Where clusters, regions and national authorities meet and explore innovation strategies for the future

For more information about the ClusterIX project please contact:
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ClusterIX is also active on LinkedIn join the group here:

Or take a look at our website www.clusterix.info
How do we design better cluster policies?

Experience shows that new technological fields emerge in the interface between existing industries.
This project is co-financed by the European Regional Development Fund and made possible by the Interreg IVC programme

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

Cross-linking regional strengths and technologies

From a policy perspective innovation means not only creating totally new technologies, but also increasingly cross-linking existing industries in the hopes of creating new paths of development – within regions, between regions and beyond national boundaries.

Experience shows that new technological fields emerge in the interface between existing industries.

The overall objective of ClusteriX is to help increase the competitiveness of European regions and their innovation potential through the improvement and strategic re-orientation of cluster policies by using smart specialization strategies.

ClusteriX helps policymakers face this challenge through 3 steps:

1. By identifying those new technological developments and trends with a high potential for boosting the regional economic growth at an early stage
2. By exploring the potential of cross-linking the existing technologies, within the regions and between the regions towards a smartly specialised Europe
3. By fostering better designs of innovation policies through clusters

Creating frameworks for interregional cluster cooperation

Clusters provide a positive environment for new industries and they support the interaction and cooperation between different innovation actors (policy makers, companies, research facilities, investors and other bodies) in the region.

Up until recently cluster programmes have looked on ways to develop existing strengths, now ClusteriX takes on a new perspective by focusing not only on the role of clusters in support of emerging industries, but also on how to create frameworks for interregional cluster cooperation.

With technologies and trends as the point of departure the ClusteriX partners use peer group discussions, staff exchanges, study tours and conferences to explore ways of cooperation between regions and technologies.

As a result, the learnings and good practices will be integrated into the regional implementation plans and also shared with stakeholders through a published manual and through policy recommendations for cross-cluster linking.

Partnership for Cross-Linked Cluster Innovation

The project is carried out in collaboration between ecoplus, The Business Agency of Lower Austria (Austria), Cluster 55/ Lund University (Sweden), Region of Southern Denmark (Denmark), ERAI - Entreprise Rhone-Alpes International (Austria), Economic Development Karlsruhe (Germany), West-Pannon Regional and Economic Development Nonprofit Ltd (Hungary), TIS, Techno Innovation South Tyrol SpcA (Italy), INMA - National Institute of Research Development for Machines and Installations Designed to Agriculture and Food Industry (Romania)) and Tillväxtverket Swedish Agency for Economic and Regional Growth (Sweden).
Being in charge of implementing the region’s Cluster Programme since more than 10 years the Lower Austrian Business Agency ecoplus sets a high priority on cross-cluster collaboration. This “horizontal” thinking needed to be developed over the years. It started with using synergies in cluster management, later it expanded to cross-cluster events, e.g. to spread the know-how in the Greenbuilding Cluster on energy efficient production buildings to other clusters in the fields of Food, Plastics, Mechatronics and Logistics.

It turned out that the most interesting projects evolved at the interface of different clusters. The first cross-cluster RDI projects were developed along the value chain, e.g. in collaborations of the Food and the Plastics Cluster on bioplastics packaging for organic food. Recently ecoplus has developed a new tool, the Competence Map, which helps companies to identify and describe their specific skills – detached from their usual products – in order to find new application fields and open new markets. The experiences with this tool have been shared with the ClusteriX partners.

Lessons learned for ecoplus in ClusteriX are a better understanding for the issue oriented innovation approach used in Sweden, that bundles different know-how to address a common challenge and in the end a shared market potential. ClusteriX also contributed to the set-up of a cross-sectorial platform (plastics, mechatronics and textiles) for smart textiles in Austria based on a good practice from Rhone-Alpes. The discussion with Romanian partners helped increase awareness for the role of key enabling technologies in the region’s Smart Specialization Strategy.
Development of a Competence Map of Lower Austrian Mechatronic Companies

Location of the Practice: Lower Austria / Austria
Start and end date: 2011 - ongoing

The “Competence Map” is a systematic approach to identify strategically significant innovation potentials and to develop emerging regional economic fields of strength. In intensive workshops companies learn to change their view from product related development to a clear definition of their competences and identification of completely new applications and markets. The tool was tested in a pilot action with 10 companies in the Mechatronics Cluster Lower resulting in the identification of new markets, especially in the fields of LED. It will be further adapted to map competences of R&D institutions and identify potential applications and diversify the know-how in so far untapped sectors.

The Competence Map tool is addressing the challenge to identify common topics for R&D&I of cluster members with impact on the regional value added. It was developed by the Lower Austrian Mechatronics Cluster with support of an external expert for technology analysis and tested with 10 companies. The tool consists of: (1) a comprehensive questionnaire for self-assessment of technological and organisational competences, (2) guidelines incl. description of the overall concept, the workshop, the analysis grid, assistance for how to complete the evaluation instrument and how to interpret the competencies portfolio. It will be further adapted to map competences of R&D institutions and identify potential applications.

The tool was tested in 2011 with 10 member companies of the Mechatronics-Cluster in Lower Austria. All participants have positively commented on the cost/benefit ratio, though the time spent was significant. Self-assessment and the workshop helped companies to clarify the understanding of their competencies and to broaden their view on their markets. Two technology fields with relevance to several companies were identified, which led to the establishment of a cluster working group to foster collaboration. The cluster staff managed to gain a deep insight into the competencies of the companies, which helps to broker future project partners and served as a direct input for the cluster strategy development. The Competence Map has been rolled out to further companies using regional funds and private financing. The tool was also further adapted to map competences of R&D institutions and identify potential applications in new sectors.

Feedback from participating companies was very positive. Self-assessment and workshop helped companies to clarify the understanding of their competencies and to broaden their view on their markets.

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With almost 15 years of regional and cross-border experience in ICT cluster development, Cluster 55 has in recent years also begun to focus on cross-cluster collaborations. As part of a cross-border initiative in the late 90’s called the øresund University, for many years the cluster’s primary role was to establish and enhance cross-border collaborations between Greater Copenhagen Area and Southern Sweden together with 4 other initiatives (Food, Materials, Environment and Logistics). While some activities were carried out across the clusters the potential of cross clustering and smart specialization became evident when the Cluster 55 helped establish Copenhagen Finance and IT region (CFIR) and the mobile communications cluster, Mobile Heights, as specialized ICT cluster initiatives. Since then cross-clustering has together with internationalization of SMEs been the main drivers of activities in the cluster organization, where the internationalization activities capitalizes on cluster networks using the synergies and differences in capabilities and competences that exists in different clusters. The good practice, Cross-cluster Business Trips, provided by Cluster 55 is an example of such collaboration.

For Cluster 55 the ClusteriX project has provided many new ideas as to how to further develop the cluster i.e. the methodological internationalization approach in Rhône Alpes and the competence mapping in Lower Austria are tools that could add value to the cluster and its members. ClusteriX has also underlined the potential of cross-clustering across sectors motivating Cluster 55 to i.e. enter into collaboration with Plastipolis (french plastics cluster), building a European strategic cluster partnership around Smart Textiles and organizing the cluster’s first regional match-making event between media, ICT and the packaging industry.

Region: Skåne Region, Sweden
Existed: Cluster since 1999
National Authority: Cluster organization hosted by Lund University
More info: www.cluster55.org
Cross-Cluster Business Trips

Location of the Practice: Brazil, Argentina, Hong Kong (Raleigh, Shanghai, Dezhou, Zuhai, Macao, NYC, Washington DC)
Start and end date: 2012-2012

For an SME operating in a global world it is necessary to expand your business to international markets, but this is more often than not a challenge to do without the right network or the finances to pay for it. Even more so when an SME is exploring markets outside of the EU. Cross cluster business trips aims to facilitate internationalization for two clusters; Cluster 55 (C55) and Future Position X (FPX). With financial support from Tillväxtverket, the Swedish Agency for Economic and Regional Growth, the two clusters gave a total of 32 companies the opportunity to do business abroad. With the combined knowledge of and competencies in successful internationalization the clusters chose 3 locations to visit during the project period; USA, South America and China. The chosen locations were carefully assessed by the cluster organizations in terms of business opportunities and market potential. Also contacts in form of existing networks of companies, organizations and public authorities were part of the assessment.

The 32 SME’s were selected from 2 criteria: maturity and relevance for market i.e. ready and able to establish businesses and collaborations in the chosen location. To motivate the SMEs to dedicate time to preparation for the trip each of them were required to pay 1,500€ to participate in one business trip and to book individual meetings well in advance. The clusters assisted the SMEs in this process with their knowledge of the market and their contacts. Cluster 55 and FPX arranged the trip and covered the costs of travel, accommodation, and joint activities such as dinners, match-making events and joint meetings with larger enterprises. The length of the trips was on average 10 days.

The practice not only facilitates international networking but also strengthens the relations between the companies participating in the project, as well as supporting regional and national partnerships and initiate new business ideas as positive side effects of the trips. With different backgrounds and experiences the participants help each other with business development.

The companies participating in the project are not required to evaluate or report the results of their trip and meetings. Therefore it is difficult to measure the impact and the results of the project. Another factor is that these trips usually have been used to facilitate the SME’s initial contact to the companies located in the markets - so actual results are hard to measure, since negotiations are still on-going for some of the companies.

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(Description)
The Region of Southern Denmark has decided to concentrate the business support infrastructure on three distinct areas based on a high potential for growth and regional core competencies. Four cluster organisations were established to improve these identified regional strengths and potentials in a new smart specialisation strategy: 1) Design2innovate supports design driven innovation across sectors, 2) Lean Energy Cluster focuses on technologies and systems’ solutions in the field of energy efficiency 3) Offshoreenergy.dk supports offshore renewables as well as oil & gas from consultancy, design, production, installation, surveillance and maintenance 4) Welfare Tech is to ensure that the strong competencies in the region within health and care are exploited in a structured way to support the collaboration between business and public health institutions.

The new strategic approach has already created significant value for the business community in the region. It has contributed to help the region being named European Entrepreneurial Region of the Year 2013 by the Committee of the Regions. This award helped establishing a one-stop-shop for entrepreneurs in the region to get support, info and advice in all stages of the entrepreneurial process. The Region is at present developing ways to support the cluster organisations to work with entrepreneurship, eco-systems and internationalization.

(Lessons learned)
For the Region of Southern Denmark it has been interesting to learn about smart specialisation strategies in other regions in Europe. In particular the approach of the Region Rhône-Alpes has been of great interest. The Region Rhône-Alpes has established long terms contracts between the clusters and the national and regional authorities. These contracts are, however, adjusted each year to ensure development and expectations of the parties. Also, national authorities are participating in the Steering Committee or the board of the clusters to ensure co-ordination with national guidelines. Finally, it has been interesting to hear that the Region is financing the technological facilities and machinery and that the Region is credited for providing companies with these facilities.

Region: Southern Denmark
Existed: Cluster policy since 2007
Cluster initiatives: 4 (Design2innovate, Lean Energy, Offshoreenergy.dk, Welfare Tech)
Body: Regional authority
Website: www.regionsyddanmark.dk
Welfare Tech

Location of the practice: Southern Denmark
Start and end date: January 2010 – ongoing

Welfare Tech is a cluster organisation for health care, home care and social services in Denmark. Its vision is to create a welfare industry that ensures growth and jobs in the private corporate sector by producing intelligent products and services with a beneficial impact on the services provided in health care, home care and social services. The coherence between the members makes Welfare Tech an entry point and test bed for companies who wants to enter the Danish and European market. WelfareTech conveys new ideas and insights into demands and requirements pertaining to hospitals and municipalities. The cluster facilitates active networks, dialogue between companies and links between companies and public sector stakeholders.

Welfare Tech has 152 members: 89 private companies, 30 municipalities, 16 educational & research institutions. Welfare Tech has contributed to the development of 56 new welfare technological products, 54 companies have found business partners/interested buyers and 46 companies side-stepped into the welfare technological field. 8 new enterprises have been formed. 500 new jobs are expected long term.

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ERAI (Entreprise Rhône-Alpes International) is the agency for the international economic development of the Rhone-Alps region. Created in 1987 by the regional council of Rhone-Alps, nowadays ERAI is an international network of 27 offices in 21 countries. ERAI has 5 main missions:

- assisting companies in their international development,
- attracting foreign investors,
- promoting the know-how of Rhone-Alps clusters and companies,
- supporting the internationalisation of Rhone-Alps clusters,
- advising companies on the best financial tools available for their international development

For more than 20 years, ERAI has been assisting more than 5,000 companies from Rhone-Alps in various industries, technologies and niches to develop their international presence. The Rhone-Alps Region has 24 clusters in its territory and assigned ERAI to supporting them on their international development.

ERAI is involved in the CLUSTERIX project with PLASTIPOLIS, one of Rhone-Alps competitiveness clusters. It acts as its technical expert. Furthermore, it is the only French competitiveness cluster in the field of Plastics engineering. Its main objective is to promote innovation and develop cooperation between companies, research labs and universities. Based in the regions of Rhone-Alps and Franche-Comte, the cluster now regroups more than 300 members of which 200 companies. The cluster’s activity covers the whole value chain of plastics processing, including material formulation/compounds, material processing and product assembly. Plastipolis’ mission is to develop innovation and cooperation in the plastics field at national and international levels. So far, Plastipolis has been involved in 15 different European projects with other partners.

(Lessons learned)
As ERAI’s mission consists in supporting Rhone-Alps clusters on their international development, Clusterix has been an interesting mine of contacts and ideas. On the one hand, ERAI became aware about the Cluster 55 best practice on “Cross-Cluster Business Trips” and they would like to deal with this topic in depth in the future. On the other hand, they shared the contacts established in Hungary (particularly tribology and mechatronics) with their local clusters. Through the project, ERAI aimed at facilitating sustainable and fruitful exchanges between the Rhone-Alps clusters and their European counterparts. In the long- and mid-term, the goal was to encourage the emergence of collaborative projects. For instance, the “Cluster Montagne” met Wintertech, its Italian counterpart from the TIS Innovation Park. Beyond a mere exchange of best practice, they planned to collaborate on European projects. Another interesting topic was the smart
specialization, which is in the heart of the new innovation policies of our regions. The project permitted to discuss about regional issues in Rhone-Alps and in Lower Austria and to make our regions exchange on their respective methodologies.

The ClusteriX project has allowed Plastipolis to develop partnerships with counterparts in Sweden, Austria, Denmark, Italy, Germany, Romania and Hungary. Plastipolis has been working on the competence mapping and the identification of good practices in the Rhône-Alps region. This work has also been done by the other partners in their respective regions. Then, all the competence grids have been analyzed to detect cross-sector cooperation opportunities between partner regions. This will allow Plastipolis to initiate transnational intersector innovation projects, especially in the field of smart plastics and green plastics. The staff exchanges organized in the different partner countries have been particularly relevant for the detection of good practices, for example in Sweden (Cluster55, organisation of workshops presenting the needs of large players like Nokia), and Austria (competence mapping of the members at ecoplus). This ClusteriX project is typically a fruitful project at cluster level that can be duplicated at company level (through innovation projects).

Region: Rhone-Alps
Existed: since 1987
Body: non profits organisation
Website: www.erai.org

International Development Plan

Location of the practice: Rhone-Alps Region
Start and end date: This practice began in 2005

The Rhone-Alps Region supports the internationalization of Rhone-Alps’ clusters and competitiveness clusters by financing actions (fairs, interclustering, exploratory missions, B2B meetings, international watches, export training sessions, etc.) that will strengthen the international visibility of both the clusters themselves and their members. ERAI was commissioned by the Rhone-Alps Region to support clusters in the setting-up of their International Development Plans (IDPs).

Each year the Rhone-Alps clusters set up their International Development Plans (IDPs). They are composed of a list of international collective activities involving the clusters themselves and/or their SME members (fairs, interclustering, exploratory missions, B2B meetings, export training sessions, etc.). Every year the Rhone-Alps Region draws up a set of eligible activities and subsidizes them from 40 to maximum 80%. For each cluster, an international committee is created. It is directed by the cluster’s manager and gathers all the relevant regional and national stakeholders dealing with internationalisation (the Rhone-Alps Region and other local authorities, UbiFrance, Chambers of Commerce, ERAI, representatives of companies). It aims at selecting the list of activities that will be included in the IDPs. The selection depends on several elements: the international strategy of the clusters, market and technology watches, sectoral information feedbacks and companies’ expectations. Besides, the international committee elects a project coordinator institution for every activity. The latter will manage it, receive the public grant and then transfer it to the participants. When the IDPs have been finalized (generally in September), they are put to the vote of the Rhone-Alps Region. Once the Region approves the IDP, the activities can start.

IDPs have many goals: increase the number of companies and clusters developing internationally, encourage their competitiveness within international markets, strengthen the international visibility of the industry and the region.

By aiming at increasing clusters’ and companies’ competitiveness, IDPs contribute to promote the dynamics of the regional authority and the whole territory. More and more clusters ask for an IDP. Currently, there are 17 of them. IDPs enhance the creation of a collective dynamics: companies of the same sector are encouraged to exchange and share experience and best practices.

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*(Description)*
The West Transdanubian Region has always been a pioneer in the Hungarian clusterisation efforts. The first cluster in Central and Eastern Europe, the Pannon Automotive Cluster (PANAC) was founded here as early as 2000. The Regional Development Agency acted as an initiator and co-ordinator of the several bottom-up clusters, helping establish networks and clusters in most of the key sectors of the region: automotive, mechatronics, wood, spa, logistics, textile.

The concept of clustering received new impetus during the 2007-13 period. ERDF funding became available for cluster competitiveness development. Due to the 3-tier support scheme, today there are close to 30 autonomous clusters at different stages of development. Clusters are primarily self-funded with additional ERDF funds available as they step up to higher levels of development. Regional and national cluster policy both emphasise the need for a variety of joint activities for closer co-operation, including joint investment and especially joint innovation projects.

West Pannon Nonprofit Ltd is a relatively new player among the intermediaries, inheriting or taking over much of the network-building from the Regional Development Agency. Its mission involves an inclusive, value-based approach to economic and community development, and the organization itself operates in close strategic co-operation with the key intermediaries and decision-makers in all the key activity areas. These include internationalisation, cluster development and innovation, information society and sustainable transport and tourism – core competencies of the region.

*(Lessons learned)*
The West Transdanubian cluster scene is highly varied both sector and experience-wise. Smart specialisation, harmonising the strategic activities of the full scope to focus on key objectives will therefore present a new kind of challenge for the region. The ClusteriX project supported the competence map from Lower Austria, an excellent tool for identifying the synergies in the heterogenous landscape. Using a mixture of a series of moderated co-operation workshops and a systematic follow-up of the competence mapping the clusters can start co-ordinating in a much tighter, strategically focused network.
Another key dimension of development of the regional clusters is a more intensive promotion of internationalisation. Many of the clusters tend to focus exclusively on the domestic market and rarely utilise the synergic opportunities for network-building and market presence abroad. In order for the key regional clusters to compete in the European arena the well-structured cluster internationalisation initiatives from ERAI and the Cluster study tours from Cluster 55 are key good practices to use.

Region: Western Transdanubia  
Existed: Cluster policy since 2000  
Body: non-profit organisation  
Website: www.westpannon.hu

The Hungarian Cluster Accreditation system

Location of the practice: Hungary  
Start and end date: May 2008 – ongoing

In the past 10-12 years several programmes have been launched to develop clusters in Hungary. As a result, a relatively large number of small and fragmented initiatives emerged as well as some strong ones. The decision was made in 2007 that cluster development should be continued with a systematic approach, putting focus on the most promising initiatives. After studying several international best practices a unique tool has been developed which was tailor-made for the Hungarian economical situation: Cluster Accreditation.

The most important goal of cluster accreditation is to select network co-operations which have intense innovation and export activities, whose co-operation effectiveness can help implement major development projects and can perform significantly in a regional scenario.

The most important difference between the accreditation and the other standard tender calls is that no direct financial support is granted to the cluster when awarding the ‘Accredited Innovation Cluster’ title. The main advantage of holding the accreditation title is that the accredited cluster and its members are exclusively entitled to submit project proposals for calls in the frame of the New Széchenyi Plan and also they can apply with preferential conditions on certain other calls.

Proposals submitted to the accreditation call are evaluated at the Standardized Monitoring Information System. As a large database is available new measures can be tested and simulated in a relatively short time, thus the accreditation scheme can be flexibly formed for new policy needs.

The two most important eligibility criteria are:

- The management organisation should be a domestic company
- The cluster as a whole should have a track-record of at least two years.

The selection system of the accreditation contains two different parts

A. Data based evaluation of the performance of the cluster members through the following subgroups

- Evaluation of the effect of the cluster on employment
- Evaluation of the business performance of SME members
- Evaluation of the export potential of member companies
- Evaluation of the framework and content of the co-operations in the cluster
- Analysis of R&D and innovation activities in the cluster

B. Qualitative assessment through the evaluation of the complex cluster strategy

Currently 23 clusters hold the Accreditation title.

The members of the accredited clusters launched more than 200 joint R&D and innovation projects financed by the Economic Development OP. The total granted support exceeds EUR 126 million.
Success factors

- In the past 5 years the Cluster Accreditation system had become a significant incentive of economy development
- The accreditation of clusters can be flexibly used to „pre-filter” a large scale of companies applying for grants in the field of innovation and technology development
- The „Accredited Innovation Cluster” title had become a well-known brand in Hungary
- The Cluster Accreditation system is recognised as a good-practice by the European Commission

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The Economic Development Department Karlsruhe (EDD) is part of the city administration - The EDD steers the Cities’ cluster approach and initiates and co-coordinates the clusters in Karlsruhe (CyberForum, EnergieForum, Automotive Engineering Network and Creative Industries K3), strategic decisions like the setup of clusters or investments in future fields of actions, cluster policies and policy advising is the core competence.

The EDD is also enhancing the German/French cooperation and development of clusters in the cross-border region.

Besides the policy advising the EDD is partner to industry: Working together with companies and institutions, we create a climate for greater growth, innovation and international appeal in and around the city of Karlsruhe. The EDD offers companies a full range of services and support them in their spatial development plans; we also help them become more competitive and innovative. Furthermore, we offer active support and strategic advice to entrepreneurs who are setting up new businesses. Our aim is to achieve the optimal conditions by ensuring a supply of commercial properties as well as infrastructure that meets the demand and by striving to achieve a balanced mix of industries as well as a vibrant city centre. We are committed to ensuring that Karlsruhe remains an attractive location for companies and professionals in the future. In addition, we develop and support competence networks and industry clusters, which in turn create new opportunities for businesses on the national and international market. Finally, we cooperate with chambers, universities and institutions for the benefit of local companies as well as the city itself and Karlsruhe TechnologyRegion.

(Lessons learned)
For the EDD the ClusteriX project offers a very interesting perspective – being one of the few cities in Europe running an own cluster programme (most are on regional level) ClusteriX gives a good insight in a broad variety of European regions and their different approaches for cluster support. Through this ClusteriX offers the opportunity to learn about many fields of actions clusters can be developed to a next level: for
example the Lower Austria Smart Specialisation approach and the competence mapping, the TIS “open Source” approach for ICT clusters and the Cluster 55 internationalisation approach expands our own ideas about how to develop running clusters. As one direct result on background of the Clusterix Project the Company- Network CyberForum and the Swedish Cluster 55 signed a cooperative agreement. The Business Roaming Agreement (BRA) is supposed to foster the Internationalisation activities along with the global competency capabilities of the local IT- and Hightech- Companies.

Project Partner: Economic Development Department Karlsruhe
Region: City of Karlsruhe, Baden-Württemberg
Existed: City founded in 1715 – Clusters in Karlsruhe since 1997 (CyberForum)
Body: Regional Authority
Website: www.karlsruhe.de/wirtschaft

**SmarterCity Karlsruhe**

Location of the practice: Karlsruhe
Start and end date: June 2009 – ongoing. The program is now part of the Cities Development Strategy 2020)

In close cooperation with partners from research and economy, the City of Karlsruhe has launched the “SmarterCity Karlsruhe” initiative. The main aim of “SmarterCity Karlsruhe” is to use the latest standards, methods and technologies to raise the quality of life for people living in Karlsruhe and to help enterprises to be more competitive and innovative.

Karlsruhe is a proving ground for advanced innovative products, solutions and services.

The initiative “SmarterCity Karlsruhe” emerged during the project proposal phase of the Software-Cluster project in 2009: Most of the partners involved in the project proposal writing had miscellaneous innovative ideas and they wanted to help to get these ideas accepted – independent of any government aid. Their willingness to innovate was the first basis for the initiative. Approximately thirty actors from research, economy, members of innovative (business) networks and public administration work intensely together in order to develop the best possible and affordable innovative solutions for a smarter town. Future scenarios for efficient and sustainable public services in a future-oriented town are elaborated by several workgroups. A couple of Living Labs were already installed in order to evaluate new approaches as well as applications and products supporting the everyday life of all age groups.

SmarterCity Karlsruhe aims first and foremost at ameliorating the quality of life for its citizens as well as at increasing the capacity for innovation of companies by employing the newest technologies. The coalescence of digital, physical and service infrastructures as well as the active involvement of citizens are of key importance for the success of the initiative. Therefore, it is of great importance that this initiative does not consist only of a single project, but that it covers a broad variety of research fields like e.g. public transport, ambient assisted living as well as different kinds of mobile business solutions. In order to achieve this goal, the Economic Development Department Karlsruhe coordinates the initiative, providing a platform for information exchange and the identification of new, innovative ideas. Additionally, the city council is seen as a keystone and has a significant influencing factor for the quality of the initiative and its solutions. Therefore it is involved closely to all SmarterCity projects.

**Uniqueness of the Initiative**

The SmarterCity Karlsruhe initiative is a unique project in Germany because of several reasons. First, SmarterCity Karlsruhe has a leading position in terms of its strategic positioning and the theme-driven approaches: There is no other city in Germany that puts not only one single smarter city project on its strategic agenda, but that has the aim to become itself a holistic smarter city and thus aims at improving its territorial competitiveness.

In order to achieve this goal, a broad variety of smart services basing on intelligent IT solutions will be developed within the next few years. The focus of this initiative lies thus on the coalescence of digital, physical and service infrastructure and
forces the active involvement of citizens, public administration as well as companies. Second, defining further ambitious strategic innovation projects for the city means also to intensify the collaboration between municipality and small and medium sized companies. But it means also exploring new conditions for cooperation models within the knowledge triangle of research, business and policy. This is a unique feature of SmarterCity Karlsruhe, too.

A Conglomerate of Projects and Initiatives

SmarterCity Karlsruhe is not only an isolated project but rather a conglomerate of miscellaneous projects and initiatives. Most of them started as single actions, but as SmarterCity Karlsruhe evolved and assumed shape, it became clear that many of these projects and initiatives are linked together in several aspects. Within all projects and initiatives, future key technology areas are identified, enabling the development of new ecosystems for growth and thus amending the territorial competitiveness of the city of Karlsruhe.

During a procreative brainstorming process the actors of the SmarterCity Karlsruhe initiative identified six fields of action they wanted to focus on in the first instance. “Smart house” projects focus on energy efficiency and ambient assisted living, whereas new and innovative concepts for mobility are researched within the field “Intelligent mobility”. “Public services” will include e.g. a City-Wiki, solutions for intelligent eGovernment as well as the for future Internet. Lean Management and information for citizens are crucial topics for the research field “New solutions for public transport”. “Energy” aims at developing solutions for an energy autarky town, employing e.g. ICT for wind-wheels. The latest field of action is “Smart Culture”; this field focuses on applications that are linked to cultural activities, e.g. events and exhibitions.

As far as possible and useful, the solutions will be linked together, so that the result will be a seamless, integrated solution – an approach that is unique at least in Germany, perhaps even world-wide. In all fields of action, IT and security are cross-sectoral topics and play a key role: New IT-applications are expected to be used strongly and to be connected intelligently with existing technologies and processes.

The ongoing process shows the following:

- Bringing in stakeholders from different background offers cross-sectoral effects along common topics.
- The process of concentration on topics leads to effects similar to a smart specialisation (difference is that the character of the process is not based on figures and data but on the group intelligence of the stakeholders formed out in a number of common workshops).
- City development strategies have to adopt and integrate the economic / cluster development strategies (as realised in Karlsruhe with the integrated City development plan 2020).
- A roadmap helps to define the targets of the common work, it is guideline and checklist for the future development process.
- A roadmap gets more important in the field of strategic long term decisions and their follow-up.

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TIS INNOVATION PARK

(Description)
The TIS Techno innovation park is situated in the Autonomous Province of Bolzano, South Tyrol. TIS is both a center as well as a driving force for innovation, cooperation and transfer of technologies for all stakeholders in innovation, but above all, for individual companies. TIS services are structured as follows:

- My office- Support of start-ups
- My product- Support of product development
- My input- Transfer of technology and know-how
- My network- Strengthening the collaboration between companies

It serves as a gateway to the latest technological trends, as an institution for translating academic and international knowledge into economic exploitation and concrete applications, and promotes innovative projects within small and medium-sized companies. TIS also helps to find project and business partners thanks to its wide range of local, national and international contacts. Since 2002 TIS also sets up and coordinates cluster initiatives, encouraging networking amongst established companies and enhancing the culture of innovation.

(Lessons learned)
For TIS innovation park the ClusteriX project has provided a common understanding of current and future regional challenges in supporting instruments for clusters (including funding), cross cluster collaboration and smart specialization. Clusterix has shown that Regions at different stages of development offer valuable visions and tools for South Tyrolean cluster management and their members. Discussions with the Swedish partners gave inputs regarding Innovation procurement and Pre Commercial Procurement (PCP) as well as insights in the exploitation of winter sports facilities and of outdoor sports future experiments; a better understanding of the competence mapping tool was offered by Ecoplus, the Business Agency of Lower Austria and contacts with our French colleagues from Rhône Alpes, who visited us during the staff exchange in November 2012, might end up in a cooperation in the winter sports sector. Many other insights came from the other partners who have organized study visits and staff exchange within the project.
Region: South Tyrol/ Italy  
Existed: Cluster since 2002  
Cluster initiatives currently 6 (Wood & Technology, Constructions, Alimentaris, Sports and winterTECH, Alpine Wellbeing, Civil Protection & Alpine Safety)  
Body: Public equivalent body (TIS is 100% owned by regional public authorities)  
Website: www.tis.bz.it

**Sector alpine technologies - system design & development strategy**

Start and end date: Timeframe for development of the strategy paper 2011-2012  
Location of the practice: South Tyrol

South Tyrol aims at becoming a leader in the Alpine Technologies sector. This comprises four clusters – sports & winterTECH, Wood & Technology, Construction, and Civil Protection & Alpine Safety – with the intent of bringing together and connect four economically flourishing sectors of South Tyrol with enormous economic potential: alpine timber resources, top quality alpine construction, pioneering technologies for winter sports and technical solutions and products for civil protection and alpine safety. The Alpine Technologies Area has the task of providing the interface between these different sectors with a constant stream of innovation, knowledge transfer and technology transfer, enabling potential so that leading products and services can be developed by local enterprises.

Starting point: Alpine technologies represent a core competence of the South Tyrolean industry. Companies from South Tyrol are among market leaders in this sector. Their products, solutions and systems define standards, which are recognized and accepted worldwide.

Challenge was to develop a strategy paper as base for medium/longterm positioning the region as an innovative leader in area of Alpine technologies.

The main goals were:

1. understanding of the status quo and identification and description of conditions and potential for innovation in the field of Alpine Technologies  
2. development of a system concept Alpine Technologies  
3. identification of market potential and profitable businesses for the future  
4. elaboration of a medium-to long-term strategy for the area of Alpine Technologies

Stakeholders: TIS innovation park- Alpine Technologies Area, Export Organisation South Tyrol (EOS), Business Location South Tyrol (BLS), Companies of the field Alpine Technologies, Public administration and University and other public institutions.

Methodology:

1. Research & Analysis  
2. Development of the system concept  
3. Developing the overall strategy and identifying measures

Output, the main results of the project are:

1. Status Determination: Analysis of initial conditions and actors, companies and institutions, analysis of regional and global frameworks and innovation potential  
2. System design “Alpine Technologies”: basics and perspectives  
3. Strategy paper “Alpine Technologies” for the positioning of South Tyrol as an innovation leader in this area  
4. Recommendations for specific target groups and stakeholders  
5. Regional implementation plan

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(Description)
With an experience of about 85 years in RDI of processes, technologies and technical equipment for agricultural and food industry, the National Institute of R-D for Machines and Installations designed to Agriculture and Food Industry – INMA has understood the role of clusters/competitiveness poles in boosting innovation and technological transfer of research results. In this context, based on its collaborations over the years with companies, universities, public authorities and related RDI institutions, in 2011 INMA has initiated the process of generation of the national competitiveness pole in the field of agricultural machinery cross cutting value chains in agriculture, food industry, agricultural tractors and machineries industry, biotechnologies and mechatronics. Thus, the IndAgro Pole Partnership Agreement was signed by 51 organisations in all 8 Romanian development regions. In 2012 - 2013, IndAgro Pole developed 17 projects in value of about 15 mil. EUR, based on cross cutting collaboration: 4 infrastructure (agricultural tractor and machinery manufacturing), 8 RDI, 2 innovation vouchers and 3 support projects (pole management, common branding and internationalization, market research). 9 project ideas were included into the SWG “Clusters of Excellence” – the Danube Strategy. This experience has been shared with the ClusteriX partners in the aim to identify collaboration potential.

(Lessons learned)
Lessons learned for INMA and its collaborators in ClusteriX project (Ministry of Economy, National Authority for Scientific Research and Romanian clusters) consist in a better understanding of the innovative tools used by ClusteriX partners: e.g. cross-clusters collaboration, competence map and key enabling technologies, from Austria; cluster internationalization, from Rhone-Alpes; cross-cluster business trips, from Cluster55; innovation procurement, from Tillväxtverket; how could become a leader in a sector with a deep experience and could ensure energetic independence using renewable energies based on local resources, from TIS; public and private funds (e.g. Venture Capital and Business Angels) for developing emerging industries, from City of Karlsruhe Economic Development; active networks and dialogue between companies and links between companies and public sector stakeholders, from Denmark; cluster accreditation system for supporting the
regional development, from Hungary; cluster financing system & smart specialization strategies, from all partners. Most of them could be implemented in Romania and could generate collaboration potential. During the ClusteriX project, with support of Ecoplus, IndAgro Competitiveness Pole became member of European Network of European Mechatronics Network – EuroMec.

### IndAgro Competitiveness Pole

**Location of the Good Practice:** Romania  
**Start and end date:** ongoing

The Best Practice deals with the main generation of the national pole of competitiveness in the field of agricultural machinery cross cutting value chains in agriculture, food industry, agricultural tractors and machineries industry, biotechnologies and mechatronics.

INMA has undertaken the role of generating the national pole of competitiveness in the field of agricultural machinery. Thus, the IndAgro Pole Partnership Agreement was signed by 51 organisations in all 8 Romanian development regions. Its main objective is to stimulate innovation and collaboration in the sector of technical equipment, constructions for agriculture and food industry and in related sectors. The elaboration of the pole strategy, externalized to a specialized consultant, cost 25,000 EUR.

The transfer potential lies in the elaboration of the cluster strategy, broken down in several action pillars: marketing, inter cluster collaboration, internationalization and development of B2B activities, management of the pole. IndAgroPole’s management holds the vice-presidency of the Romanian Cluster Association.

12 projects in value of 14 mil. EUR were developed: 4 infrastructure (tractor manufacturing), 5 RDI (mainly technology transfer) and 3 soft projects ( pole management, branding, internationalization, market research). 9 project ideas were included into the SWG “Clusters of excellence” – the Danube Strategy.

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The National Agency for Economic and Regional Growth (Tillväxtverket) has been working with cluster development and cluster programs for more than 10 years. The Agency is prioritizing SME clusters (market oriented clusters) and multi-level governance. Creative links between clusters have been on the agenda for some years as one important tool in order to promote renewal and innovation. This “networks of clusters” started with a collaboration between a market driven cluster (packaging) and a R&D cluster (printed electronics). Our experience is that creative links and collaboration between clusters usually are directed towards complementary assets or competences rather than specialization. The cluster management is essential for creative links or cross-cluster cooperation in terms of substantial outcome and persistence. Experiences have been shared around this with the partners in ClusteriX. Multi-level governance, as in cooperation between different levels of governance (national, regional and local) and sectors (private, public) is highly prioritized in the cluster program. We promote learning between policymakers and clusters in different regions and implement this in program and operative strategies. The cluster program has therefore two target groups: regions and clusters. Basic requirements for both creative links between clusters and multi-level governance seem to be well-functioning arenas, trust and long-term commitment from all stakeholders. ClusteriX is therefore an important arena for us in sharing methodologies for analysis, discussing funding and international cluster cooperation.

The ClusteriX project has provided the National Agency for Economic and Regional Growth with many interesting ideas, tools and contacts. The competence map introduced by Lower Austria is one such tool and is already in use in one Swedish cluster. The internationalization approach in Rhône Alpes is another interesting and important tool that also stresses multi-level governance. Discussions around Smart Specialization Strategies with the partners have been fruitful and new contacts have been made between clusters from ClusteriX and Sweden.
Innovation friendly Procurement – a possible method within Cluster Initiatives

Location of the Good Practice: Region Skane, Sweden
Start and end date:

Public bodies at local, regional and national level have often high objectives regarding environmental demands in their public procurements, but also difficulties to identify new, innovative environmental solutions. Tillväxtverket has supported a concept that may increase contacts between public sector and innovate SMEs.

The concept “Testbed Skåne” supported by Tillväxtverket has been developed by the cluster initiative Sustainable Business Hub. The idea with the tool is to get public bodies interested in innovations within the field of clean-tech. “Testbed Skåne” starts out as a speed dating tool where the suppliers get a limited time to present their innovative product at the same time as public customers get a broader range of knowledge about new solutions within a specific field in an efficient way. 6 procurements have been realized during the last years. The methodology has spread to other clusters. In 2012 the cluster Sustainable Sweden Southeast started a similar project in order to stimulate innovation friendly procurement.

The results and the impact has been measured from the first meeting by following up on number of purchased test products, number of leads to sales for the companies participating in the Testbed and by number of satisfied participating companies or SMEs.
How do we design better cluster policies?

Experience shows that new technological fields emerge in the interface between existing industries
For more information about the ClusterIX project please contact:
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ClusterIX is also active on LinkedIn. Join the group here:

Or take a look at our website www.clusterix.info

Where clusters, regions and national authorities meet and explore innovation strategies for the future