP**

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Germany</td>
</tr>
<tr>
<td>2</td>
<td>Germany</td>
</tr>
<tr>
<td>3</td>
<td>Germany</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
</tr>
<tr>
<td>5</td>
<td>Poland</td>
</tr>
<tr>
<td>6</td>
<td>Poland</td>
</tr>
<tr>
<td>7</td>
<td>Poland</td>
</tr>
<tr>
<td>8</td>
<td>Slovenia</td>
</tr>
<tr>
<td>9</td>
<td>Slovenia</td>
</tr>
<tr>
<td>10</td>
<td>Slovenia</td>
</tr>
<tr>
<td>11</td>
<td>Spain</td>
</tr>
<tr>
<td>12</td>
<td>Spain</td>
</tr>
<tr>
<td>13</td>
<td>Italy</td>
</tr>
<tr>
<td>14</td>
<td>Italy</td>
</tr>
<tr>
<td>15</td>
<td>Italy</td>
</tr>
</tbody>
</table>

Lead partner:  
Leibniz-Institute for Regional Development and Structural Planning  
Flakenstraße 28-31  
15537, Erkner  
GERMANY
UNICREDS
University Collaboration in Regional Development Spaces

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2010 - 31/12/2012
Website: www.unicreds.eu

BUDGET
Total budget: EUR 2 173 658
ERDF contribution: EUR 1 710 860.89

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>Cornwall Council, Truro</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>University College Falmouth, Falmouth</td>
</tr>
<tr>
<td>Sweden</td>
<td>Council of Skellefteå - Campus Development Unit, Skellefteå</td>
</tr>
<tr>
<td>Sweden</td>
<td>Regional Council of Vasterbotten, Umeå</td>
</tr>
<tr>
<td>Sweden</td>
<td>Åkademir Norr Association of Municipalities, Storumsans kommun</td>
</tr>
<tr>
<td>Finland</td>
<td>City of Seinäjoki, Seinäjoki</td>
</tr>
<tr>
<td>Finland</td>
<td>University Consortium of Seinäjoki / University of Tampere, Seinäjoki</td>
</tr>
<tr>
<td>Finland</td>
<td>Frami Ltd, Seinäjoki</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>University of South Bohemia, České Budejovice</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>South Bohemian regional authority, České Budejovice</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Bulgarian Ministry of Regional Development and Public Works, Sofia</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Sophia University 'St.Kliment Ohridski', Blagoevgrad</td>
</tr>
<tr>
<td>Hungary</td>
<td>University of Debrecen Centre for Environmental Management and Policy, Debrecen</td>
</tr>
<tr>
<td>Hungary</td>
<td>Hajdú-Bihar County Council, Debrecen</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>UHI Millennium Institute, Inverness</td>
</tr>
<tr>
<td>Hungary</td>
<td>Institution Maintenance Centre of Hajdú-Bihar County, Debrecen</td>
</tr>
</tbody>
</table>

Lead partner:
Cornwall Council
New County Hall, Treyew Road
TR1 3AY, Truro
UNITED KINGDOM

Triple helix as assistance for transformation of failing peripheral regions into centers of excellence
Generation and transfer of innovation in metropolitan areas through urban-rural partnerships

URMA
Urban-rural partnerships in metropolitan areas

PROJECT DETAILS
Priority: Innovation and the knowledge economy
Theme: Innovation, research and technology development

TYPE OF INTERVENTION
Type of intervention: Regional Initiative Project
Duration: 01/01/2012 - 31/12/2014
Website: www.urma-project.eu

BUDGET
Total budget: EUR 1 939 530
ERDF contribution: EUR 1 506 430.68

PARTNERSHIP

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution, Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Germany HafenCity University Hamburg, Hamburg</td>
</tr>
<tr>
<td>2</td>
<td>Germany State Ministry of Urban Development and Environment, Free and Hanseatic City of Hamburg, Hamburg</td>
</tr>
<tr>
<td>3</td>
<td>Poland Westpomeranian Voivodeship, Szczecin</td>
</tr>
<tr>
<td>4</td>
<td>Italy TUSCANY REGION, FIRENZE</td>
</tr>
<tr>
<td>5</td>
<td>Italy LOMBARDIA REGION, Milan</td>
</tr>
<tr>
<td>6</td>
<td>Spain Department for Town Planning and Territorial Strategies Madrid, Madrid</td>
</tr>
<tr>
<td>7</td>
<td>Poland Institute of Urban Development Krakow, Kraków</td>
</tr>
<tr>
<td>8</td>
<td>The Netherlands Municipality of Borne, Borne</td>
</tr>
<tr>
<td>9</td>
<td>Bulgaria Pleven Regional Administration, Pleven (Bulgaria)</td>
</tr>
</tbody>
</table>

Lead partner:
HafenCity University Hamburg
Winterhuder Weg 29-31
22085, Hamburg
GERMANY
Annexe 4: Innovation systems (triple helix & open innovation) Literature List

Publications:


Webpages:


Individual Project Reports:

CLIQ

CLIQ (2009), “CLIQboost Report - Baseline research for CLIQ INTERREG IVC (Creating Local Innovations for SMEs through a Quadruple Helix)”, Available at: http://www.cligproject.eu/en/products/research/interRegionalResearch/?id=79&folderId=109&fileId=1578&key=b957ba69c80c9d73a3690788a4ee86c2


IPP


KNOW-MAN


PERIA


SMART+


UNICREDS


URMA


Other:


INTERREG IVC Thematic Capitalisation

- Innovation systems
- Innovation capacity of SMEs
- Eco-Innovation
- Creative Industries
- Entrepreneurship
- E-government services
- Demographic change
- Rural development
- Climate change
- Energy efficiency
- Renewable energy
- Sustainable transport

Download all reports at:
www.interreg4c.eu/capitalisation