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ACSEE

AUTOCLUSTERS

Automotive network for innovation

BEST PRACTICES ACROSS PARTNER REGIONS IN AUTOMOTIVE INDUSTRY

April 2010

www.autoclusters.eu

South east europe transnational cooperation programme

Autoclusters Project – Partners

- *Automobilový klaster - západné Slovensko*- SLOVAKIA
- *Comunimprese Societa' Consortile a Responsabilita' Limitata*- ITALY
- *Universitatea Tehnică "Gheorghe Asachi" din Iași*-ROMANIA
- *Nyugat-Pannon Regionális Fejlesztési Zrt.*- HUNGARY
- *Technical University of Gabrovo*- BULGARIA
- *Associazione CREATE-NET*- ITALY
- *Slovenská technická univerzita, Materiálovo Technologická Fakulta*-SLOVAKIA
- *Gospodarsko interesno združenje ACS, Slovenski avtomobilski grozd*- SLOVENIA
- *Hrvatski Automobilski Klaster* - CROATIA
- *Automobilski klaster Srbija* – SERBIA
- *Automotive Cluster Vienna Region* – AUSTRIA

Dear Reader,

To publish a brochure on "best-practices" is always a very gladsome event because it indicates the existence of practices which are worth introducing and following. This publication summarizes and presents those Best Practices which had been chosen by Project Partners to show and share its experiences with each other. Nine Partners sent their Best Practices, some of them presented two or three projects, so in this way 16 issues had been introduced.

The main aims of this Work Package were collecting and comparing Best Practices from South-East European countries regarding to the automotive industry. The key point was to determine those parameters which are typical in case of all (or almost all) Best Practices in order to define the common characteristics. In the period of economic crisis it is urgent to collect the knowledge and achievements that could works and put them into practice.

In this brochure we would like to publicize the short abstracts of the collected practices from the partner regions in order to provocate thoughts and enhance innovation and creativity in automotive industry. A simple SWOT analysis at the end shows the factors for success and future possibilities for the partners.

Yours sincerely,

Dr. Péter Szegvári
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Imprint
BEST PRACTICES ACROSS PARTNER REGIONS IN AUTOMOTIVE INDUSTRY
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The Autoclusters Project

The project brings together Universities, R&D institutions, SME support facilities from EU-15, NMS as well as IPA to prepare and create the first automotive network in SEE. The second level clustering activities proposed by the project are strictly oriented on the activities, which are improving the innovation capacities in the region and improve technology and know-transfer – improving the innovation circle. The project in the first stage analyses the cluster's development and best practices across the regions as well as creating the connection with other existing European activities in the automotive clustering.

During the project activities which should promote automotive industry and increase the cooperation between universities and SME's will be realized as well – one permanent exchange program will be realized. The project will summarize earned experienced and know-how to the Common Methodology which will be elaborated close to the project closure to help in other regions and different industries in second level clustering focused on innovation.

The main aims of the project:

- Requirements for implementations of new technologies, particularly according to new European strategies and policies
- Innovation capacities – Lack of labour on the market mainly in the area of highly qualified workforce for automotive industry
- Innovation circle – Lack in cooperation between R&D (universities), SME's and car (part producers)

The expected outputs of the project:

- 1 permanent cooperative network in SEE automotive industry. The sustainability of the network should be ensured by private or public source, which will be more deeply analyzed during the project
- 1 permanent exchange program as part of the activities of the cooperative network
- Realization of 3 small projects from the list will be financed by the project to prove the concept
- Preparation of 3 proposals of the FP7 for other 3 projects from the list will be realized during the project
- 3 studies and 1 methodology will be researched and elaborated during the project, the results have to offer the possibility to be adopted in different industries as well as regions

As other results and outputs with highly positive impact on the innovation capacities and innovation circle we should mention – 10 exchange study visits (with 200 participants), 10 exhibitions at universities (with 3000 visitors), 1 exchange experience seminar (with invitation of other relevant stakeholders), and 2 educational seminars in each region.

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Automotive Cluster – West Slovakia

Automotive Cluster

With the aims of creating the automotive cluster is to support automotive SMEs in the fields of increasing the competitiveness, marketing, management and education. SMEs are benefitting on organizing their own company. In cooperation with cluster there is possibility for easier managing of human sources by common education, utilization of common purchasing or other services. Cluster should look for new market possibilities of their members (SMEs). It can be predicted that with a good leader of the cluster that already has a good name and contacts in automotive industry there is better chance for reinforcement the SME position in the market. Limitations are mainly in size of the cluster (bigger cluster – better cluster name – more opportunities), incomes that are necessary for travelling, speaking to people and finding the new markets and important for creation and co-financing projects of networking, innovations and cooperation.
Establishment of such an organization should be the interest of regional governments for supporting the regional market development.

Success factors of Best Practice
In the period of economic crisis suitable conditions are created for effective Automotive cluster implementation. It helps to support local economy and stabilize the market situation. Previous experience from the past approved that clustering and networking was suitable outcome from complicated financial situation in the region.

Visibility of the Best Practice
Automotive cluster contributes to networking, innovations, establishment of R&D centres, universities and companies cooperation by the implementation of European Union project activities that will bring financial support to the region.

Broader regional impact of the Best Practice
Cluster is a positive and motivating example for other regions to establish similar organisation in their own region with aim to improve their situation. Moreover, it attracts region and country in transnational level within the cooperation of European Union project.

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Automotive Cluster – West Slovakia

Industrial and Technological City Park

Location of innovative companies and creation of technological cooperation and development activities in co-operation with university is in the focus of the project. The benefit for business entities with highly qualified employees are mainly in using new highly organized production and store halls, high-tech technologies and others. There is an expectation of 450 working positions in approx. 28000 m^2 areas where 7500 m^2 will be built-up for administrative offices and production and store halls. Complication could appear in case of unexpected expenditures. The realization and organizing of this best practice is leaded by city self-government (Trnava city).

Success factors of Best Practice
- Good reputation in the field of cooperation with companies
- High quality university education background

Visibility of the Best Practice
- Strong media and non-media propagation
- Propagation on international exhibitions and conferences
- Propagation by Slovak Investment and Trade Development Agency
- Immediate negotiations with potential investors

Broader regional impact of the Best Practice
- Diversification of regional economy
- Building the background for new investors approach

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Comunimprese Scarl

Network of Automotive Regions

In 2004, the Limburg Development Agency in Belgium put together a bid for €1.5m Interreg IIIC European funding to set up a network of regions heavily dependent on the automotive industry. Automotive Regions aimed to help different regional decision-makers work together to develop approaches to strengthen the competitive position of the existing automotive industry. When regions anticipate or face the closure or downsizing of a car plant, or have to manage its consequences, this involves formulating measures to ease the social and economic effects of such an event. In the longer term, regions should learn from one another how best to support companies and employees, and strive for diversification of the regional economy.
The overall objective of the Automotive Network was to raise awareness of the challenges faced by these regions. It would capitalize on know-how and good practices developed by the partner regions concerning private and public sector policies, as well as initiatives related to retaining and promoting the automotive industry and supply chain cluster. In the 15 partner regions there are approximately 150,000 people employed directly in automotive manufacturing plants plus around another 300,000 employed in the supplier chain.

Success factors of Best Practice
The lesson learnt/added value that we obtained through this interregional cooperation are resumed in the papers "Social Dialogue: a work in progress" and "Case histories about territorial intelligence in automotive in Europe" that take an in-depth look at the subject of social dialogue in automotive industry, in its various forms and levels.

Visibility of the Best Practice
The European Automotive Strategy Network (EASN) is a pan-European meta-network, which was initiated with the recently signed memorandum of understanding between 5 EU supported automotive-themed networks: TCAS, BeLCAR, Network of Automotive Regions, NEAC and I-CAR-O; and it represents 45 European regions that depend on automotive industry at varying degrees. Initially the network aims to support and facilitate communication and the wider and faster dissemination of best practices and cluster management organisations. Secondly, it aims to initiate cross-border cooperation projection, with a strong emphasis on Small to Medium sized Enterprises, SMEs.

Broader regional impact of the Best Practice
The partnership worked together quite well, in order to improve the cooperation the partners should have guarantee more continuity of efforts throughout the project activities o commitment to the fixed objectives, constant participation of people competent in the subjects and the know-how in the territory.

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"Gheorghe Asachi" Technical University of Iasi

Continental-UTI Industry-University cooperation

The aim of the Continental – University cooperation is to develop a long term relationship between the Continental company and universities in Romania from which all partners involved will have benefits on several layers of interest. As Continental company acts in the area of automotive, the relationship will develop based on common activities that can bring results in this area. The project started in Timișoara and Sibiu, extended to Iași and Suceava and continues to spread to other university centers. The benefits are aimed to be equally shared between the company and universities though they are different for the parts. Continental company envisions to increase knowledge and skills of human resources, which leads to competitiveness and, at a certain level to orient them to the automotive area. Universities benefit from Continental donation of equipment in university labs, company support for student competitions, student diploma project, student fellowships, student internship etc. At the research level, through this best practice is encouraged joint participation of the company and universities in research projects financed from national or EU founds. The practice can be communicated to companies that face challenges in hiring high skilled work force or that find big differences between the skills they need for their work force and the skills of graduates from colleges or universities. It can also be communicated to regional workforce bureaus, chamber of commerce and professional insertion companies and agencies.

Success factors of Best Practice

- Siemens VDO/Continental company was as is well aware that in the present moment the output of universities can be improved (and oriented to the company needs) only if the they support university activities
- the company can benefit from the cheap workforce and innovative spirit available in universities (in both students and teachers). They can transfer task to this workforce within the frame of the partnership.
- university is interested to have access to latest technologies in the area of automotive and also to be involved in projects that have to solve real problems

Visibility of the Best Practice

Every major activity is launched in meetings that are announced on company webpage, partners (universities) web pages. "Open door" final are announced in local and regional newspapers, on local student forums and even on some recruitment job sites.

Border regional impact of the Best Practice

The project improves the quality of work force, develops a long term relationship between industry and universities with benefits on both academic and research activities and provides research direction for research activity in university.

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"Gheorghe Asachi" Technical University of Iasi

Postgraduate course – Engineering in Automotive Projects

The main issues of this best practice are development and consolidation of a partnership between Renault Technologie Roumanie and universities in Romania as "Gheorghe Asachi" Technical University of Iasi, "Politehnica" University of Bucuresti, University of Craiova. This innovative programme has a professional side (training engineers capable of teamwork in automotive-related projects) and an educational one - technical universities (Romanian and French) are interested in postgraduate training.

The main benefits are:

- industrial companies can recruit and train according to their own requirements and standards for qualified workforce.
- universities benefit from clearly outlined guidelines in training students according to the demands of industrial companies.
- students can receive training in Engineering in Automotive Projects according to industry demands and be hired by companies in the field.

A precondition of best practice is the presence of at least one automotive company willing to invest in qualifying workforce and one or some universities willing to develop a partnership in the area. Target group to communicate in case of transfer requirement are automotive companies interested in postgraduate training and regional or national technical universities

Success factors of Best Practice

Since 2006, Renaul Technologie Roumanie has started building a professional training programme in the Renault group. The engineering school was founded by the Human Resource Department based on different resources: Local Technical Leaders and Outside Technical Leaders (technical universities and specialized companies). The aim of the Engineering school is developing skills and know-how, promoting standards in automotive design and managerial practices. From this point of view, the Engineering in Automotive Projects programme aims for the development of skills required to integrate in a team of automotive design (taking on complex projects).

Visibility of the Best Practice

This activity is launched in meetings that are announced on Renault Technologie Roumanie company webpage, universities of Bucuresti, Iasi and Craiova web pages and also in local and national newspapers, on local student forums and even on some recruitment job sites.

Border regional impact of the Best Practice

The regional and national best practice impact consists of improvement of workforce quality, development of a long term relationship between industry and universities with benefits for both academic and research activities and building a new relationship between universities and engaging them in competition, with benefits for academic and research activities.

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Technical University of Gabrovo

Automotive Quality System TS16949 with emphasis on DFMEA (Design failure mode and effect analysis)

The Quality standard TS16949 is introduced after 2002 to be able to focus on the efforts and call the attention in the phase of development and to introduce techniques helping the product and process development teams to apply Build-in Quality. The main benefit of this system is that it gives means to improve the end quality and shorten the time to market. It is implementable in the Development of the Product and Process. The official certification can be given only to companies that produce, including testing and are showing at least 1 full production cycle. If the certification is not the target, then all kind of development and production companies can implement the Best Practice. Direct target group (regional industrial stakeholders) can be communicated.

Success factors of Best Practice
The success factors are Project Management, Regular Follow-up, Experienced Consultant, Training program for all engineers.

Visibility of the Best Practice
The implementation of system is proven to be successful in various companies. Personal experience covers 3 companies.

Border regional impact of the Best Practice
The introduction opens the door of the supplier to many new automotive and medical customers.

External evaluation
The system can be audited as every quality system by all big certificate bodies like BSI, BVQI etc.

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Technical University of Gabrovo

XCAR Sherpa - First BULGARIAN electric car

The project is Bulgaria's first electricity-powered automobile of the XCAR type. The project has been developed by a five-member team of the Belchev Motors Company. Town of Stara Zagora, Bulgaria. All parts of the electromobile have been manufactured in Bulgaria.
The one-seat XCAR has steel construction chassis, the body is manufactured from composite materials, and it is 210 cm long and weighs 400 kilos with the batteries, which need eight hours and 6.5 kilowatt-hours of electricity to charge. XCAR's battery life is one hundred kilometers and the mileage cost is 0.005 eurocent per kilometer. The one-seat electromobile's maximum speed is 45 km/h. Total price is 5000 Euro. It is very convenient for delivery of products, post officer, eco policeman and etc.
The history of electromobiles began with the invention of the first car with electromotor in 1841, but the greatest development have received only in the end of the last century in connection with such acute problems as air pollution and the high price of oil.
The most important advantages of electromobiles compared to cars with internal combustion engines are absence of air pollution, a low level of noise, high reliability and durability. Electromobiles differ in low cost of operation. Especially it is actual for municipal urban services. It will support decreasing air pollution in big cities and reducing expenses on motor transport maintenance.
The best practice will be implemented in the second stage of clustering life cycle when summarized collected experiences and know-how will be elaborated close to the project closure to help other regions and different industries. The inventor and his team have great enthusiasm to develop electomobile. They began to work on the two-seat model.

Success factors of Best Practice
The success factors are Project Management, Regular Follow-up, Experienced Consultant.

Visibility of the Best Practice
The company has already made the first drive tests.

Border regional impact of the Best Practice
There is no regional boarder because the implementation of electomobile will be great success for every partner

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Center for Research and Telecommunication Experimantation for Networked communities

SAFESPOT Integrated Project

SAFESPOT implements a local high speed ad hoc network, as defined by C2C-CC, based on the IEEE.802.11p protocol. SAFESPOT generated a complete set of messages (as an extension of existing C2C messages) that is offered as contribution to C2C and ETSI standardization processes. In SAFESPOT each application acts as a primary and a secondary actor. The primary actor is related to the generation of a warning to the driver of the ego-vehicle (i.e. the vehicle in which the application is running). The secondary actor is a vehicle or infrastructure node responsible for generating information to be communicated to other vehicles or to the infrastructure. According to this logic an infrastructure node is always a secondary actor providing the right information (raw data or driver oriented messages) to the vehicles. A large number of applications have been considered in SAFESPOT, so as to demonstrate the potentiality of the SAFESPOT system. The applications that are implemented within the project are both Vehicle based and Infrastructure based. The Integrated (IP) and Specific Targeted Research (STREP) Projects under the leadership and strong involvement of the EUCAR (the European association for collaborative automotive research) members have been organized into three Programs. "The SAFESPOT IP belongs to the Integrated Safety Program (ISP) that has been formed with the general goal to create a common understanding of the role of each project and relations among them within the integrated safety framework. The task force currently focuses mainly on the definition of a common use case and on the agreement on a high-level architecture. The common use case will be described with the purpose to show how the technologies developed by the Integrated Safety Program projects can be integrated in future vehicles to solve real problems.. The high-level architecture will provide a functional component view of a future integrated safety system, identifying its main components and their mutual relations. The main purpose of this is to ensure general compatibility between the technologies developed in the different projects. The long term objective of the interactions implemented between the ISP projects is to establish a general consensus and compatibility of technologies already during the research phase. SAFESPOT is co-funded by the EC FP/ and supported by EUCAR.

Success factors of Best Practice:

- **Car makers** will open new market opportunities offering on the market new functions for safer vehicles at sustainable costs as the "intelligence" will be distributed.
- **Suppliers** will meet the challenge of new market opportunities:
- **Road operators and public authorities** will improve road safety on motorways and urban roads via a combination of infrastructure and vehicle systems that will collect and transmit in real time traffic/weather and accident information to all road users and to traffic information centres.

Visibility of the Best Practice

The co-operative nature of the developed systems imply a high degree of dissemination and sharing of key aspects of the communication and applications, and the definition of common frameworks of tools, methodologies, technologies, protocols for standardization.

Border regional impact of the Best Practice

There are 51 partners from 12 EU countries, representing car manufacturers, service suppliers, road managers, public authorities, universities and research centers.

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Slovak Technical University

Professional MBA Automotive Industry

Aims of creating the MBA for Automotive branch is to support automotive companies and institutions in a fields of increasing knowledge and skills of human resources, which leads to competitiveness and upper level of TOP management. The intention was specifically profiled unique training program for middle and top management using the advantages of modern multi-cultural environment, lecturers and experts, the combination of e-learning and traditional lectures and seminars, access to monographs and unique learning materials.. This study is one of its kinds in Europe, it is oriented to all European companies in the car industry. Nowadays in CENTROPE (7 neighboring regions of four European countries: Slovakia, Austria, Hungary and Czech Republic around cities Wien, Bratislava, Brno and Győr was created in 2003 by agreements) has rapidly occurred the shortage of qualified managers with sufficient technical and managerial skills for the upcoming innovations mainly in automotive industry. In the second half of the year 2006 Automotive Cluster Vienna Region, together with the technical universities in Vienna and Bratislava originated process for "a new form of advanced study" for automotive industry supported by the EU. The pilot class was launched in March 2009. There were accepted 23 students from eight countries who met the requirements. Duration of this programme is 2 years. With the program Professional MBA Automotive Industry cooperates internationally renowned experts, who are members of academic university staff and also have broad theoretical and practical knowledge of the automotive industry and its supply industries. Students also have the opportunity to participate in the business evenings with leaders in the automotive industry, visits of the plants in the CENTROPE regions. Having successfully graduated, students obtain a graduate degree from University of Technology in Vienna which is already accredited through the FIBAA. Slovak University of Technology prepared an accreditation in Slovakia.

Success factors of Best Practice

- Demand of high qualified and motivated managers
- High quality of neighbour universities with technical and managerial experts and contacts to industrial practice
- Regional need to stabilize automotive production in the era of big labour division and global competition

Visibility of the Best Practice

Graduates will be able to transfer gained knowledge and skills into practise, as well as new modern methods of company cooperation B2B and also among universities.

Border regional impact of the Best Practice

Professional MBA Automotive Industry is a positive and motivating example. It is unique educational programme which builds on an individual approach to each participant. Supports individual personal development which leads to creating leader for success and unique of company management.

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Slovak Technical University

Regional Innovation Centre (RIC)

The aims of this centre are to build personal capacities for creation and implementation innovations, to systematize innovation activities and support educational activities. Other aims are know-how transfer, networking, building partnerships between public administration, universities and SMEs. Centre should insure enhancement of innovation potential of the region and industry.
Regional innovation centre should be established everywhere the education and innovation process is not guided in order to centralize direction of regional development. It is necessary to ensure financial support. That could be done by cooperation of ministry of economy, ministry of education with setting the responsibilities and control on national level. Limitations are in creation of spare for SMEs to present themselves, output creation and added value. Target group to communicate in case of transfer requirement are mainly regional self-governments, Ministry, partners like clusters and universities, regional policies, chambers of commerce's, SMEs, highly educated human resources.

Success factors of Best Practice

- state financial support
- regional government and Clusters interest
- following the regional innovation strategy is required

Visibility of the Best Practice

- creating of clusters
- coordination of innovation activities in the region
- creating of innovation networks in strategic part of regional economy
- promotion material, media and non media communication

Border regional impact of the Best Practice

- increasing of innovation potential and innovation power of the region
- increasing of personal capacities for business & public innovation and co-operation
- creating of basic infrastructure for PPP projects in part of innovations and Best practices implementation

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Business Interest Association ASC, Automotive Cluster of Slovenia

Development of Automotive Cluster of Slovenia

What are the aims of this best practice in automotive industry?
To established formal/legal central communication point of automotive suppliers
What are the main benefits and why to use it?
ACS is a business association based on economic interest of its members uniting Slovenian automotive suppliers. Its members' aim is to reinforce the competitiveness and create greater added value. GIZ ACS is the central communication point of the automotive cluster and it is supported by infrastructure. ACS provides support for its members to integrate into the global automotive industry and to improve the range of their products and services. Therefore it accelerates the efficiency of its members by providing adequate research and development and co-operating with expert development and scientific institutions both in Slovenia and abroad.
In which stage of clustering life cycle can the best practice be implemented?
It can be introduced in any life-cycle phase of the cluster.
Are there any preconditions, limitations for this best practice?
Preconditions: confidence between the cluster members. Limitations: financial, mentality of the involved personnel.
Which "AutoCluster project" target groups could be communicated for further discussion of this best practice? Direct target group (regional industrial stakeholders) or others (Suppliers, general public, EU officials, international networks, etc)?
R&D institutions, industrial partners.

Success factors of Best Practice
Without the mutual trust between the involved partners it is very difficult if not impossible to formalise such partnership and make it work.

Visibility of the Best Practice
ACS has a great reputation at home and in foreign, model was used for cluster development in Slovenia, Serbia and Russia. ACS was also one of the first three formalised collaborative initiatives in Slovenia and in the near past often served as a guideline for the other similar initiatives.

Border regional impact of the Best Practice
Collaboration of the industry and R&D institution via ACS resulted in many newly developed products that found their customers in the European automotive industry. In the mean time the involved industrial partners became tier 1 suppliers to the automotive industry, which improved their image and put them to the map of the European automotive industry. This also benefited companies that are in lower levels of the automotive supply chain in Slovenia, because their business has expanded as well.

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Business Interest Association ASC, Automotive Cluster of Slovenia

Polycentric technological centre as an international innovatory system of the Slovene automotive supply industry, PTC

What are the aims of this best practice in automotive industry?
Develop the intensive and reliable network of suppliers for the global car manufacturers at chosen segments with the products of higher degree of complexity and higher added value.
What are the main benefits and why to use it?
After the Automotive Cluster of Slovenia had been formed, it successfully went through the phases of initial activities and development, so that it has now entered the phase of growth. The main features of this phase are deepening the co-operation between members, increasing the number of members which results in the extension of the potential knowledge that is to come into effect in the international environment. The cluster wishes to direct its way of development into the polycentric technological centre as a regional innovatory system, and in this way establishes co-operation in the field of innovatory activities between the companies and other institutions which are involved in development and spreading of new knowledge. These organizations, apart from having important competence, invest in training of their employees, as well as provide the necessary financial and other support for innovations.

Success factors of Best Practice
Without the mutual trust between the involved partners it is very difficult to formalize such partnership and make it work.

Visibility of the Best Practice
The project "Polycentric technological centre as an international innovative system of Slovenian automotive supply industry" was started as a result of a realization that only by mutual investments can the position of Slovenian automotive suppliers be improved as well as the cooperation between the economic and academic sphere.

Border regional impact of the Best Practice
Collaboration of the industry and R&D institution via PTC resulted in many newly developed products that found their customers in the European automotive industry. In the mean time the involved industrial partners became tier 1 suppliers to the automotive industry, which improved their image and put them to the map of the European automotive industry. This also benefited companies that are in lower levels of the automotive supply chain in Slovenia, because their business has expanded as well.

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Business Interest Association ASC, Automotive Cluster of Slovenia

CRV – Centre for R&D Evaluations

What are the aims of this best practice in automotive industry?
Knowledge transfer from university to industry.
What are the main benefits and why to use it?
Improved R&D process, development of products with higher added value, introduction of innovative R&D methodologies into every-day industrial use.
In which stage of clustering life cycle can the best practice be implemented?
It can be introduced in any life-cycle phase of the cluster. Recommended, after the initial confidence between the cluster members is established.
Are there any preconditions, limitations for this best practice?
Preconditions: confidence between the cluster members. Limitations: financial, mentality of the involved personnel.
Which "AutoCluster project" target groups could be communicated for further discussion of this best practice? Direct target group (regional industrial stakeholders) or others (Suppliers, general public, EU officials, international networks, etc)?
R&D institutions, industrial partners.

Success factors of Best Practice

1. Without the mutual trust between the involved partners it is very difficult if not impossible to formalize such partnership and make it work.
2. Without collaborative mentality and mutual respect the personnel from the industry cannot collaborate and work together with the academic people.
3. Academic people must realize the importance of the accepted standards and the time schedule in the industry, which often restricts academic freedom.
4. People from the industry should begin to understand that the academic knowledge can add value if properly applied. By presence of people "from outside" often a new perspective on the every-day industrial challenges is gained, which can improve every-day operation.

Visibility of the Best Practice

The presence of the CRV is well known among the partners of the ACS (Automotive Cluster of Slovenia). It is also well accepted by the top management of the University of Ljubljana, which strongly supports such initiatives. CRV was also one of the first formalized collaborative initiatives in Slovenia and in the near past often served as a guideline for the other similar initiatives. When the operation of the CRV was presented to the public in 2003 a Slovenian ministry of economic affairs together with its state secretaries was present at the event.

Border regional impact of the Best Practice

Collaboration of the industry and R&D institution via CRV resulted in many newly developed products that found their customers in the European automotive industry. In the mean time the involved industrial partners became tier 1 suppliers to the automotive industry, which improved their image and put them to the map of the European automotive industry. This also benefited companies that are in lower levels of the automotive supply chain in Slovenia, because their business has expanded as well.

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West-Pannon Regional Development Company

RICARDA

RICARDA aims to transfer the method of Intellectual Capital Reporting to the level of regional innovation networks of clusters.
Intellectual capital reports analyze and assess the intellectual capital of organizations. Intellectual capital is commonly distinguished into three dimensions: human capital, structural capital, relational capital. This capital report tries to introduce the Pannon Automotive Cluster as a network. Towards in first emphasize those abilities which are able to contribute to the success of this network: know-how represented by cluster members, structures help the information- and knowledge flow and the relevant regional, national and international partner relationships.
Overall and specific objectives of the project: improvement of regional RTD policy by developing, applying and disseminating an Intellectual Capital Reporting methodology for European regions, preparation of Intellectual Capital Reports (ICRs) for four clusters with different specializations in the collaborating regions, development of an ICR based RTD policy learning framework within these four regions.
In an initial phase of the project Intellectual Capital Reports will be jointly drafted by regional institutions, cluster managers and specialized research institutions for differing pilot clusters in four European regions. The results will contribute to identifying opportunities for improving private and public engagement in R&D activities. In a second phase the potential for a wider use of ICR based policy learning will be explored with regional stakeholders and also in a comparative perspective. Within the RICARDA project a basic model for the intellectual capital reporting of regional, technology-oriented networks was developed.
The pilot application of RICARDA's methodology for Intellectual Capital Reporting is carried out with four clusters focusing on different branches or technology. The experiences from the process of formulating the intellectual capital report, also in the other three RICARDA regions, will inform the revision and refinement of the tolls developed so far. They will be presented in a manual for the application of ICR.

Success factors of Best Practice
- Maturity of local economic
- Openness of involved parties
- Availability of local cluster policies
- Advanced competencies of cluster members

Visibility of the Best Practice
Project results have been disseminated in a manual on a European methodology for the use and application of ICR for regional innovation network.
http://www.ricarda-project.org/downloads/ricarda-manual.pdf

Border regional impact of the Best Practice
- Development of organization of culture
- Sharing of practices
- Benchmarking possibility

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Automotive Cluster Serbia

Automotive Network South East Europe (Automotive SEE)

The main aim of the project is to promote export of automotive industry suppliers by the networking of the automotive clusters from the Western Balkans. The issues are addressed in the project are developing regional cooperation and strengthening capacities for EU accession in the South-East European (SEE) countries. The project primarily targets SMEs that can integrate into supply chains of the international automotive industry and therefore achieve higher value added.

Activities are implemented:

- Initiated cooperation with international organizations and clusters (TAYSAD/Turkey, UIB Working Group Just- in Time/Germany; EASN Cluster network)
- Establishment of a regional internet portal, which would increase the regional and international visibility of the automotive suppliers from SEE. The portal will provide bilateral platform for the players of the region's automotive industry and will facilitate the regional and international cooperation.
- Establishment of an office in Germany, which acts as a representative office of the automotive clusters from Bosnia and Herzegovina, Serbia and Macedonia and implements pro-active marketing activities for the automotive suppliers from these countries.
- Support to joint participation in trade fairs, organization of promotional events and B2B meetings.

Success factors of Best Practice

- Willingness for cooperation
- Strong cross country linkages due to common industrial history in Ex-Yu
- CEFTA Free Trade Agreement in SEE

Visibility of the Best Practice

- Joint participation in trade fairs, organization of promotional events and B2B meetings
- Regional internet portal established
- Representative office of automotive clusters from Bosnia and Herzegovina, Serbia and Macedonia
- Signed Cooperation agreements

Border regional impact of the Best Practice

- **Level B** – Activities on cluster level to promote strategic co-operations and networks between companies and relevant bodies in the automotive sector on regional and national level.
- **Level A** ("Made in SEE") – Supra-regional and trans-national exchange of marketing strategies and information for automotive suppliers from entire SEE region.

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Comunimprese Scarl

POLI–AUTO (Lombard Industrial Pole automotive)

The particular characteristics of the Lombard Industry, characterized by an high diversified production and the delocalization of industrial plants, drove the Lombard Government to carry out the "metadistrict" policy. For this reason Lombardy Region does not have an automotive cluster.
The realistic POLI-AUTO goal is to awake the regional Government about the importance of the automotive industry to allow, by setting up a cluster, its introduction among the industrial and innovation policy priorities.
The main benefits of the project:

- The introduction of the automotive companies among the beneficiaries of specific support innovation programs;
- The setting up of an observatory aiming at a deeper monitoring of the automotive industry status and needs than that done by the project;
- The involvement of some automotive leader companies in research and innovation projects in the framework of the FP7 and the CIP.

Success factors of Best Practice

Over the last twenty years the Lombardy automotive industry had a deep decrease due to the closure or reassessment of many important plants such as Alfa Romeo in Arese, Fiat Autobianchi in Desio, Innocenti in Milan and OM in Brescia. Nevertheless the Lombardy automotive industry maintains a good dimension as shown by a research done during BeLCAR activity on a sample of 90 big/medium automotive companies. The research pointed out that there are about 30000 employees working and a turnover of 11000 billion €. The good dimension of the Lombardy automotive industry, is supported by its neighbourhood with the most powerful Italian automotive region (Piedmont – Fiat group) and by its strong internationalization vocation which allowed the creation of good technical and commercial relationships with other European nations such us Germany, France and Spain. The Lombardy automotive industry is characterized by an important presence of components suppliers but there is also a significant presence of industrial/farm vehicles and motorcycles OEMs.

Visibility of the Best Practice

The project involves major companies like Brembo, Pirelli, Mercedes Same and the most innovative Research Center in Italy called "Kilometro Rosso" in Bergamo (www.kilometrorosso.it). The results of the periods are presented frequently.

Border regional impact of the Best Practice

- the industrial scientific and technologic network
  local incentives for innovation that contribute to make Lombardy Region more attractive for foreign investments.

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CONCLUSION

The aim of this brochure was to publicize best practices in automotive industry across partner regions of Autoclusters project.

The statements of this paper reflect alone these projects, not on the whole automotive industry of South-East Europe, but maybe caught the main policies and trends.

The type of the practices moves on a large scale connected to R&D activities and supplier cooperation. The role of the R&D activities is very important, as the projects evaluations show. Regarding the target beneficiary the picture is much diversified. It depends on the aim of the project, the type of the project partner, etc.
Based on the summarized issues, we may say, that the success factors in most case of projects were the collaboration (cooperation), the strong team work, the innovation from all aspects and the automotive industrial background.
Most of best practices were implemented between the years 2004-2009, and the period of the projects were 2-3 years.
More than 54 million Euros were invested in the investment phase into these projects, in contrast with the running phase where 'only' 4 million Euros had been given. The first phase had been supported by public sector (more than in 50%), and in this sector the main 'supporter' were the EU funds (39%). The running phase is financed again by the public sector (53%), and the projects were supported mainly by regional sources (43%).

If we would like to summarize the projects' main characteristics, we can use a simple SWOT analyzes to show the factors:

Strengths	Weaknesses
Capacity for innovation Cooperation among economic players Common interest	Financial situation Low number of participants
Opportunities	**Threats**
Processes of innovation New market possibilities New innovative products, technologies, materials Higher added value	Weakness of financial issues Threats of low cost manpower countries - cars

We believe this brochure could contribute to project partners putting their own project in wider context and show good examples which could be used or developed by others.