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Automotive network for innovation

SUMMARY OF BEST PRACTICES ACROSS REGIONS AND SWOT ANALYSIS

SOUTH EAST EUROPE TRANSNATIONAL COOPERATION PROGRAMME

AUTOCLUSTERS PROJECT
WP 3.3

„The international cooperative network of educational and research institution with subcontractors and other bodies active in Automotive Industry”
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**SUMMARY OF BEST PRACTICES ACROSS REGIONS
AND SWOT ANALYSIS
- GLOBAL STUDY -**

**Written by APNB Ltd.
on behalf of West Pannon Regional Development Company**

Szombathely, December 2009.

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I. INTRODUCTION

The study summarizes and presents those Best Practices which had chosen by Project Partners to show and share its experiences each other. Nine Partners sent their Best Practices some of them presented two or three projects, so in this way 16 issues had received. (Only from the Croatian Partner has not been sent any template.)

Aims of this Work Package were collect and compare Best Practices from South-East European counties 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 a common SWOT analysis.

The summary stands from two main chapters. Structure of it follows the structure of the questionnaire. In the first chapter will be presented the identification of Best Practices and in the second chapter will be described the coherency of selected quantitative indicators. In each parts will be highlighted the common, significant parameters.

II. BEST PRACTICE IDENTIFICATION

II.A INTRODUCTION OF THE BEST PRACTICE

1. SUMMARY OF BEST PRACTICES

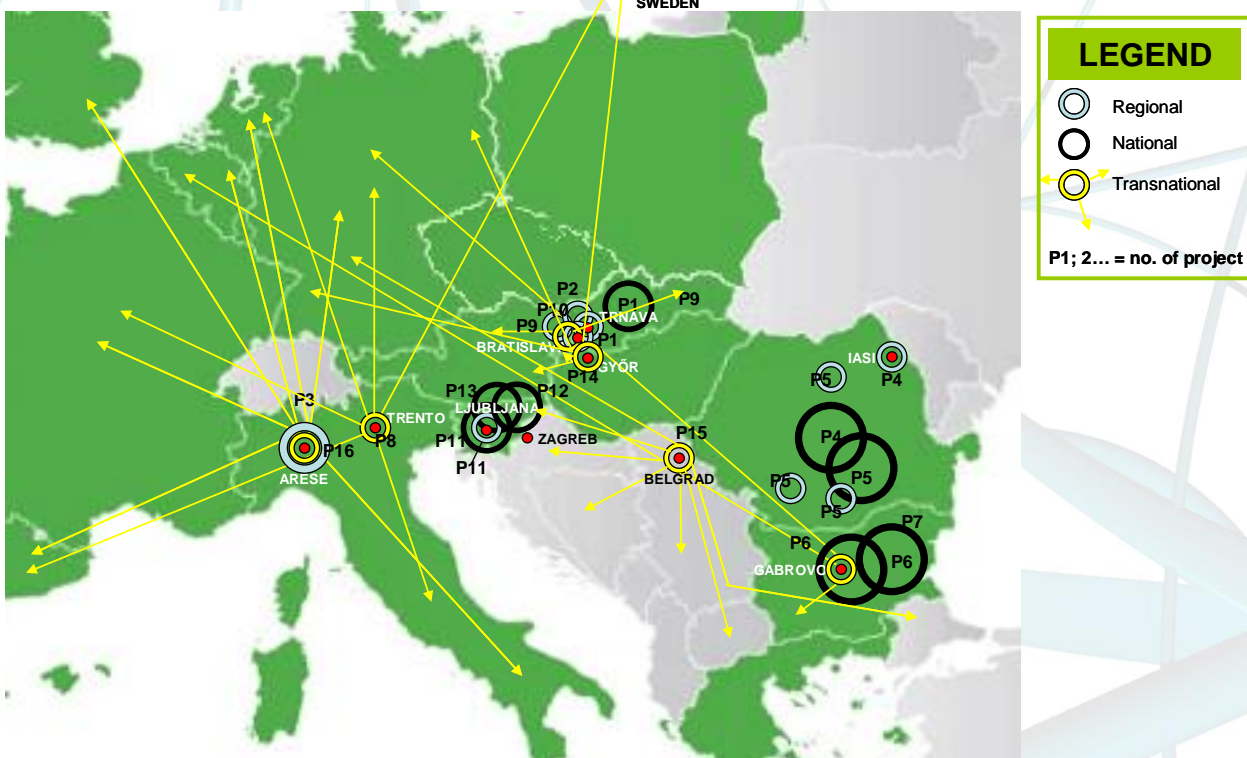
	Name of PP	Country	No. of B.P.	Name of Best Practice
LP	Automotive Cluster – West Slovakia	Slovakia	1	Automotive Cluster
			2	Industrial and Technological City Park
PP1	Comunimpresa Scarl	Italy	3	Network of Automotive Regions
			16	POLI – AUTO (Lombard Industrial Pole automotive)
PP2	"George Asachi" Technical University of Iasi	Romania	4	Continental-UTI Industry-University cooperation
			5	Postgraduate course Engineering in Automotive Projects
PP3	West-Pannon Regional Development Company	Hungary	14	RICARDA
PP4	Technical University of Gabrovo	Bulgaria	6	Automotive Quality System TS16949 with emphasis on DFMEA (Design failure mode and effect analysis)
			7	XCAR Sherpa - First BULGARIAN electric car
PP5	Center for REsearch And Telecommunication Experimentation for NETworked communities	Italy	8	SAFESPOT Integrated Project
PP6	Slovak Technical University	Slovakia	9	Professional MBA Automotive Industry
			10	Regional Innovation Centre
PP7	Business Interest Association ACS, Automotive Cluster of Slovenia	Slovenia	11	Development of Automotive Cluster of Slovenia
			12	Polycentric technological centre as an international innovatory system of the Slovene automotive supply industry, PTC
			13	CRV - Centre for R&D Evaluations
PP8	Croatian Employers' Association	Croatia		No data
PP9	Automotive Cluster Serbia	Serbia	15	Automotive Network South East Europe (Automotive SEE)

2. REGIONAL IDENTIFICATION OF BEST PRACTICE

As it can be seen on the map, the geographical scope of most projects are the own regions (there are 6 regional projects), but many of them reach the whole country (no. of national projects: 4). International projects (total 6 projects) involve several counties widespread Europe (19 countries are concerned). Some Partners indicated their projects both regional and national, so thus can be seen more regions and counties than the no of projects. The table shows the numerical data. (Comment: some questionnaires have not given enough information.)

Regional projects (6)	No. of occurrence of the regions (10)
West Slovakia	4
RO21*	2
RO32*	1
RO41*	1
SI2*	1
Lombardy (IT)	1
National projects (4)	No. of occurrence of the countries (8)
Slovakia	1
Romania	2
Bugaria	2
Slovenia	3
Trasnational projects (6)	No. of countries (19)
Project Partner country	Involved countries
Serbia (PP9)	Turkey, Germany, Bosnia and Herzegovina, Macedonia, Slovenia, Croatia
Italy (PP5)	Germany, France, Spain, The Netherlands, Sweden
Italy (PP1)	Belgium, The Netherlands, UK, Germany, France, Spain
Bulgaria (PP4)	Germany, Belgium
Slovakia (PP6)	Austria
Hungary (PP3)	Germany, Sweden, Austria

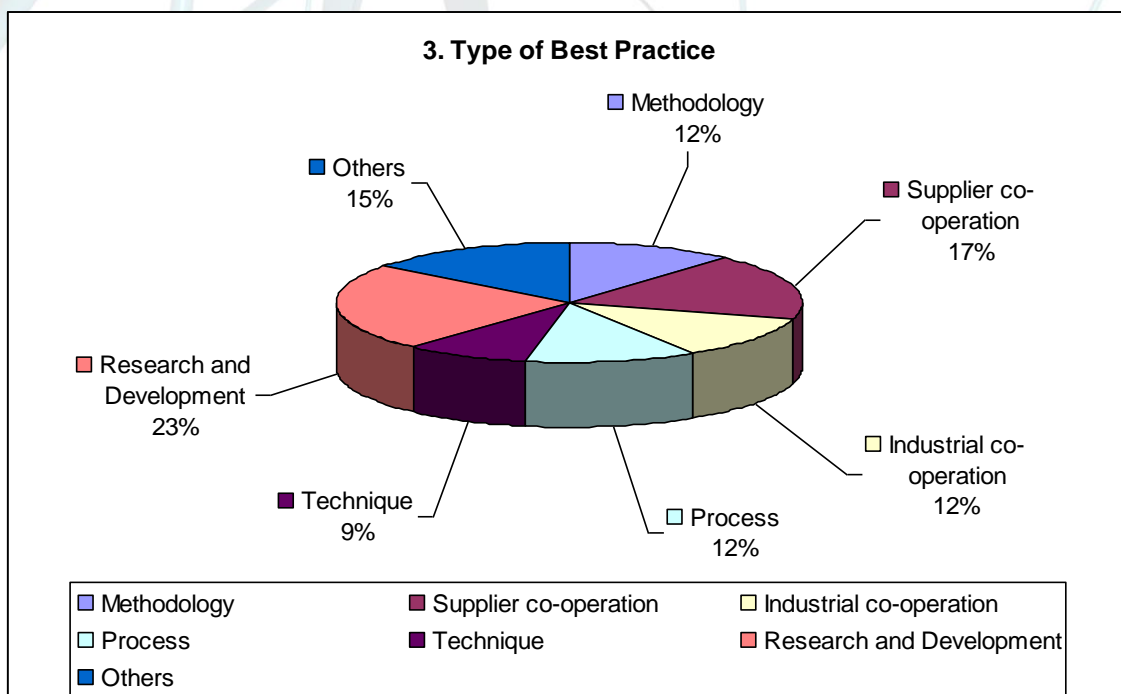
* identified by NUTS II level, see relative templates



3. TYPE OF BEST PRACTICES

As it can be seen most of Best Practices are connected to the **R&D activities**. This area (23%) is the most significant beside the **supplier cooperation** based projects, because it has 17%. Do not pass unmarked that in the 'Others' category three times were mentioned the filed of **education** (training, university). It must be highlighted that cooperation with universities, industrial based education and trainings are also very important. All other areas are presented approx. with the same percentage.

Methodology	4
Supplier co-operation	6
Industrial co-operation	4
Process	4
Technique	3
Research and Development	8
Others	5
Industry-university cooperation	
Co-operation industry-technical training	
Education	
Innovation support	
International cooperation	



4. IDENTIFICATION OF TARGET BENEFICIARY

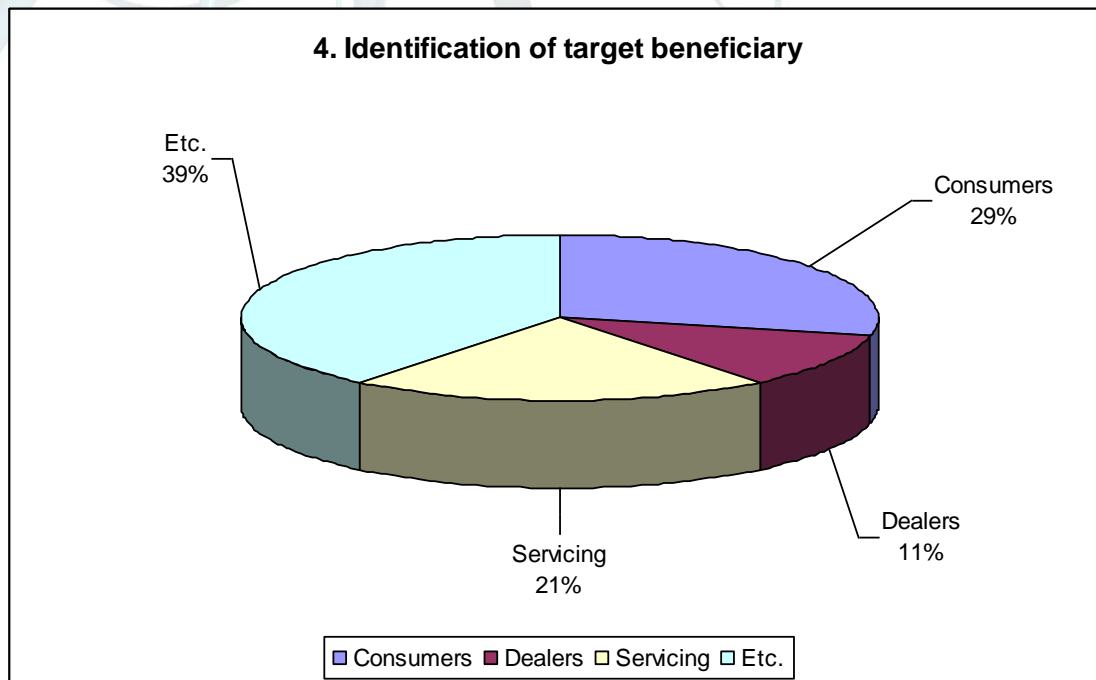
As you can see, the group of the target beneficiaries is very diversified (Others – 39%); the list can be found below. After this, the group of consumers (29%) and servicing fields (21%) are in the second and third places.

Consumers	8
Dealers	3
Servicing	6
Etc.	11

Maybe could be interest to see the other groups of beneficiaries were indicated in this part of the questionnaire.

Others (etc.):

- Domestic SMEs, foreign investors
- Industrial companies, universities, graduates (2x)
- Graduated & Companies, Institutions
- Public Authority, Road Manager, Service Provider, Content Provider, System Producer, Probe Vehicle Driver, Vulnerable Road User
- Research Organizations (2x)
- Industrial market (principal customers)
- Cluster members



5. EXECUTIVE SUMMARIES OF BEST PRACTICES

Here are listed all executive summaries of Best Practices. By reason of diversity of projects there could not find any common parts.

1 **Automotive Cluster – West Slovakia**

Automotive Cluster

Aims of creating the automotive cluster is to support automotive SMEs in a fields of increasing the competitiveness, marketing, management and education. SMEs are benefitting on organising 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 have a good name and contacts in automotive industry there is better chance of 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 organisation should be the interest of regional governments for supporting the regional market development.

2 **Automotive Cluster – West Slovakia**

Industrial and Technological City Park

Location of innovative companies and creation of technological cooperation and development activities in cooperation with university. Benefit for business entities with highly qualified employees are mainly in using new highly organised production and store halls, high-tech technologies and others. There is an expectation of 450 working positions in approx. 28000m² areas where 7500m² will be built-up for administrative offices and production and store halls. Complication could appear in case of unexpected expenditures. Realisation and organising of this best practice is City self-government (Trnava city).

3 **Comunimpresa Scarl**

Network of Automotive Regions

What are the aims of this best practice in automotive industry?

In 2004, the Limburg Development Agency in Belgium put together a bid for €1.5m Interreg IIC 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.

What are the main benefits and why to use it?

The overall objective of the Automotive Network was to raise awareness of the challenges faced by these regions. It would capitalise 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.

In which stage of clustering life cycle can the best practice be implemented?

In the stage linked with external cooperation.

Are there any preconditions, limitations for this best practice?

Good international partnerships.

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)? All.

4

 "George Asachi" Technical University of Iasi

Continental-UTI Industry-University cooperation

The aims of the Continental – University cooperation best practice 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 best practice started in Timișoara and Sibiu, extended to Iași and Suceava and continues to spread to other university centers.

The benefits of the best practice are aimed to be equally shared between the company and universities though they are different for the parts. Continental company envision 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 funds.

Precondition of the best practice is the presence of a strong company in the automotive industry willing to cooperate with universities and at least one university willing to cooperate with the company.

The best 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.

5

 "George 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

6

 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 the efforts and 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.

7

 **Technical University of Gabrovo**

XCAR Sherpa - First BULGARIAN electric car

The best practice we present is the 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.

Representatives of Belchev Motors say the two-seat model will be shown soon. They have already submitted application to the Ministry of Transport to license the prototype and launch mass production.

Electromobiles have begun the history with the invention of the first cart with the 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 for 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 allow decreasing air pollution in big cities and reducing expenses on motor transport maintenance.

The best practice will be implemented on the second stage of clustering life cycle when summarized earned experienced and know-how will be elaborated close to the project closure to help in other regions and different industries.

The only limitation for this best practice is problem financing. The inventor and his team have great enthusiasm to develop electromobile. They began to work on two-seat model.

8

 **Center for REsearch And Telecommunication Experimentation for NETworked communities**

SAFESPOT Integrated Project

SAFESPOT aims to:

- Use the infrastructure and the vehicles as sources and destinations of safety-related information and develop an open, flexible and modular architecture and communication platform.
- Develop the key enabling technologies: ad-hoc dynamic network, accurate relative localization, dynamic local traffic maps.
- Develop and test scenario-based applications to evaluate the impacts on road safety.
- Define a sustainable deployment strategy for cooperative systems for road safety, evaluating also related liability, regulations and standardisation aspects

The SAFESPOT applications aim to:

- Increase road safety for all road users
- Extend the range, improve the quality and reliability of the safety -related information providing an 'extended co-operative awareness' to all drivers
- Support drivers preventively to the proper maneuvers in the different contexts
- Optimize the intervention of vehicle controls with respect to critical situations
- Enable the development of new safety applications based on the cooperative approach.

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. Moreover the defined architecture is open to add further applications if available in the future.

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; “Fuels and Powertrain”, “Manufacturing and Materials” and “Integrated Safety”. The SAFESPOT IP belongs to the Integrated Safety Program (ISP), which so far consisted of the following projects: PReVENT AIDE, GST APROSYS, EASIS, SAFESPOT, WATCH-OVER, TRACE. SAFESPOT joined the Integrated Safety Programme (ISP) task force 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. To date, a draft story has been produced, which is currently being revised in the task force. 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. To this end, a task force, consisting of representatives from the projects’ coordination and core groups plus experts on the relevant topics (mainly architecture), has been formed in order to further harmonize the projects on a more technical level.

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)?

Public Authority, Road Manager, Service Provider, Content Provider, System Producer, Probe Vehicle Driver, Vulnerable Road User.

9



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. The target groups are those who already are or have the ambition to become leaders in the automotive industry. Furthermore, conditions for acceptance, is employers` statements about motivation of employers` candidate. 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. Programme is divided into modules, which are provided by combination of face-to-face and distance learning and takes four terms. The language of instruction is English. 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.

10



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. Another 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 centralise 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.

11

Development of Automotive Cluster of Slovenia



**Business Interest Association ACS,
 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.



**Business Interest Association ACS,
 Automotive Cluster of Slovenia**

12

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?

To established formal/legal central communication point of automotive suppliers

What are the main benefits and why to use it?

After the ACS 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 of the co-operation between members, the increase of 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 establish 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 organisations, apart from having important competence, invest in training of their employees, as well as provide the necessary financial and other support for innovations.

In which stage of clustering life cycle can the best practice be implemented?

It can be implemented in the phase of growth.

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.

13

CRV - Centre for R&D Evaluations



**Business Interest Association ACS,
 Automotive Cluster of Slovenia**

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.

14

RICARDA



West-Pannon Regional Development Company

What are the aims of this best practice in automotive industry?

RICARDA aims to transfer the method of Intellectual Capital Reporting to the level of regional innovation networks of clusters.

What are the main benefits and why to use it?

Within the PICARDA 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 focussing 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.

In which stage of clustering life cycle can the best practice be implemented?

After the first 5 years.

Are there any preconditions, limitations for this best practice?

No, there isn't.

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)?

Cluster members, cluster management, other cluster partners

15



Automotive Cluster Serbia

Automotive Network South East Europe (Automotive SEE)

What are the aims of this best practice in automotive industry?

Export promotion of automotive industry suppliers by the networking of the automotive clusters from the Western Balkans

What are the main benefits and why to use it?

Improved position of automotive industry suppliers from SEE in the European and global markets.

In which stage of clustering life cycle can the best practice be implemented?

Expansion phase.

Are there any preconditions, limitations for this best practice?

No.

Which "AutoCluster project" target groups could be communicated for further discussion of this best practice?

Regional industrial stakeholders, international suppliers, EU officials and international networks.

16



Comunimpresa Scarl

POLI – AUTO (Lombard Industrial Pole automotive)

What are the aims of this best practice in automotive industry?

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.

What are the main benefits and why to use it?

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

In which stage of clustering life cycle can the best practice be implemented?

In the very beginning (start up phase).

Are there any preconditions, limitations for this best practice?

No.

Which "AutoCluster project" target groups could be communicated for further discussion of this best practice?

Especially Regional Governements.

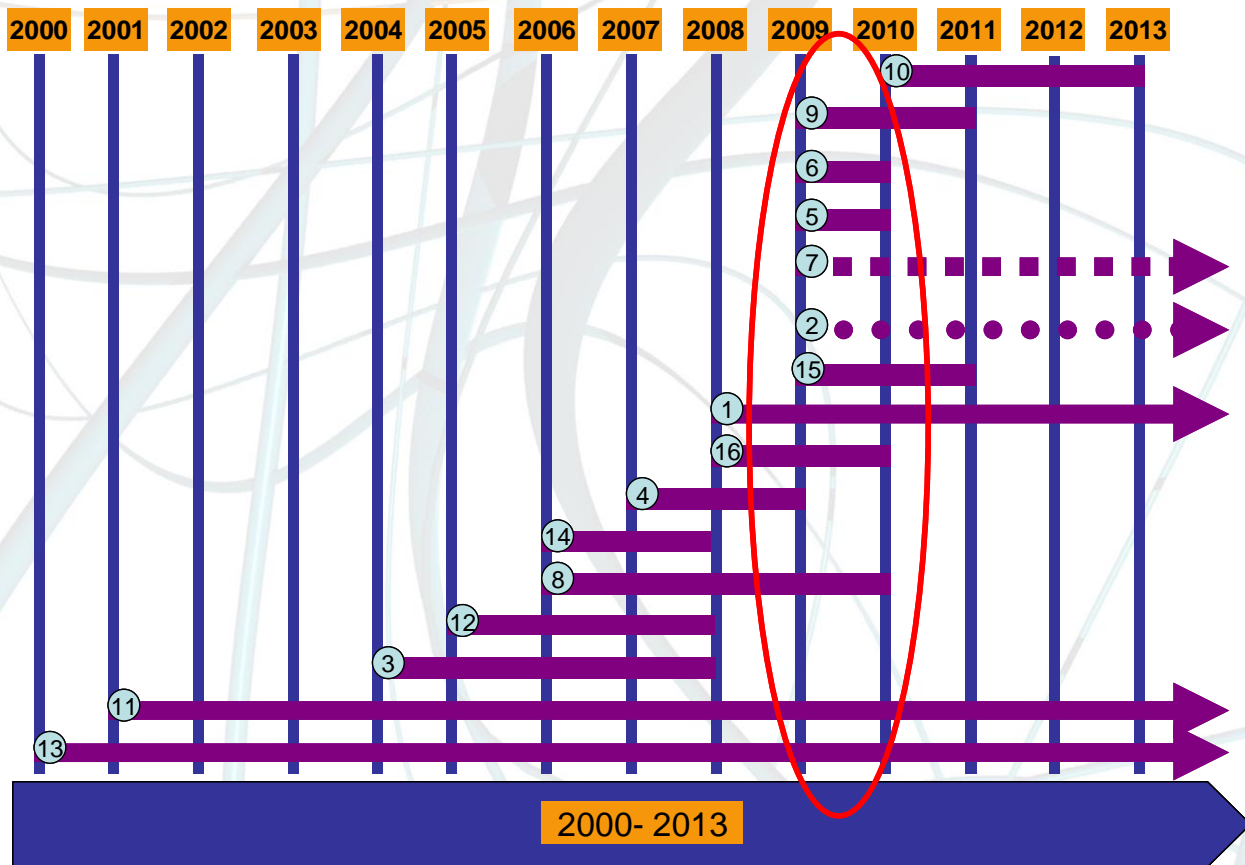
6. SUCCESS FACTORS

All success factors can be found in the list below. Of course from some best practices come not only one but several expressions. As follows 43 success factors had been collected. It is again a very colorful part of the questionnaire. The most powerful success factor is the **collaboration** (between economic players and project partners). Furthermore there are four factors which are worth to highlight: *cooperation* (with the same meaning of collaboration), *industry* (strong industry background), strong *team work* and the importance of *innovation*. The views of a successful project, besides the above mentioned key factors, are very important also for example the *networking*, *consulting*, *support of the government*, the *automotive industry environment*, good cooperation with *suppliers*, *partnership* and of course *communication* and *information exchange*.

no.	Success factors	no.of mention
1	collaboration	5
2	cooperation	3
3	industry	3
4	team work	3
5	innovation	3
6	networking	2
7	consulting	2
8	government	2
9	automotive	2
10	suppliers	2
11	partnership	2
12	communication, information exchange	2
13	internationalisation	1
14	common services	1
15	education	1
16	guidance	1
17	region	1
18	project management	1
19	multinational cooperation	1
20	branch education of TOP managers	1
21	common services	1
22	combination of e-learning and face to face education	1
23	SMEs interest	1
24	sustainable business and service models	1
25	major enabling and disabling factors for future deployment	1
26	customers benefit	1
27	First Time Right	1
28	safety	1
29	low cost	1
30	low level of noise	1
31	absence of pollution	1
32	small sizes	1
33	wide area of implementation	1
34	Automotive Supply Industry	1
35	open mind for ideas of the others	1
36	clear organisational structure	1
37	transparent financial relations	1
38	method	1
39	intellectual	1
40	knowledge transport	1
41	cluster	1
42	research	1
43	trust	1

7. PERIOD OF IMPLEMENTATION

As it can be seen on the diagram, some of the Best Practices have begun 8-9 years before. Those projects which are signed with arrows are mostly the cluster or R&D initiatives (long term projects), and those which are signed with a single strip have 2-3 years project period (short term projects). There are some which waiting for further financing support for exist. The time diagram shows that most of projects has been started, or keep in the year of 2009. (In some cases the given information was not unambiguous.)



- ② Starting to implement, building, investors acquisition
- ⑦ The pilot car travelled first kilometre on 21 of June this year. Now the inventor needs additional financing to begin serial producing.
- ⑤ ⑥ ⑨ Periods of implementation are estimated

II.B DESCRIPTION OF THE BEST PRACTICE

The aim of the section “Description of the Best Practice” is to introduce the projects generally. As the detailed descriptions of all projects were included in the earlier W.P.3.1 study, the current study does not intend to repeat this information again.

Therefore Annex 1. contain the Best Practice descriptions (page 60.).

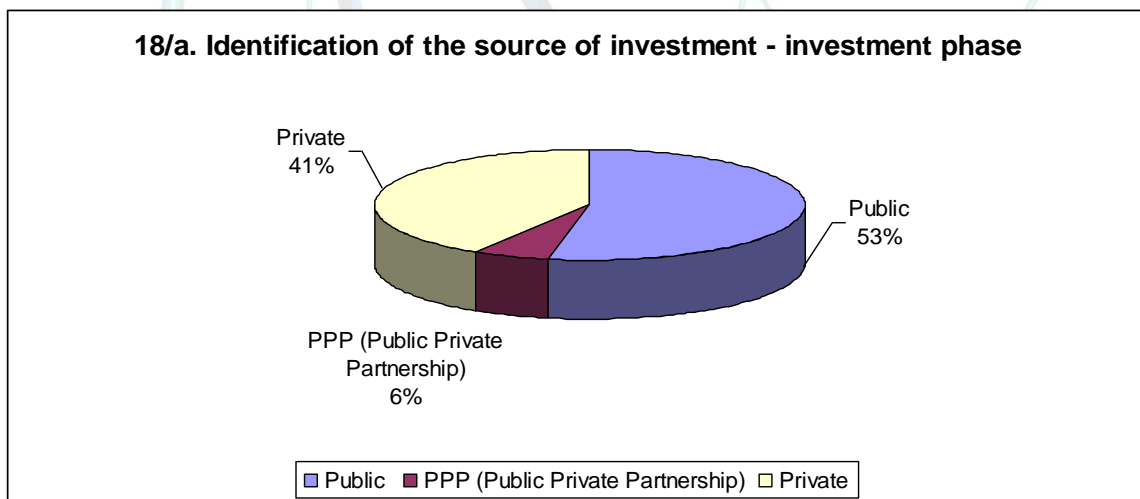
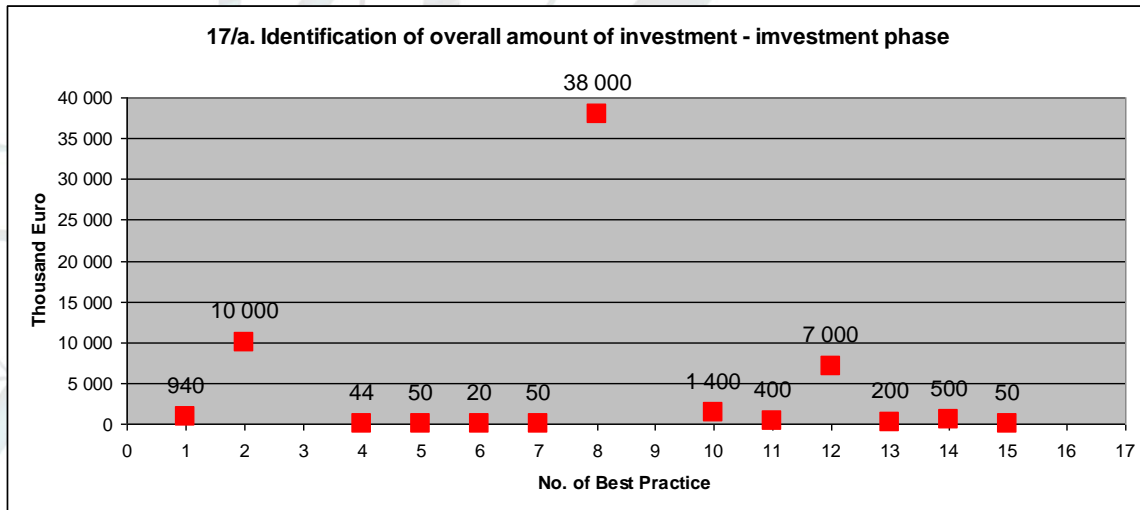
II.C FINANCIAL BACKGROUND OF THE BEST PRACTICE

The topic of financial background of the Best Practices was divided into two parts: the *investment phase* and the *running phase*.

Investment phase

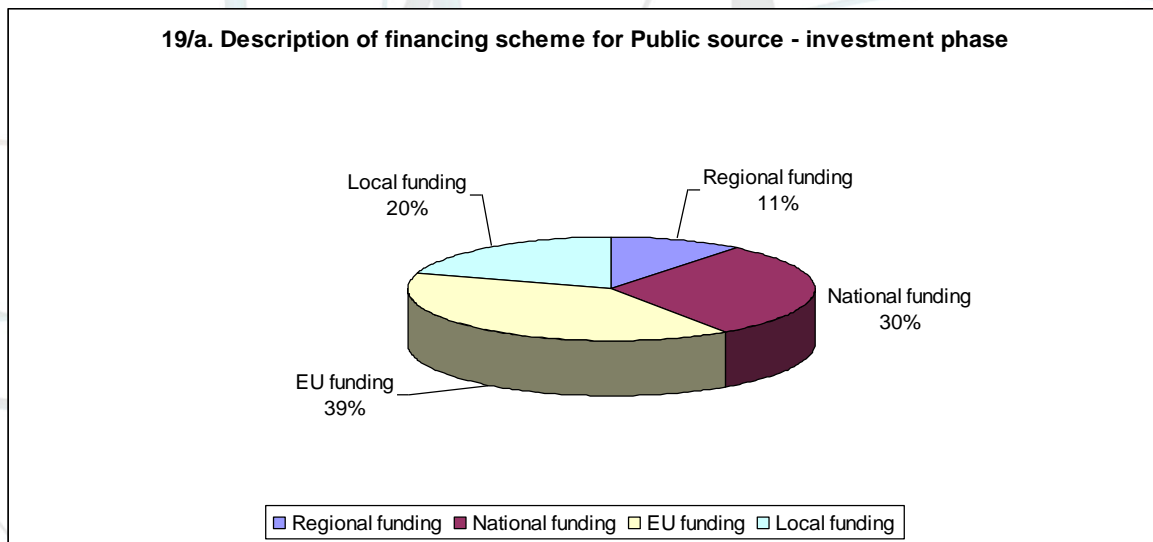
As it can be seen in the first diagram, the invested amount in the investment phase is generally below 1 000 000 Euros.

(Where no data received, dots are missing.)



Sources in this phase come mostly from the private and the public sector (private 41%, public 53%). (See diagram 18/a - investment phase.) Within the public sector, the distribution of the figures is the following (diagram 19/a.):

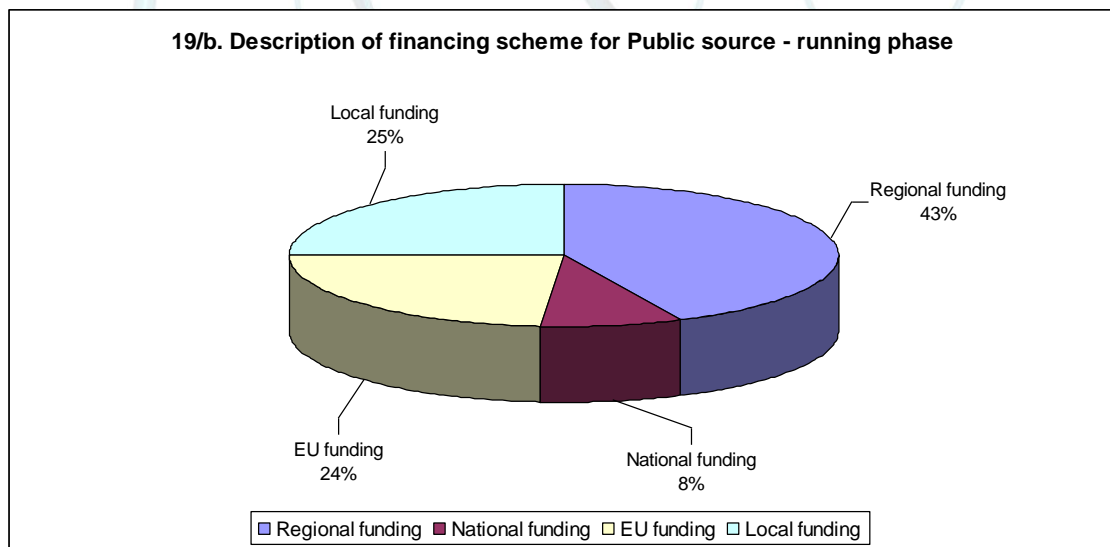
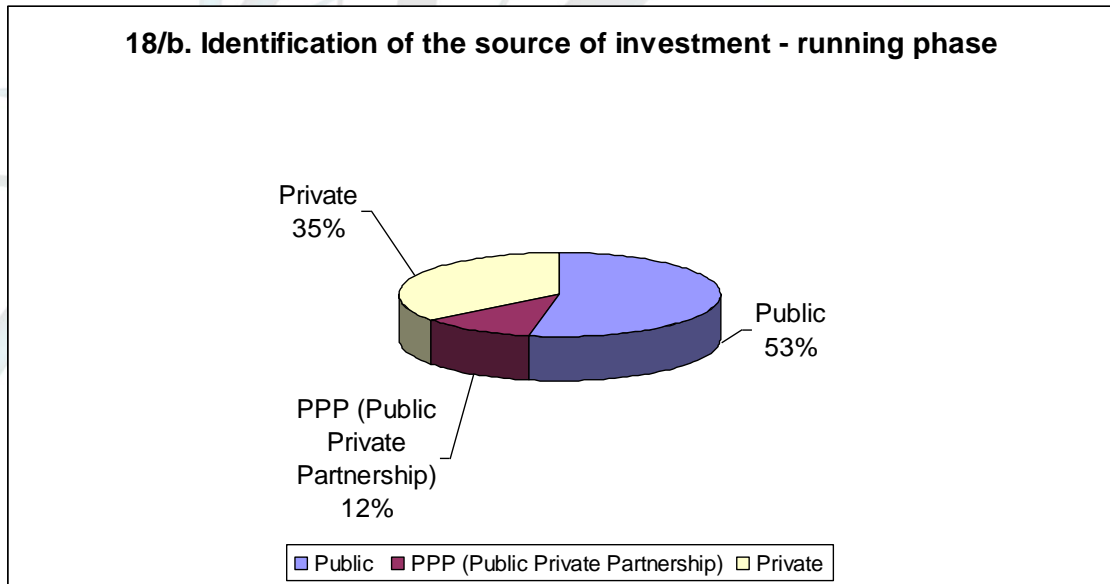
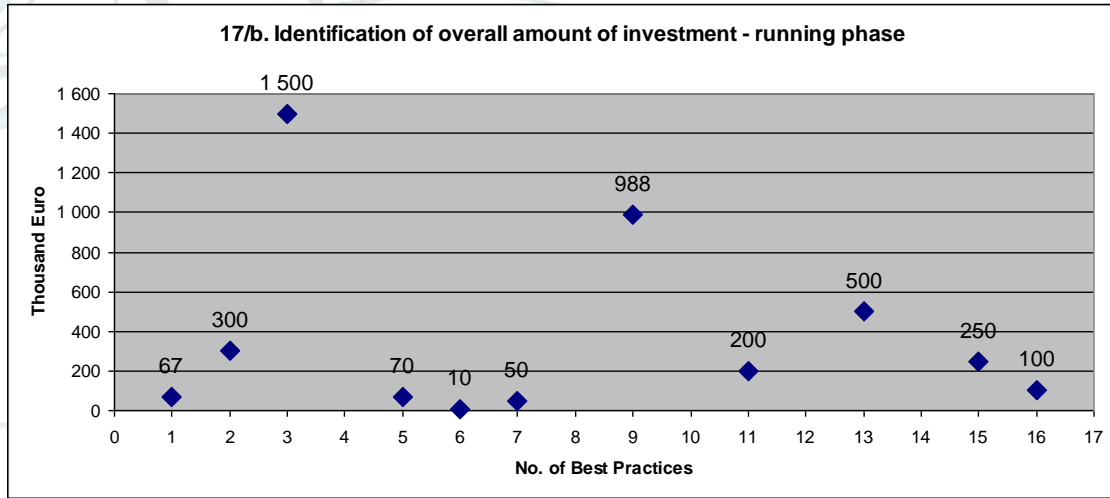
- 39%: EU funding
- 30%: National funding
- 20%: Local funding
- 11%: Regional funding



Running phase

Regarding the running phase, the amounts of investments do not show any significant deviation as compared to the investment phase (Diagram 17/b – running phase). But in this part, as the ‘diagram 18/b – running phase’ shows, the main source is also the public sector (53%). The regional funding is at the first place (43%) within the public sector financing, and comparing to the investment phase the role of local funding is growing (25%), the national funding is decreasing (8%). The rate of EU funding changed in negative direction (24%). (See diagram 19/b – running phase.)

(Where no data received, dots are missing.)



II.D ANALYSIS OF THE BEST PRACTICE

D1. BASIC ANALYSIS

In this part, the Best Practices were described according to the following aspects:

- **Success factors** of Best Practice
- **Visibility** of Best Practice
- Broader regional **impact** of the Best Practice
- External **evaluation**

All projects show very different parameters, therefore could not be found real common factors.

In the followings, all basic analyses are listed.

1 Automotive Cluster

 **Automotive Cluster – West Slovakia**

Success factors of Best Practice

In the period of economic crisis are created suitable conditions for effective Automotive cluster implementation. It helps to support local economy and stabilise 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.

External evaluation

Not available

2 Industrial and Technological City Park

 **Automotive Cluster – West Slovakia**

Success factors of Best Practice

Good reputation of in a field of cooperation with companies

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

External evaluation

Not available

3

Network of Automotive Regions



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. The importance of these tasks was once more underlined in the recently published “Competitiveness Report of the Council of European Union”.

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:

- a. continuity of efforts throughout the project activities o commitment to the fixed objectives;
- b. link with the EC;
- c. constant participation of people competent in the subjects;
- d. know-how in the territory;
- e. homogeneity of partners (public authority of same levels or comparable level);
- f. access of new partners from East Europe countries (like Slovakia) where automotive is now a very significant sector in terms of productivity.

External evaluation

Not available

 "George Asachi" Technical University of Iasi

4

Continental-UTI Industry-University cooperation

Success factors of Best Practice

Siemens VDO, opened the first research and development center in Timisoara, Romania. The company established a first university-industry partnership with West University of Timisoara in 1999. The partnership implied joint research projects in the area of automotive control, joint supervision of student diploma projects, programming courses provided by university for company employees, joint developed master study programs.

Because of the good results obtained within this partnership, when the company opened the second research and development center in Iasi, the management of the Siemens VDO company decided to transfer the best practice in Iasi.

The success of the best practice can be explained by the following:

- 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 obtain financial and material support from companies to complement the reduce budget allocation
- 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
- students are motivated to learn and to be involved in projects that can add to their curriculum vitae and increase their chance to be employed.

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.

Local media is invited at the Open Door Day, interviews are published in newspapers and showed on local television channels

Border regional impact of the Best Practice

The best practice impact locally and regionally in the following way:

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

External evaluation

Continental Automotive in partnership with Technical University of Iasi, Automatic and Control Faculty started a master program in October 2008. The program has been evaluated by ARACIS (Romanian Agency for Quality Assurance in Higher Education) and obtained the certification that allows the master program to continue for the next 5 years.

5

 "George Asachi" Technical University of Iasi

Postgraduate course - Engineering in Automotive Projects

Success factors of Best Practice

Since 2006, Renault 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). This innovative programme has a professional side (training engineers capable of teamwork in automotive-related projects) and technical universities (Romanian and French) are interested in postgraduate training.

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
- building a new relationship between universities and engaging them in competition, with benefits for academic and research activities.

External evaluation

Not available

6

 Technical University of Gabrovo

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

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.



Technical University of Gabrovo

7

XCAR Sherpa - First BULGARIAN electric car

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 electromobile will be great success for every partner

External evaluation

Not available



Center for REsearch And Telecommunication
 Experimentation for NETworked communities

8

SAFESPOT Integrated Project

Success factors of Best Practice

SAFESPOT activities have ambitious targets in terms of innovative results and the acquired know-how is expected to be strategic for Europe and European organisations. The interest of different classes of companies for SAFESPOT results may be summarized as follows:

- **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. The level of complexity of vehicles will be sensibly decreased, compared to autonomous solutions.
- **Suppliers** will meet the challenge of new market opportunities: they want to be prepared to offer fully developed technical solutions and intend to actively drive the evolution in terms of concept generation, technical evaluation, standardisation, public work.
- **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 standardisation. In addition, SAFESPOT applications will achieve their greatest impact to the public only if the project's achievements are widely disseminated to all interested actors, such as the public road authorities, the drivers, the national safety committees etc.

The most important dissemination channels are:

- *European and International Events (workshops, conferences etc)*
- *SAFESPOT Events*
- *Mass Media and Press*
- *Scientific Journals*
- *Demonstration events*
- *Test and demonstration sites*
- *Project's website*
- *Project's User Forum*
- *Collaboration with organizations*
- *Synergies with other Projects*
- *Project logo*
- *Project leaflet*
- *Project poster*
- *Publications and presentations*

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.

CREATE-NET research center from Trento, Italy (partner in AUTOCLUSTERS) participated together with the University of Trento and CRF in Trento took part in *Preliminary Analysis and Initial Deployment Programme, WP3: Organisational Architecture, WP4: Risk analysis and legal aspects and WP5: Assessment & evaluation.*

External evaluation

A methodology has been developed as part of the project activities: The project's performance is determined by a set of pre-defined criteria covering not only quantitative aspects such as resources or work package delays in months, but also qualitative such as the deliverables' quality marks or the projects impact to the society. For the defined criteria, specific values will be appropriately selected in a range between 1 and 5 and then specific assessment formulas will be calculated so that quantitative results can be summed and compared against the defined thresholds. In addition, the values will be monitored through time with the use of diagrams so that general tendencies and especially slight but not obvious declinations can be timely identified and brought to the attention of the interested parties.

The assessment reports will be submitted to the attention of the Core Group with special indications on possible problematic areas and failures in specific criteria which raise an alarm and require the attention of the relevant partners involved.

Proposed compensating measures may be also included to the reports for the consideration by the Core Group. The relevant decisions and precautions taken will be included to the subsequent report along with possible conclusions on their impact to the updated values.

The assessment procedure therefore is planned to serve as a monitoring tool for the SAFESPOT project by periodically defining exact values on the project's performance and picturing the results. In this way, areas that need attention are defined and alarms are raised on time, before critical failures influence the entire project's success. The success of the tool, of course is proportional to the objectivity and attention of the people setting the performance values at each assessment report and therefore special attention will be given to correct application of the methodology by the Core Group and the project Coordinator.

9



Slovak Technical University

Professional MBA Automotive Industry

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 stabilise 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.

External evaluation

Successful FIBAA accreditation

10



Slovak Technical University

Regional Innovation Centre (RIC)

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

External evaluation; results:

- strategic documents for innovation support
- basic RIC infrastructure
- new personal capacities for innovation dissemination in Tnava region
- publicity of innovation in public, SME, government, R&D centres and Universities

11

Development of Automotive Cluster of Slovenia



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.

External evaluation

With other similar clusters (phases, investments, number of members, turnover, number of employees in the office)

12

 Business Interest Association ACS,
 Automotive Cluster of Slovenia

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

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

The project “Polycentric technological centre as an international innovative system of Slovenian automotive supply industry” was started as a result of a realisation 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.

External evaluation

Not available

13

 Business Interest Association ACS,
 Automotive Cluster of Slovenia

CRV - Centre for R&D Evaluations

Success factors of Best Practice

1. Without the mutual trust between the involved partners it is very difficult if not impossible to formalise 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 realise 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 between 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 formalised 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.

External evaluation

Not available

14
RICARDA



West-Pannon Regional Development Company

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

External evaluation

Not available

15
Automotive Network South East Europe (Automotive SEE)



Automotive Cluster Serbia

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.

External evaluation

Not available

16

POLI – AUTO (Lombard Industrial Pole automotive)

 **Comunimpresa Scarl**

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. At the moment there are not car OEMs due to the closure of important plants as mentioned above. Mould and tooling suppliers (mainly MICRO enterprises) with high technology are also significant for the automotive industry. Finally the basic mechanic industry (foundries, mechanic manufacturing) which has a diversified production, some of which direct to the automotive industry, plays an important role. The automotive enterprises are mainly located in Milan, Varese, Bergamo and Brescia provinces.

Visibility of the Best Practice

Trough European Project BeLCAR, Cestec awoke the Regional Government about the importance of the automotive industry to allow, without setting up a cluster, its introduction among the industrial and innovation policy priorities.

Recently the “Politecnico of Milan” participated and won a regional Call for Tender (Driade Programme - 25 Million Euro for 7 winning projects) for building a Regional Automotive Cluster: managed by Mechanical Department and organized by Comunimpresa (technical Advisor), the project involve 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 1st networking period will be presented on 25th November in Milan.

Border regional impact of the Best Practice

About the 60% of the production has an Italian market (mainly FIAT and IVECO) while the last 40% has an European one (mainly Germany, France and Spain). The component suppliers are highly specialized and can be divided into two groups:

- car suppliers
- other vehicles suppliers (special and two wheelers vehicles).

Among the car suppliers there are mainly big companies not interested in the “other vehicles” market because of the low production volume, the big flexibility and the low investments that this market requires. On the other site there is a good number of technological and dynamics SMEs operating in the above mentioned “other vehicles” market.

Over the last twenty years Italian suppliers tried to diversify their markets to avoid a unique dependence from FIAT group shifting their attention to foreign OEMs (particularly the German and French ones). As a consequence, when the economic environment was favourable, many of them moved their plants to other European countries, bringing there also the production for the Italian market. This has caused a decrease of the workforce despite an increase of turnover

Concerning multinational companies with transplant in Lombardy it has to be taken in account that, since the labour cost in Lombardy is very high, there is a risk that they could leave our country. To avoid this risk it is essential to offer a good environment for their development. First of all it is necessary to guarantee an Italian OEM market: fortunately the FIAT group is now coming out from a long crisis period.

Secondly Lombardy guarantees many positive factors such as:

- the flexibility of the job
- the educational level
- the logistic position
- the industrial scientific and technologic network
- local incentives for innovation that contribute to make Lombardy Region more attractive for foreign investments.

External evaluation

Not available

D2. SWOT ANALYSIS

In the first part of this section all SWOT analyses will be found separately below.

1 Automotive Cluster – West Slovakia

Automotive Cluster

STRENGTHS	WEAKNESSES
First automotive cluster in the region Support of the regional government and the city Creative potential of human resources Cooperation with universities, R&D Centers and other innovation organization Strong automotive industry orientation in the region and also in the country	Possibility of further financial issues regarding transnational projects co-financing Not sufficient support from the government
OPPORTUNITIES	THREATS
Networking Innovation New market possibilities Attracting the region	Financial issues No interest of companies in joining the cluster

2 Automotive Cluster – West Slovakia

Industrial and Technological City Park

STRENGTHS	WEAKNESSES
Regional development Rising the competitiveness Enhancement of business background Specialization and leadership	Initial expenses Overloading the transport capacities (resulting to location outside the city)
OPPORTUNITIES	THREATS
Foundation and development of research centers Providing of complex services for companies	Not enough investors interest Lack of financial sources

3 Comunimpresa Scarl

Network of Automotive Regions

STRENGTHS	WEAKNESSES
-	-

OPPORTUNITIES	THREATS
<p>From the SWOT analysis, it followed that Stuttgart and Montbéliard appear to be the areas that are most completely endowed with assets and skills in order to be a frontrunner in automotive (production and R&D) activities.</p> <p>Therefore, they also seem best positioned to take on a larger part of the innovation activities that are devolved from OEMs to supplier companies.</p> <p>In the case of Montbéliard, there is a worry that its peripheral location - from a national perspective - may lead to a transfer of decision making power and research activities to more central locations (notably towards the Paris basin).</p> <p>In the case of Stuttgart, the apparent absence of productivity-enhancing logistics and real estate infrastructure is striking. Although this may be related to the tradition in the area to concentrate on high added value products and activities for which such facilities are less critical. The high concentration of suppliers in the direct proximity of the DaimlerChrysler factory is almost a „de facto“ supplier park.</p> <p>Also the Northern Italian regions Turin and Lombardia appear to be adequately positioned to attract a (larger) share of high added value activities, notably in product styling and design, to their areas. Nonetheless, the two regions are completely different in terms of the composition of their automotive clusters.</p> <p>For the moment, the regions of Flanders, Galicia and Luton/East England appear to be destined to act as final assembly and production areas, although considerable efforts are being made by all three regions to climb up the value chain.</p> <p>Galicia, in particular, has made significant efforts recently in terms of sustaining innovation activities.</p> <p>In the case of Flanders, a remarkable strength is its pioneering role in all kinds of logistics and real estate facilities to sustain final assembly productivity.</p> <p>Galicia stands out in terms of its solidity of a regional production base in spite of its peripheral location, more so in view of the current drift of European industrial activity eastwards. It has also witnessed a remarkable intensification of R&D activity.</p> <p>In the case of Luton/East England, a significant advantage is the presence of the Formula 1 activities in its surroundings, which generate a lot of technology for the industry.</p>	

4

 "George Asachi" Technical University of Iasi

Continental-UTI Industry-University cooperation

STRENGTHS	WEAKNESSES
<p>The best practice is based on practices that are common in Western Europe and which have a long tradition. There are common interests and both parts can benefit from the best practice.</p>	<p>At the moment it covers only a small part of the automotive area (electronic equipment of vehicles).</p> <p>There is no car manufacturer in the region which could increase the demand for</p>
OPPORTUNITIES	THREATS
<p>To these best practice objectives can adhere other companies in the area of automotive. Increasing the quality of the work force in</p>	<p>The partnership can have as result a narrower of student training. They can be tempted to learn and involve only in projects that are</p>

the region in the area of automotive can determine that other well known automotive companies open subsidiaries in the region. In the same time local companies can emerge or enter in the automotive area with new innovative products.

related to the programs within the partnership. This can result in disciplines that students are no more interested in which makes their training at the end of studies to be incomplete.
 If other partnerships are not developed with other companies in the area of automotive and if Continental company decided not to provide support to universities, the partnership and activities in the area of automotive will end.

5

 "George Asachi" Technical University of Iasi

Postgraduate course - Engineering in Automotive Projects

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> - the common interest of all participants - correlation between industry demands and technical education - rigor, strictness, high standards - clearly outlined training steps with periodical evaluation - strict student selection 	<ul style="list-style-type: none"> - large amount of money invested by the industry - despite the strict selection, not all students graduate
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> - 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. 	No threats

6

 Technical University of Gabrovo

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

STRENGTHS	WEAKNESSES
Rigged, Internationally proven system opening the door to new customers	Can be implemented in a bureaucratic way instead of Practical
OPPORTUNITIES	THREATS
Gives tools for avoiding repetition of prototyping and decreasing the time to market	Can be accepted by the development engineers as only paper work


7

 **Technical University of Gabrovo**

XCAR Sherpa - First BULGARIAN electric car

STRENGTHS	WEAKNESSES
<p>Strengths and weaknesses are internal factors. The strengths of the best practice are its resources and capabilities that can be used as a basis for developing a competitive advantage. For this practice they are following:</p> <ul style="list-style-type: none"> ▪ a new, innovative product ▪ Patent – the owner of the patent is team of specialists of Belchev Motors Company ▪ strong brand names – this is the first Bulgarian electric car ▪ good reputation among customers – the firm is founded in 1999 and is well known ▪ cost advantages from proprietary know-how ▪ Location of the business access to distribution networks – town of Stara Zagora is situated in Central South Bulgaria, which is in South East Europe ▪ Green philosophy – keep the environment clear 	<p>The weaknesses are following:</p> <ul style="list-style-type: none"> ▪ Lack of marketing experience ▪ The working team is very well structured and educated, but it will be good to increase the number of people involved with this practice. ▪ Lack of access to key distribution channel ▪ Much difficulties with self-financing ▪ Lack of large investment in manufacturing capacity ▪ A necessity of station to charge the batteries
OPPORTUNITIES	THREATS
<p>Opportunities and threats are external factors. In our case opportunities are:</p> <ul style="list-style-type: none"> ▪ an unfulfilled customer need ▪ global influence ▪ arrival of new technologies ▪ removal of international trade barriers with European membership 	<p>Possible trends are:</p> <ul style="list-style-type: none"> ▪ emergence of low cost cars for delivery ▪ development of non-polluting transport and improving environment

8

 **Center for REsearch And Telecommunication Experimentation for NETworked communities**

SAFESPOT Integrated Project

STRENGTHS	WEAKNESSES
<p>Manufacturing science Technology know how Clustering examples Skilled European citizens Strong services industry</p>	<p>Fragmented technology policy Fragmented markets Application & leverage of IP Poor interaction research & industry Unattractive conditions for academia and</p>

<p>Leading European ICT players in the automotive industry Leading European users (citizens and industry) Good research programmes including FP</p>	<p>research institutes Larger project funding out of EU scope Heavy procedures for R&D programs Lack of a harmonised legal framework, and as a result a liability problem.</p>
OPPORTUNITIES	THREATS
<p>Tax incentives for R&D Incentives for co-operations industry/universities State aids for innovative/leading edge technologies Incentives for new technologies in the sciences Excellent research initiatives including PPP and recently the Green Car initiative Increase coordination and complementarity between EU and MS research programmes</p>	<p>Slow procedures in standards development: The technical risks that are a threat to the deployment process. The decisions made in this arena need to be made by all stakeholders. Important decisions that need to be taken are about standardisation. The standardisation bodies that will develop standards for V2V communication and information presentation need to receive a mandate to develop standards. The European Commission has the power to make this decision and will be one of the important stakeholders for this decision. Besides the important issue of standardisation, a choice on a form of restoration fund has to be taken as well.</p> <p>Liability problems: who has access to which data. An important consideration is whether an in-car electronic data recorder (EDR) will be implemented. The second issue is about access and use of data with respect to privacy concerns</p> <p>Lack or not enough tax incentives for R&D Continuation of the market fragmentatio. Mistakes at any of the decision making arenas:</p> <ul style="list-style-type: none"> ▪ ‘Steering committee’ arena ▪ Community of Interest arena ▪ Technical arena ▪ Business Planning arena ▪ Legal arena ▪ Deployment arena

9



Slovak Technical University

Professional MBA Automotive Industry

STRENGTHS	WEAKNESSES
<p>First Professional MBA Automotive Industry in Europe</p>	<p>Possibility of further financial issues regarding transnational projects co-</p>

Support of the INTERREG project Using the potential of academic staff TUV and STU Cooperation among universities (2 countries), cluster and business Strengthen of automotive industry in the regions	financing Time determination of the financial support Weak financial situation of SME's
OPPORTUNITIES	THREATS
Networking by ICT Stability of Faculty members New market possibilities Attracting the high level of education	Financial and time issues No interest to support the study of individuals from employer side

10



Slovak Technical University

Regional Innovation Centre (RIC)

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> · Advantageous of geographical location · Very good transport, social, industrial, educational infrastructure · Developed relationship with foreign countries · Strong background of multinational companies from automotive, electronic and energy industry · Companies are interested in innovation activities · High level of diversified industry and suppliers · Number of SMEs · Real potential for next development of industry · Qualified and educated employees · Innovation activities are not systematically planned yet, they are done base on needs of companies 	<ul style="list-style-type: none"> · Low companies of production with higher added value · Low number of SME involved to applied and experimental R&D · Weak connection among R&D centers and enterprises · Low level of private investment to R&D · Weak mutual connection between companies and schools
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> · To improve traffic, social, educational and industrial infrastructure · Foreign investment to industry and R&D · More work places for educated and qualified employees · Higher ratio of production with higher added value · Efficient cooperation among companies, R&D and educational institutions 	<ul style="list-style-type: none"> · Migration of young educated people to other regions or country · Implementation of investment programs without keeping the sustainable development principle · Move activities of international companies to other countries · Decreasing support of subvention to R&D · Inefficient cooperation among R&D

	centers and companies Education isolated from labor market needs
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 **Business Interest Association ACS,
 Automotive Cluster of Slovenia**

11
Development of Automotive Cluster of Slovenia

STRENGTHS	WEAKNESSES
Excellent RTDI cooperation infrastructure (technology centres, Polycentric Technology Centre) Excellent global ACS network ACS Automotive School More than 1,000 registered researchers connected with automotive industry ACS information system – integral solution supporting networking, cooperation, data bases, virtual project office, documents management Clear roles and responsibilities of competent cluster management team Active role of company managers in decision making Confidence between the members and shared understanding of common operation Acting as open system with clear demands for new members Maintaining basic principles of the competitiveness inside the cluster (cooperation and concurrence)	Smallness in terms of number of member companies Small domestic market in terms of OEM Availability of R&D financial resources
OPPORTUNITIES	THREATS
Transnational cooperation will offset restrictions of small domestic market and offer to ACS members new cooperation opportunities Global support to vehicle producers and system suppliers Willingness to learn from best-practices from other cluster participants strategies how to involve SMEs more actively in the ongoing projects Leverage more funding for projects (EU and globally) Develop region of South Eastern Europe as supply base for automotive industry Active role of Slovenian government	Low cost countries in Eastern Europe and Asia Not much local OEMs

developing RTDI and cooperation infrastructure
 Intellectual Property protection
 Shift of competences and added value in automotive industry from OEMs to suppliers

 Business Interest Association ACS,
 Automotive Cluster of Slovenia

12
Polycentric technological centre as an international innovatory system of the Slovene automotive supply industry, PTC

STRENGTHS	WEAKNESSES
Critical mass of researchers in the industry and R&D institution. Critical mass of the R&D equipment. Established formalised and inter-personal links between the stakeholders. Formalised partnership with clear rules of operation. Transparent financial relations.	Conflicts between the involved personnel from the industry and academia are sometimes not resolved promptly.
OPPORTUNITIES	THREATS
Even though the level of R&D knowledge has rose from the beginning significantly, there is still room for improvement with an application of new technologies, new materials, etc. Introduction of the new industrial partners.	Extreme economic events can weaken financial strength of the involved partners Disrespect for each other.

 Business Interest Association ACS,
 Automotive Cluster of Slovenia

13
CRV - Centre for R&D Evaluations

STRENGTHS	WEAKNESSES
Critical mass of researchers in the industry and R&D institution. Critical mass of the R&D equipment. Established formalised and inter-personal links between the stakeholders. Formalised partnership with clear rules of operation. Transparent financial relations.	Conflicts between the involved personnel from the industry and academia are sometimes not resolved promptly. The contractual annexes are usually valid only for a current business year, so the change in the management structure of the partners can influence a short-term operation of the CRV.
OPPORTUNITIES	THREATS
Even though the level of R&D knowledge has rose from the beginning significantly, there is still room for improvement with an application of new technologies, new	Extreme economic events (like the 2008/2009 recession) can weaken financial strength of the involved partners, which could reduce the investment and operational

materials, etc.
 Introduction of the new industrial partners.

capability of CRV.
 Strong egos of the involved personnel (especially the managers) can limit or even break the links, which were generated through many years of fruitful co-operation. Disrespect for each other.

 **West-Pannon Regional Development Company**

14
RICARDA

STRENGTHS	WEAKNESSES
Well-developed tool Learning opportunity Developed large international project team Easy to access and use	Require certain level of maturity
OPPORTUNITIES	THREATS
To capture innovation-relevant intangibles at the level of organizations Benchmarking opportunity ICR makes possible sharing of best practices	Difficult is in adaptation of ICR Similar tools available Misunderstanding of usage of ICR

 **Automotive Cluster Serbia**

15
Automotive Network South East Europe (Automotive SEE)

STRENGTHS	WEAKNESSES
Critical mass of companies and R&D institutions. Tradition in strong cooperation in countries of former Yugoslavia Strong inter-personal links between the stakeholders.	Many companies are facing financial weaknesses Old technology and R&D infrastructure Weak governmental support for automotive sector in some participating countries Small expenditures for R&D and innovations
OPPORTUNITIES	THREATS
Creation of an “Automotive SEE” brand Existing CEFTA Free trade agreement in Western Balkans Potential of Special Free Trade Agreements with Russia and Turkey New FIAT plant in city of Kragujevac/Central Serbia with planned capacity of 200.000 vehicles/year from 2012	Shortened inflow of international investments in automotive industry due to economic crisis worldwide

16

 **Comunimpresa Scarl**

POLI – AUTO (Lombard Industrial Pole automotive)

STRENGTHS	WEAKNESSES
<p>The Lombard automotive industry is characterized by a productive diversification: presence of farm vehicles - industrial vehicles - motorcycles OEMs; Lombardy hosts top level Italian components suppliers headquarters and strategic directions so guaranteeing the future presence of the enterprise; There are good suppliers in the field of prototypes and moulds; Lombard industry is well developed in all the sectors (about 255000 enterprises); this allows high opportunity of technology transfer between the different sectors among the automotive one; Lombardy Region is one of the European motors and it has a strategic geographical position and Milan hosts new exhibition area which offer many business opportunities; Presence of engineering and technical university fundamental for the research and technological development.</p>	<p>Disappearance of historical car OEMs (Alfa Romeo, Innocenti, Autobianchi) and related decrease of the supplier network; Some suppliers are too much dependent on FIAT Group; Some automotive enterprises have too much management turnover this means lack of a consolidated company structure and presence of short time strategies; Low appeal of a technical/technological career for young employees who prefer career with possibility of success in short time: risk to move the know how in the way of suppliers; Low collaboration with university/research centres; No cooperation network among companies and too strong competition; Generational business transfer: lack of successors in the SMEs; Difficulty to access credit due to the rigid banking system; Education sometime doesn't match with the industry needs; High labour and lands cost; Low knowledge of foreign languages; Over crowded transport system: only wheel transport and a law developed/efficient railway.</p>
OPPORTUNITIES	THREATS
<p>Resumption of the FIAT and PIAGGIO groups; Customization: to anticipate and to comply the customers needs is an opportunity to avoid the import from the low cost workforce countries; New policies on traffic and pollution which promote the development of new technologies; Collaboration with other national and European regions; Development of topics related to safety, traffic and pollution.</p>	<p>Competition from low cost manpower countries; The high cost of labour the high taxes and the complex Italian legislative system cloud force multinational companies to leave Lombardy; Too many actors working on the same topics without coordination (for example Association, Public body, University, Banks); Lack of a regional cluster culture due to the productive diversification.</p>

The SWOT analyses were very colorful and diversified. In spite of the fact that during this part of the project, we can meet with 16 different projects, even so it could be found some common parts and the same opinion in respects of the strengths, weaknesses, opportunities and threats. In this way there were able to make groups from those expressions which have the same content. See next table.

Strengths	Examples from SWOT analysis
1. Capacity for innovation <i>Researchers, R&D institutions, R&D and technological development</i>	Critical mass of researchers in the industry and R&D institution More than 1,000 registered researchers connected with automotive industry Critical mass of companies and R&D institutions Presence of engineering and technical university fundamental for the research and technological development Critical mass of the R&D equipment
2. Cooperation among economic players <i>Cooperation and correlation among industry, education, universities, R&D centers, clusters</i>	Cooperation among universities (2 countries), cluster and business Correlation between industry demands and technical education Cooperation with universities, R&D centres and other innovation organizations
3. Common interest <i>Common interest of participant in innovation, in mutual work, in benefit from the best practice</i>	Companies are interested in innovation activities. The common interest of all participants (industrial companies, universities, students) There are common interests and both parts can benefit from the best practice.
Weaknesses	
1. Financial situation <i>Weak and ambiguous financial situations, lack of investments</i>	Availability of R&D financial resources Much difficulties with self-financing Lack of large investment in manufacturing capacity Low level of private investment to R&D Possibility of further financial issues regarding transnational projects co-financing Time determination of the financial support Weak financial situation of SME's Large amount of money invested by the industry Initial expenses Possibility of further financial issues regarding transnational projects co-financing
2. Low number of participants <i>Low number of SMEs in clusters, and involved in R&D, low companies of production with higher added value</i>	Smallness in terms of number of member companies Low companies of production with higher added value Low number of SME involved to applied and experimental R&D
Opportunities	
1. Processes of innovation <i>Sustaining innovation activities</i>	Sustaining innovation activities Innovation To capture innovation-relevant intangibles at the level of organizations
2. New market possibilities	New market possibilities New market possibility
3. New innovative products, technologies, materials	State aids for innovative/leading edge technologies Incentives for new technologies in the sciences

	Arrival of new technologies Application of new technologies, new materials, etc. New innovative products.
4. Higher added value	Higher ratio of production with higher added value Appear to be adequately positioned to attract a (larger) share of high added value activities
Threats	
1. Weakness of financial issues	Financial issues Lack of financial sources Financial and time issues Extreme economic events (like 2008/2009 recession) can weaken financial strength of the involved partners
2. Threats of low cost manpower countries - cars	Competition from low cost manpower countries; Emergence of low cost cars for delivery Low cost countries in Eastern Europe and Asia

D3. TRANSFERABILITY ANALYSIS

Minimum conditions

Minimum conditions also show high diversification. All given conditions are listed below. Considering the content of the comments the following groups of topics has been set up:

- Support of national government and regional policy;
- Further financial support, sufficient conditions and financial incentives;
- Willingness of collaboration and partnership;
- Mutual trust among partners;
- Existence of a good partnership;
- Cooperation and collaboration interest among economic players: educational institutions, R&D centers and organizations, government chambers, local authorities, universities and industrial companies;
- Good cooperation infrastructure.

Key potential threats in Practice transfer

Partners listed many of threats (see all listed below) which could threaten the transfer of the best practices. There were some common comments which reflected on the same problem. See it in these points:

- Differences of: economics, regional policies, cultures
- Low interest of: networking, cooperation, from investors' point of view
- Low regional support and attractiveness
- Insufficient local critical mass
- Inefficient cooperation among educational institutions, R&D centers and industrial companies

Other comments

There was only one note on "Other comments" part. (See below.)

Here can be found all given minimum conditions and threats put expressions in italics which are refer to the above mentioned groups.

Minimum conditions for functioning the Practice

- Cluster orientation has to be in line with regional politics
- *Support from regional government or other bodies active in particular area*
- Knowledge about companies needs, lacks and wants in the region
- Building the strong competent team of people
- *Cooperation interest between regional subjects (government chambers, universities, ...)*
- *Existence of a good partnership (in terms of number and quality)*
- One automotive company and one university willing to develop a partnership in the area
- Real products developed by the team
- Now the practice working with self-financing. For closure the process of certification it is needed about 70 000 Euro.
- Technical: Stable local network; standards; successful results from the real life tests in the test suites; use of common architecture and communication

- Legal: related to IPR, liability and privacy
- *Economic- based on the costs and tax incentives*
- Actions to push legislation or system providers to provide financial contribution (as a loss leader) and local authorities to provide monitoring/maintenance costs.
- Strategy to enable manufacturers to reduce the purchase, installation and operating costs of the new infrastructures.
- Developing a proper and updated system usage (user manuals, communication dealer-purchaser, training, involvement of external entities such as car driver associations, helpdesk service, etc.).
- Decision on the type and amount of compensation in case of an accident.
- Licensing the operational and maintenance aspects to commercial organizations which will make it cheaper
- *Agreement on a request for financial incentives from the Public Authorities for the commercial organizations those are unable to reduce sensor costs*
- *Proposal for collaboration with the public entities integration with the Safespot system based on the benefits identified for both parts (local authorities, drivers' associations, police, emergency services, etc.)*
- Number of effective run of class: minimum 10 participants per run
- Support of both universities' infrastructures
- *To create the conditions for mutual cooperation among educational institutions, R&D centers and industrial companies*
- *Efficient and systematic support of innovation activities in SMEs*
- *Regional policy support*
- RTDI cooperation infrastructure (technology centers, Polycentric Technology Centre)
- Global network
- *Research organizations connected with automotive industry*
- *Confidence between the members and shared understanding of common operation*
- Cluster team
- Infrastructure
- RTDI cooperation infrastructure
- *Research organizations connected the industry*
- *Mutual trust, mutual interest, long-term strategic vision.*
- Opening cluster
- 5 years background
- Availability of data
- *Support of national government and regional policy*
- *Financial support and sufficient conditions*
- *Willingness for collaboration and partnership*
- *Existence of a good partnership (in terms of number and quality)*

Key potential threats in Practice transfer

- Already existing similar cluster in the region
- *Low interest of networking*
- No availability of creative and enthusiastic human potential
- *No interest from investors' point of view*
- *Low attractiveness of the region*

- The good practice is based on an old methodology (change of experience) with low impact on each partners' Organization
- Too many details and paper work.
- Advertising in other partners' countries
- New production and more employed in the time of economical crisis
- IPR and privacy issues; timing in standards development; high costs;
- European competitors' area
- University managers' educational programmes by OEM's
- *Inefficient cooperation among educational institutions, R&D centers and industrial companies*
- Unsupported innovative activities
- Development and use in other environments
- *No much local critical mass*
- *Regional support*
- Academic people must realise the importance of the accepted standards and the time schedule in the industry, which often restricts academic freedom
- 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.
- Suppressed disrespect for each other, short term economic interest (to get "free" money from the state, EU funds, etc.), poorly communicated benefits to the personnel, which are daily be involved in the operations of the association.
- *Differences of economic*
- *Differences of regional policies*
- *Cultural differences*
- *Decreasing willingness for cooperation*
- *Low attractiveness of the automotive region SEE*
- *Insufficient local critical mass and regional support*

Other comments

This project is in prepare phase only. Real indicators will be after realisation of project.

III. SELECTION OF QUANTITATIVE INDICATORS

This section of the study can be divided into three parts:

1. input indicators,
2. output indicators,
3. result indicators.

The aim of this part is to show the effectiveness of the projects. The *Objectives* ('ex ante'), the *Realization* ('ex post') and the *Evolution* ('over the years') data will be compared to each other in case of input, output and result indicators, also.

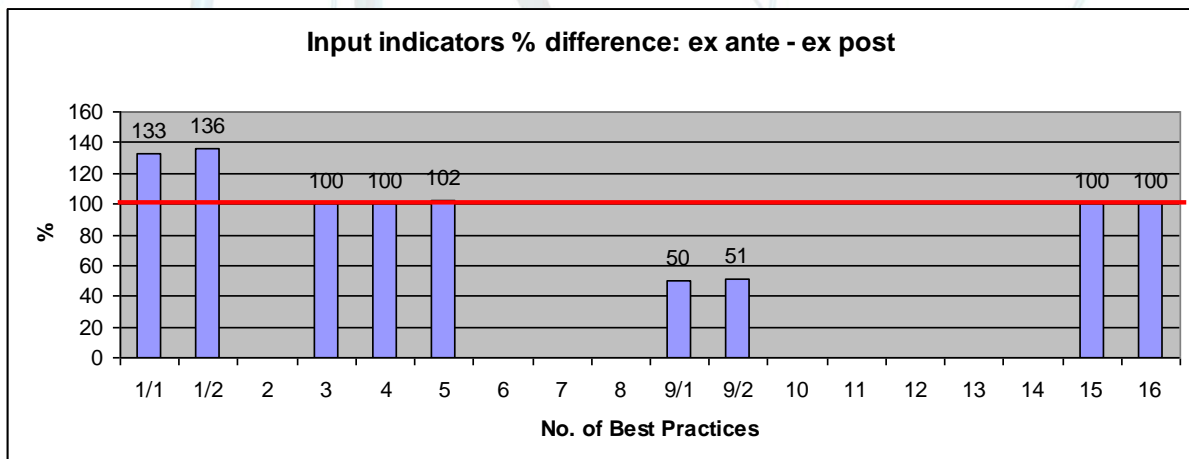
During this evaluation in all cases, the 100% means the same value, for example if the indicator was 5 ex ante, and was 5 ex post (or over the years) also, the % difference shows the 100% rate (in other way the aim was realized in 100%). And if the value was 10 ex post (or over the years) the % difference will show the 200% rate. In this way can be seen what % were the growth.

(Here must be mentioned, that in more than 50% data were not available.)

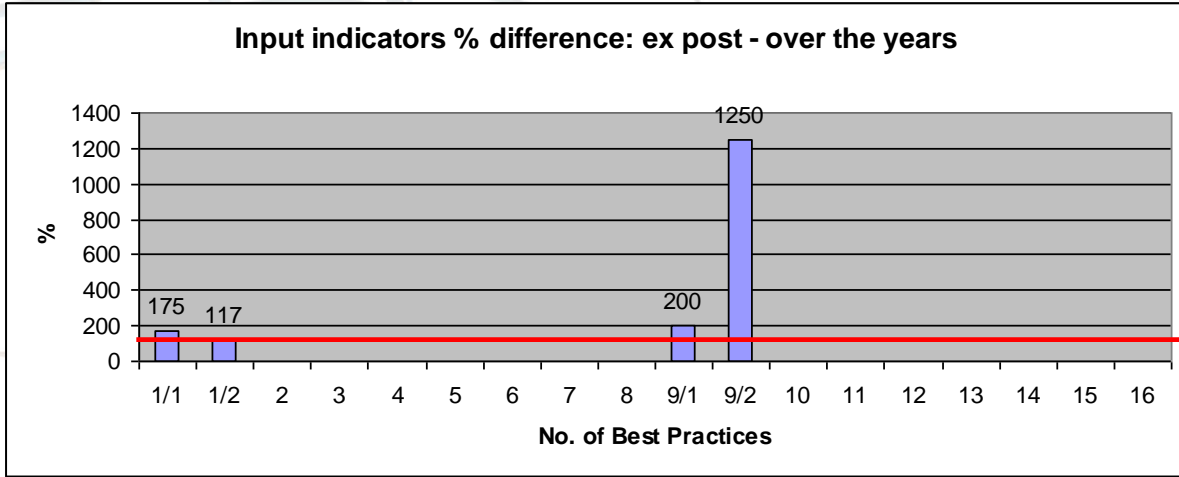
INPUT INDICATORS

Comparing the ex ante input indicators to the ex posts can be seen that it in seven cases had been achieved or topped the target number, in other cases the target number were achieved only in 50%.

(Where no data received, bars are missing.)

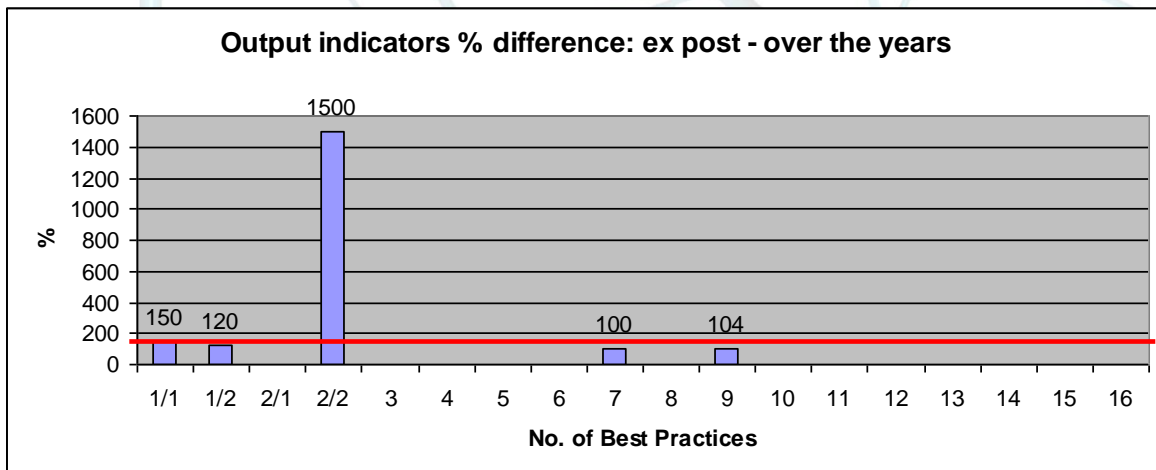
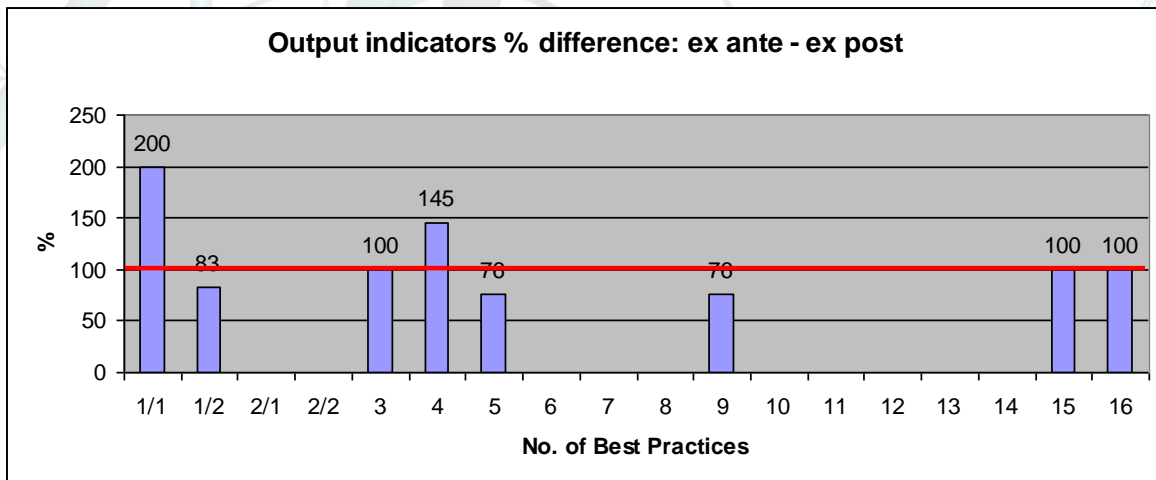


Comparing the target numbers of the evolution (over the years) to the realized numbers can be seen that the growing is the expectation in all cases.



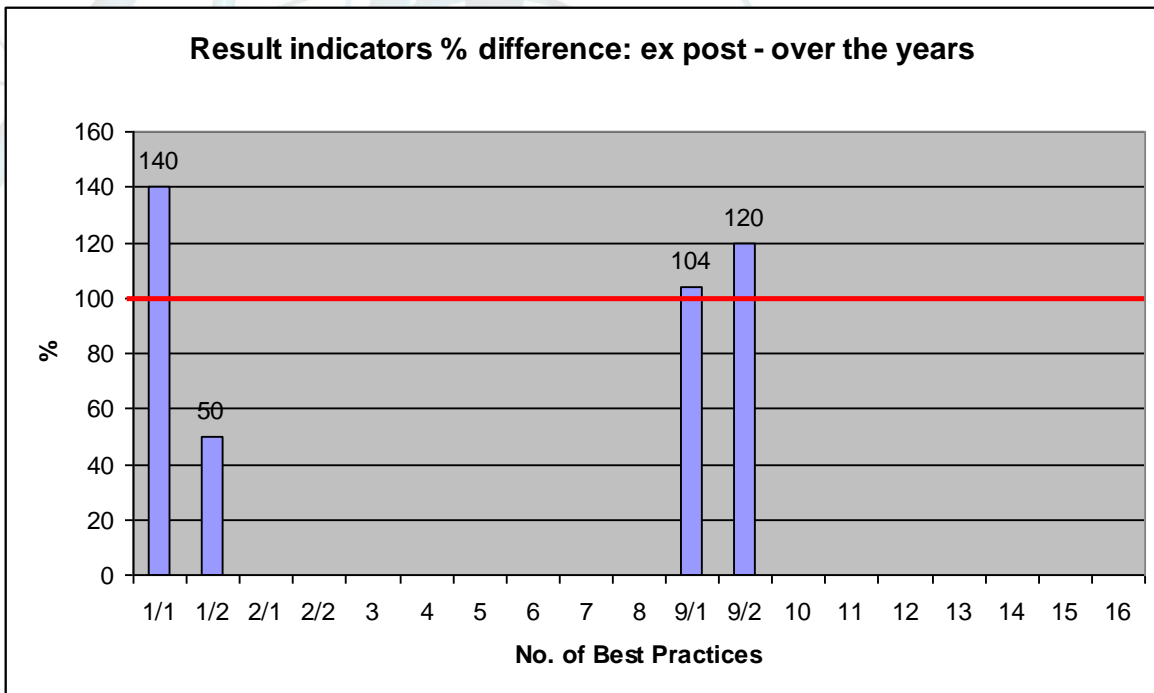
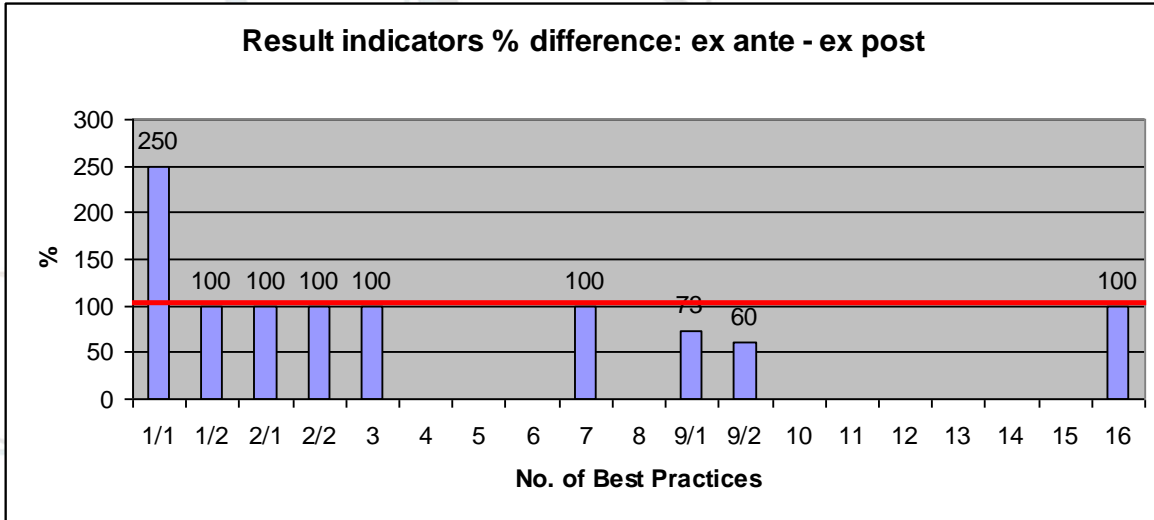
OUTPUT INDICATORS

Realized output indicators are near, at or above the expected rate in most of cases. Over the years the target numbers can be at the same level.



RESULT INDICATORS

Result indicators are at the expected rate almost in all cases. Comparing expectations to the number of over the years, it can be seen that the same or higher figures are.



The following table contains all realized indicators regarding the input, output and result indicators, also.

No. of BP	Input indicators		Output indicators		Result indicators	
1	Staff: Members No.:	4 34	Educational courses for AI, realised in two years: Common services:	10 5	No. of courses participants: Cooperation meetings organised:	250 6
2	Idle area: Investors:	28 000 m ² 0	Modernisation of old and building of new non-residential premises: Invitation business subjects:	0 0	Renting the area for companies and investors: Creation of working positions:	0% 0
3	<i>(There was only one column without any comments on if they are input, output or result indicators.)</i>					
	Good practice guides/handbooks: Policy recommendations: Studies / surveys / analyses: Web / IT tools:		8 8 1 1			
4	Persons in relation with University: Persons for Open Doors:	6 15	Student competition: Open Door day: Student teams:	1 1 29	No data	
5	Teachers: (3 universities) Postgraduates/year: (3 universities)	6 22	Graduates/year: (3 Universities)	16	No data	
6	No data available regarding realization					
7	No data		No data		The test drive was leaded on 21 of June 2009	
8	Project is to be finished in January 2010		April 2009		No data	
9	Staff (STU): Donation:	1 0,08	Educational courses for AI, realised in two years:	23	No. of courses participants: Cooperation meetings organized:	23 15
10	No data provided					
11	No data provided					
12	No data provided					
13	No data provided					
14	No data provided					
15	Project staff	8	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	4 1 1 3	Number of joint activities Active Internet portal Established representative office Number of signed cooperation agreements	
16	<i>(There was only one column without any comments on if they are input, output or result indicators.)</i>					
	Web / IT tools Studies / surveys / analyses Policy recommendations Good practice guides / handbooks		1 1 1 1			

VI. CONCLUSION

Aim of this study was analyzing best practices across regions and identifies a common SWOT analysis.

Collected best practice materials from South-East European counties had been compared. The key point was to determine those parameters which are typical in case of all best practices in order to define a common analysis.

From nine partners from seven countries 16 issues had been received.

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

Regional identification: as the map on the 6 page shows the projects reached almost all counties from Turkey to Sweden. Besides the international projects the regional activities are very strong, also.

The type of the practices on a large scale connected to the R&D activities and supplier cooperation. The role of the R&D activities is very important, as the other parts of the analysis will 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%).

The SWOT analyses were again very colourful but if we would like to set up the SWOT analysis for these projects we could see the following 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

The transferability of the projects depends on many factors. Were given some minimum conditions and key potential threats, which are listed in the study.

The second (last) chapter tried to describe the coherency of selected quantitative indicators, but since many of indicators were missed and some information was not correct in every case, therefore this analysis will not be able to give an adequate picture of all best practices.

First and last the analysis is very interest of some aspects. Hopefully this study could contribute to project partners putting their own project in wider context and eventually identify the SWOT analysis for the South-East European region.

This paper belongs to the following section of AUTOCLUSTERS project: WP3 Best practices and study on clusters development in SEE / 3.3. Analyze best practices across region and identify basic SWOT for each project partner by realizing of self-assessment method as part of common methodology.

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ANNEX 1

DESCRIPTION OF BEST PRACTICE

1

 **Automotive Cluster – West Slovakia**

Automotive Cluster

Background of Best Practice

- to improve economic company results implemented to cluster activities
- to improve amount of innovations and increase companies technological capacities
- to improve market access and export activities in the region
- to attract investments
- to support R&D
- to organise educational activities for HR effectiveness improvement
- to support region and effectively utilize public sources

Issues are addressed by Best Practice

- networking
- innovation
- research and development
- human resources

Overall and specific objectives of Best Practice

- Rising the competitiveness of the region
- Rising the education level in companies
- Providing common services
- Organising common cooperation meetings
- Network creating

Activities are implemented by Best Practice

- Educational courses
- Common purchase and other services
- Consulting in a field of management and marketing
- Implementation of further project activities aimed at networking and innovation as well as finding new partners and markets

Why this Practice is a Best one

- This cluster is founded by regional governments that create initial economic background for running phase
- It is unique in the area
- Supporting cooperation of companies and universities as well as R&D centres
- Contributes in creation of centres of excellence and technological centres

Who is operating Best Practice

- General Assembly - hold session twice a year
- Executive council - members, /Regional government, City of Trnava, STU MTF, companies/
- Supervisory council - 5 members, /Regional government, City of Trnava, STU MTF, companies/
- Cluster director – responsible for projects and operation
- Cluster economic director – responsible for economic affairs

The link between public national/regional activities or legislation and Best Practice

Automotive cluster's main objectives are in line with regional politics to raise the level of the region by raising the competitiveness of companies where employment in the region is increasing same as living standard. Other objectives are regional cooperation leading to geographical concentration and to regional

cooperation with financial institutions. Another impact for the region is that cluster supports stability of regional HR as well as companies development.

The key factors for successful transfer of Best Practice

Interest of companies in joining the cluster.
Moral and financial support of regional government or other legislation in establishment such an organisation.
Finding the suitable leadership that will be able to manage cluster.
Identifying available human resources.

2



Automotive Cluster – West Slovakia

Industrial and Technological City Park

Background of Best Practice

Regional government effort in rising competitiveness of the region
Creation of working positions
Strategic logistic position
Existence of production facility (PSA Peugeot Citroen)

Issues are addressed by Best Practice

networking
innovation
research and development
human resources

Overall and specific objectives of Best Practice

Rising competitiveness
Diversification of economic structure in the region
Creation of working capacities
Creation of high-tech non-residential premises, new technologies

Activities are implemented by Best Practice

Building
Investors acquisition
Promotion
Organising of best practice

Why this Practice is a Best one

Support for beginning companies
Research and development, prototype production simulations
Connection between universities and companies
Activity of regional policy to support SMEs and universities cooperation

Who is operating Best Practice

Regional government

The link between public national/regional activities or legislation and Best Practice

Best practice is linked to a regional innovation strategy that is in line with national development strategy

The key factors for successful transfer of Best Practice

Sufficient business background
Regional government effort
Certain level of regional economic status
Quality infrastructure
Adequate personal capacities

3

 **Comunimpresa Scarl**

Network of Automotive Regions

Background of Best Practice

There were 16 partners in this network from regions in Belgium, The Netherlands, UK, Germany, France, Italy and Spain. All partners have a common characteristic, namely all regions have a history of significant presence of and dependence on the car manufacturing industry. This heritage makes up a vital part of the economic activity of the regions and has shaped their socio-cultural identities. The common features of the automotive industry are at the root of many of the economic predicaments faced by the partner regions.

Issues are addressed by Best Practice

Almost all Automotive Regions have experienced downsizing and (part) withdrawal of the car industry with dramatic impacts on local economic activity by the sudden loss of a pivotal part of the local industrial (and consumer) economy. This has left a legacy for many of the partner regions of a constricted base for manufacturing and higher than average rates of unemployment.

Overall and specific objectives of Best Practice

To help regional authorities, RDAs or business organisations to design policy schemes when anticipating or facing a crisis.

Activities are implemented by Best Practice

The “Network of Automotive Regions” helped regions to understand the critical factors that influence the competitiveness of local plants by monitoring economic and innovation trends in the industry. In the project, the main aim of Thematic Workgroup 5, “Territorial intelligence on labour market issues including training and skill needs”, was to identify the following: legislation concerning the labour market; experiences and best practices in the field of social dialogue; territorial intelligence on labour markets issues; forward planning of human resource & skills in the light of retirement trends; availability of workforce for some skills/crafts; level of qualification and behaviour of workforce; know-how, international versus local culture; control versus autonomy; decentralisation of the decision-making process versus centralisation; evolution of the different skills and techniques; impact on productivity; attractiveness of territories.

Why this Practice is a Best one

Considering that the overall objective of the project was “to help regional authorities, RDAs or business organisations to design policy schemes when anticipating or facing a crisis” we can say that the objective has been achieved by partnership.

Who is operating Best Practice

The current network partners are: Limburg (the Lead Partner), Ghent, East Flanders, Genk and Antwerp in Belgium; Limburg and Sittard-Geleen in The Netherlands; Luton in the East of England; Milan and Turin in Italy; Montbéliard in France; Stuttgart Region in Germany; and Galicia and Castillia y Leon in Spain.

The link between public national/regional activities or legislation and Best Practice

The European Union (EU) is currently facing changes on an unprecedented scale. The EU has adopted a strategy for responding to those challenges: enlargement to new borders and the objective of economic and social modernisation agreed at the Lisbon European Council in 2000, and to which an environmental dimension was added at Gothenburg in 2001.

Social dialogue is seen as a basic tool to face the change in EU. Successful economies in the 21st century will not be possible without a modern system of labour relations and efficient strategies for managing change pro-actively.

To underpin the implementation of the Lisbon agenda, the spring 2004 European Council called on Member States to build partnerships for change involving the social partners, civil society and the public authorities in accordance with national traditions.

Social dialogue is consistent with the efforts made to improve European governance: more interaction between the European institutions, national governments, regional and local authorities and civil society, of which the social partners form part. The social partners, with the active support of the European Commission, have laid the foundations for the European social dialogue, and both its tripartite and bipartite dimensions - including all actors on the scene - have developed in a dynamic and innovative way.

The key factors for successful transfer of Best Practice

Existence of a good partnership

4

 "George Asachi" Technical University of Iasi

Continental-UTI Industry-University cooperation

Background of Best Practice

Siemens VDO, one of the leading providers of electronic and mechatronics for the automotive industry, opened in Iasi, in 2006, the second research and development center in Romania. In the new location they started to develop electronic products for automotive, electronic control unit of the engine, gearbox, air conditioning units and innovative braking solutions to multimedia solutions for the vehicle. In the first 18 months of activity have increased steadily in both the number of specialist staff (over 300) and complexity of activities. Having a positive experience in Iasi, their desire is to continue developing the activities, which requires a workforce increasingly better prepared.

In the meantime Siemens VDO became Continental Automotive.

Issues are addressed by Best Practice

The main issues of the best practice are development and consolidation a partnership between Continental Automotive and universities in Moldova region including University AICuza Iasi, "Gheorghe Asachi" Technical University, University of Suceava, University of Bacau and Technical University of Chisinau, Rep. of Moldova.

Overall and specific objectives of Best Practice

- strengthen the practical know-how of graduates
- promote automotive technical training
- continuously adapt to industry development

Activities are implemented by Best Practice

Activities planned by the best practice are:

- Scholarships for students and doctoral students
- Traineeships
- Possibility development of graduate work in Continental Automotive company
- Organizing and supporting various student competitions (Siemens/Continental Open Doors,
- Support for teaching by engaging in laboratory work (teaching specific themes performed by specialists of Continental Automotive company) – Siemens VDO University Funding
- Donations of equipment and materials to support the educational process
- Joint development of master studies oriented to automotive industry

Why this Practice is a Best one

The Practice has issued good results from the early stage of implementation from which have benefit all parts involved.

University benefits: increased student motivation for some topics in the curricula; the application part of some courses has been improved by being more focused on real problems as identified by industry; some laboratories received equipment

Industry benefits:

- possibility to hire engineers with increased and automotive oriented practical and theoretical skills
- possibility to externalize training activities

Students' benefits:

- increase of their theoretical and practical skills
- opportunity to obtain internship in a high-tech company
- good perspective of being employed by Continental company or other companies in the same field

Who is operating Best Practice

Continental Automotive (former Siemens VDO)

The link between public national/regional activities or legislation and Best Practice

The master study program "Embedded Control Systems" has been started at Technical University of Iasi, Faculty of Automatic Control and Computer Science. The program has been certified by the Romanian Ministry of Education, Research and Innovation in 2008 and thus is financed from the ministry budget. For the academic year 2009-2010, in this program there will be available 31 places financed from the ministry budget and other 20 places for tax paying students.

The key factors for successful transfer of Best Practice

Existence of companies in the automotive area interested in cooperation with universities.

Participant Comments

After such actions Continental Automotive Romania decided to:

- increase number of technical presentations
- invite international experts to offer technical presentations
- include trainings in the program

 "George Asachi" Technical University of Iasi

5

Postgraduate course - Engineering in Automotive Projects

Background of Best Practice

Renault Technologie Roumanie (RTR) is the only automotive engineering center in the Eastern Europe and Mediterranean region and Renault's largest engineering center outside France, with about 2300 employees. RTR mostly employs engineering activities (design and testing), but is also engaged in acquisition, aesthetics and support (financial administration, human resources, computer processing).

The main fields of activity of RTR are conceiving and improving vehicles as well as adapting engines and gearboxes.

The goal of RTR is to develop vehicle projects (personal and utilitarian) or mechanics destined for factories in the area or for the Euromed region market. Most of the vehicles are based on the Logan platform.

Romanian technical education, with over 100 years' tradition, aims to professionally train engineers in different fields by way of knowledge, research and technological innovation. The technical universities in Bucharest, Iasi and Craiova, as well as other cities, are open to cooperating with partners from industry and research in the field of R&D and innovation.

Issues are addressed by Best Practice

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.

Overall and specific objectives of Best Practice

The development of skills required to integrate in a team of automotive design (taking on complex projects). An innovative programme with a professional side (training engineers capable of teamwork in automotive-related projects) and a university-related side (by entrusting Romanian and French universities with conceiving and carrying on the programme).

Activities are implemented by Best Practice

The training of the teachers that will be implicated in this programme by Technological University of Compiegne and Renault Technologie Roumanie.

A study semester at universities of Bucuresti Iasi and Craiova.

An internship semester at Renault Technologie Roumanie in Bucuresti.

Why this Practice is a Best one

All partners that participated to this program: industrial companies, technical universities and graduates have benefited from it.

The partners collaboration was excellent

Very well organized procedures.

Who is operating Best Practice

- Renault Technologie Roumanie
- "Gheorghe Asachi" Technical University of Iasi,
- "Politehnica" University of Bucuresti
- University of Craiova.

The key factors for successful transfer of Best Practice

Existence of powerful companies in the automotive area interested in cooperation with universities and ready to invest in the postgraduate training of engineers.

Participant Comments

“Gheorghe Asachi” Technical University of Iasi: rigour, strictness, ability to meet partners’ requirements, sets a standard in education.

 **Technical University of Gabrovo**

6

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

Background of Best Practice

The system is developed initially for the space industry to avoid problems with not working and not reliable products. The analysis of the potential failures, their root cause and the way of solving by design is defined as DFMEA. The final impact is estimated as RPN number and is used for prioritising and planned solving of different issues.

Issues are addressed by Best Practice

Time to market, safety, reliability

Overall and specific objectives of Best Practice

First time right, no field failures

Activities are implemented by Best Practice

Product and system analysis

Why this Practice is a Best one

Because gives the developers a tool to be efficient and to avoid in an initial phase of design future malfunctioning.

Who is operating Best Practice

The design and test team. Process development team.

The link between public national/regional activities or legislation and Best Practice

The practice can be a part of the Governmental Program Competitiveness

The key factors for successful transfer of Best Practice

Knowledge of the method, team work, experience in the field of development.

 **Technical University of Gabrovo**

7

XCAR Sherpa - First BULGARIAN electric car

Background of Best Practice

The project has been developed by a five-member team of the Belchev Motors Company. All parts of the electromobile have been manufactured in Bulgaria.

Issues are addressed by Best Practice

Implementations of new technologies, particularly according to new European strategies and policies – renewable energy.

The producer have a great idea – for every manufactured car he will plant a tree – this will increase the level of CO2 in the atmosphere.

Overall and specific objectives of Best Practice

Decrease air pollution
Contribute to the solving of worldwide problem with petrol
Developing and producing first Bulgarian electromobile
Producing low-cost car for delivery
Plant a tree for every manufactured car

Activities are implemented by Best Practice

The main activities are:

- Research and study all achievements in this area
- Transfer technologies from leading companies
- Producing a pilot electromobile and turn into motion
- Advertisement of the car and create collaboration with potential consumer
- Planting a tree for every produced car

Why this Practice is a Best one

Worldwide problem with the increasing prices of petrol and its shortage make this electromobile very attractive decision for delivery of food, courier offices, police patrols, postmen and etc.
It has created an innovation product which is first of its kind in Bulgaria.
Moreover this car is not only the paper project, it has already travelled its first kilometres.

Who is operating Best Practice

Belchev Motors Company, Stara Zagora, Bulgaria

The link between public national/regional activities or legislation and Best Practice

Belchev Motors Company have already submitted application to the Ministry of Transport to license the prototype and launch mass production.

The key factors for successful transfer of Best Practice

- Strong administrative support – many institutions in Bulgaria works slowly
- Cultivating an atmosphere of good coordination between inventors and investments
- Attracting foreign direct investments
- Motivation
- Research/business collaboration
- Effective risk management

8

SAFESPOT Integrated Project



Center for REsearch And Telecommunication
Experimentation for NETworked communities

Background of Best Practice

An EU project that uses the infrastructure and vehicles to communicate safety-related information via cooperative systems. The project develops and tests technology whose aim is to enhance traffic safety.

Issues are addressed by Best Practice

The SAFESPOT applications aim to:

- Increase road safety for all road users
- Extend the range, improve the quality and reliability of the safety -related information providing an 'extended co-operative awareness' to all drivers
- Support drivers preventively to the proper maneuvers in the different contexts
- Optimise the intervention of vehicle controls with respect to critical situations
- Enable the development of new safety applications based on the cooperative approach

Overall and specific objectives of Best Practice

SAFESPOT is working to design cooperative systems for road safety based on vehicle to vehicle and vehicle to infrastructure communication. SAFESPOT will prevent road accidents developing a: “**SAFETY MARGIN ASSISTANT**” to detect in advance potentially dangerous situations and extend, in space and time, drivers’ awareness of the surroundings.

Activities are implemented by Best Practice

SAFESPOT developed reference applications for road safety based on vehicle to vehicle and to infrastructure communications.

Five Test sites spread in six European countries were defined: Italy, Germany, Western Europe (France & Spain), The Netherlands, Sweden •Four Test sites are shared with the CVIS IP

Why this Practice is as a Best one

Traffic safety is a top-priority area within the EU. By getting vehicles to communicate with one another and using infrastructure in what is known as cooperative systems, it is possible to considerably increase safety levels. With new solutions in telematics - integrated use of telecommunications and information - vehicles can be made increasingly intelligent. Many trucks, for instance, are already equipped with GPS (Global Positioning System) for navigation, or camera-based systems for lane changing. What is unique about the Safespot project is that with the help of telematics, vehicles will now be able to communicate with each other in a system known as V2V (Vehicle-to-Vehicle). Moreover, it will also be possible for vehicles to communicate with the surrounding infrastructure (V2I, Vehicle-to-Infrastructure) to create a driving support system that enhances active safety.

Who is operating Best Practice

Consortium of 51 partners from 12 countries in Europe, coordinated by CRF (Italy). The full list is here: <http://www.safespot-eu.org/consortium.html>

The link between public national/regional activities or legislation and Best Practice

The EU regards traffic safety as one of the most important social issues on its agenda;
A joint European standard for communication systems between vehicles is to be developed;
There are several aspects that need to be discussed between service providers and government. The service and the content provider together with the road operator have to clearly assign the activities related to the system maintenance (monitoring, effectiveness/level of service, periodical checks) among the stakeholders.

The key factors for successful transfer of Best Practice

Reliable and quick communication in a local network; achieve a critical mass; Successful completion of the test and evaluation phase in all test sites in Europe. Raising awareness on the service limits when less than 100% vehicles are equipped incentives. Actions to push legislation or system providers to provide financial contribution. Strategy to enable manufacturers to reduce the purchase, installation and operating costs.

Participant Comments

CREATE-NET research center from Trento, Italy (partner in AUTOCLUSTERS) took part in *Preliminary Analysis and Initial Deployment Programme, WP3: Organisational Architecture, WP4: Risk analysis and legal aspects and WP5: Assessment & evaluation.*

9

Professional MBA Automotive Industry



Slovak Technical University

Background of Best Practice

- to improve economic results by well educated top managers
- to improve SME’s access to high quality of managers education
- to support of multicultural cooperation
- to organise educational activities for HR effectiveness improvement
- to improve the unique position of central European regions

Issues are addressed by Best Practice

- preparing new automotive leader
- development of innovative education methods and techniques
- knowing different cultural policies
- experience of multicultural environment

Overall and specific objectives of Best Practice

- Knowing different culture and processes in automotive sector
- Rising education level of top managers (skills, knowledge)
- Providing common services for SME's and OEM's
- Creating of new contacts
- Building the new quality of cooperation between academic area and business

Activities are implemented by Best Practice

- Traditional education methods
- Implementation of electronic communication and support
- Consulting in a field of top management experience
- Best examples of managing face to face with leaders of this sector

Why this Practice is a Best one

- It is unique in the area of sector MBA programmes in Europe
- Intensive application of electronic and classic education
- It is tailored for leaders in CENTROPE regions and sector
- Supporting cooperation of companies and universities
- Contributes to cooperation without any boundaries

Who is operating Best Practice

- Academic directors (TU Vienna, STU Bratislava)
- Programme managers (TU Vienna, STU Bratislava)
- Project manager (ACVR Vienna)
- Academic staff

The link between public national/regional activities or legislation and Best Practice

Professional MBA Automotive Industry is in line with regional politicise (INTERREG) to deepen the level of the skills and knowledge of top managers, which enable to manage their companies in more efficient way. Cooperation between universities and cluster company provides high quality of education to companies mainly in Central Europe. Another impact for the region is that education of managers supports stability of regional HR as well as development of companies.

The key factors for successful transfer of Best Practice

- Interest of individuals and their companies
- Moral and financial support of employers
- Finding the suitable leadership that will be able to manage evolution in this activity.
- Identifying high potentials

**10
Regional Innovation Centre (RIC)**

 **Slovak Technical University**

Background of Best Practice

- systematisations of innovations
- possibility of innovation support

Issues are addressed by Best Practice

- Public Private Partnerships,

- increasing of innovation potential and innovation power of Trnava region networking of organisations & sectors of economy (Enterprises, R&D centres, Universities, Self-region government)
- high innovation power of Trnava Region

Overall and specific objectives of Best Practice

- Creation of infrastructure for personal capacities of Regional innovation Centre in Trnava in order to support innovation potential in the region
- Creation of RIC Trnava institution as a tool of systematic controlling the innovation politics in the region
- Creation of cooperation institution that supports centres of innovation transfer to the praxis.
- building-up the personal capacities in a field of creation the innovative processes and implementation of innovations into modern praxis of automotive energetic and electrotechnic industry
- Elaboration of development HR strategic concepts and elaboration of action plans for innovations and innovative way of thinking in the region in relation to three mentioned areas (automotive, energetic, electrotechnic industry)
- Establishment of network for experience transfer (national and international innovative know-how)

Activities are implemented by Best Practice

- to establish Regional innovative Centre in the region
- strategies creation
- organisation of educational courses and workshops
- management, publicity,...

Why this Practice is a Best one

Increasing of innovation potential and innovation power by Innovation centres is a best way to success. Organisations like this are also elsewhere in the world successfully implemented (Sweden...)

Who is operating Best Practice

Regional government, clusters

The link between public national/regional activities or legislation and Best Practice

Following the indicators of national strategy reference framework and innovation national strategy 2007–2013, innovation policy on 2008–2010 and development strategy of Slovakia competitiveness till 2010.

The key factors for successful transfer of Best Practice

- Effective co-operation business enterprises and R&D, Universities, Self-region government and public administration,
- Continual support of Ministry of Economy, Ministry of Education, Ministry of Labor and social affairs, support of innovations in SME
- Innovation transfer and dissemination of innovation thinking of public.

11

Development of Automotive Cluster of Slovenia

 **Business Interest Association ACS,
 Automotive Cluster of Slovenia**

Background of Best Practice

ACS is a network for business in the Slovenian engineering and manufacturing industries: metal working, mechanical, electrical and electronics, chemical, rubber, textile and transport equipment industries, as well as partners from R&D institutions and other services in the supply chains that create and deliver products and services for the automotive industry.

Issues are addressed by Best Practice

- Communication among its members
- Represents its members' interests and promotes their activities at home and abroad, especially at car manufacturers.
- Monitors the business environment

Overall and specific objectives of Best Practice

ACS provides support for its members to integrate into the global automotive industry and to improve the range of their products and services.

Activities are implemented by Best Practice

- ACS enhances the development of efficient communication among its members, who produce components, modules and systems for OE customer producing cars, buses, lorries and special vehicles, and for after-sales market.
- ACS enhances all activities connected with the research and development of new products and services with greater added value.
- ACS also provides important links between members, supporting synergy with suppliers of machines, tools, manufacturing, design, logistics and other services.
- ACS promotes joint members' activities to improve products and operations in R&D, production, quality assurance and to achieve and maintain business excellence.
- ACS keeps members promptly informed of new and existing issues in the automotive industry.
- ACS develops and maintains information, educational and other infrastructure for its members' needs.
- ACS represents its members' interests and promotes their activities at home and abroad, especially at car manufacturers.
- ACS monitors the business environment, suggesting the appropriate measures to the authorities enabling the members to respond to the constant challenges in the automotive industry.

Why this Practice is a Best one

ACS has brought together the largest suppliers in Slovenia.

Who is operating Best Practice

Dušan Bušen, Managing Director.

The link between public national/regional activities or legislation and Best Practice

ACS monitors the business environment, suggesting the appropriate measures to the authorities enabling the members to respond to the constant challenges in the automotive industry.

The key factors for successful transfer of Best Practice

The main point is that the partners, who would like to implement such kind of partnership, trust each other. The former acquaintance between the partners is welcomed. This is a prerequisite to formalise such kind of partnership. To make it work, additional success factors are needed: collaborative mentality, team work, open mind for ideas of the others, clear organisational structure, transparent financial relations.

12

 **Business Interest Association ACS,
Automotive Cluster of Slovenia**

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

Background of Best Practice

The vision of the polycentric technological centre is to become together with its members a developmental intensive and reliable network of suppliers for the global car manufacturers with the products of higher degree of complexity and higher added value at chosen segments.

Issues are addressed by Best Practice

An efficient polycentric technological centre enables the cluster members to present themselves on the international competitive market with more competence and to do away with some basic problems and thus reduce the gap between our country and the most developed countries. In this way, we will succeed in following the planned vision and in contributing to Slovenia's becoming a society, based on the knowledge with the balanced regional development as a part of the international economy.

Overall and specific objectives of Best Practice

The activities by the polycentric technological centre help the ACS fulfil one of its goals which is defined in the Cluster's development strategy. The goal is to become a regional innovatory system whose main task is to encourage the co-operation between companies and other institutions with the intention of developing, expanding and using new knowledge.

Activities are implemented by Best Practice

Research and Development of new materials, new technology, mechatronics, IT.

Why this Practice is as a Best one

ACS has brought together the largest suppliers in Slovenia.

Who is operating Best Practice

Dušan Bušen, Project Manager

The link between public national/regional activities or legislation and Best Practice

The project was managed by ACS and it was the largest project in Slovenia.

The key factors for successful transfer of Best Practice

The main point is that the partners, who would like to implement such kind of partnership, trust each other. The former acquaintance between the partners is welcomed. This is a prerequisite to formalise such kind of partnership. To make it work, additional success factors are needed: collaborative mentality, team work, open mind for ideas of the others, clear organisational structure, transparent financial relations.

13

CRV - Centre for R&D Evaluations

 **Business Interest Association ACS,
Automotive Cluster of Slovenia**

Background of Best Practice

After the first transition period in Slovenia the R&D departments in the industry were modest. Most of the products were developed by the customers and only industrialised in the involved companies. Specific R&D knowledge in the Slovenian industry was scarce. The main objective of the CRV was to raise the level of the specific R&D knowledge in the industry by a knowledge and know-how transfer from the R&D institution to the industry.

Issues are addressed by Best Practice

Transfer of specific, up-to-date knowledge from the R&D institution to the industry, involvement of the academic researchers in the R&D teams from the industry, permanent training of researchers from the industry, focused development of intangible assets (knowledge, know-how) and investment into specific tangible assets (R&D equipment) to gain competitive advantage.

Overall and specific objectives of Best Practice

Increasing added value of the products by developing innovative and cost-effective products in-house.

Activities are implemented by Best Practice

Multilateral development teams composed of researchers from the industry and R&D institution, permanent training, focused basic research activities, applied research, investment into R&D equipment.

Why this Practice is a Best one

CRV is a long-term frame for the co-operation, it proved itself as a sustainable association (it last now for 10 years with good future prospective), the extent of cooperation is growing from the beginning with respect to the performed research activities and financial dimension, the CRV has expanded in the mean time.

Who is operating Best Practice

CRV has its seat at University of Ljubljana, Faculty of Mechanical Engineering; its head is prof. dr. Matija Fajdiga.

The link between public national/regional activities or legislation and Best Practice

CRV is not a formal legal person. The association was established by the 4 founding members with a multilateral contract. For every new partner an annex to the founding contract is signed. An annex regarding the cooperation between the partners is signed for every new business year.

The key factors for successful transfer of Best Practice

The main point is that the partners, who would like to implement such kind of partnership, trust each other. The former acquaintance between the partners is welcomed. This is a prerequisite to formalise such kind of partnership. To make it work, additional success factors are needed: collaborative mentality, team work, open mind for ideas of the others, clear organisational structure, transparent financial relations.

Participant Comments

It takes some time that the researchers from the academia get used to the industrial pace and vice versa, it also takes some time that the researchers from the industry begin to respect the effort from the academic people.

14 RICARDA

 **West-Pannon Regional Development Company**

Background of Best Practice

The process of drafting an intellectual capital report for the PANAC took place in the context of the EU-financed project RICARDA (Regional Intellectual Capital Reporting – Application and Development of a Methodology for European Regions). This project focuses on the pilot-application of the method of intellectual capital reporting for regional technology oriented networks.

Issues are addressed by Best Practice

Intellectual capital reports analyse 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 Best Practice

- 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 specialisations in the collaborating regions.
- Development of an ICR based RTD policy learning framework within these four regions
- Interregional policy comparison on ICR and development of recommendations.
- Identifying success factors (especially in the dimensions of structural and relational capital) and their interactions for regional RTD policy.

Activities are implemented by Best Practice

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 ICRbased policy learning will be explored with regional stakeholders and also in a comparative perspective.

Project results will be disseminated in a manual on a European methodology for the use and application of ICR for regional innovation networks. The RICARDA project runs from January 2006 till December 2007.

Why this Practice is a Best one

RICARDA aims to transfer the method of Intellectual Capital Reporting to the level of regional innovation networks or clusters. Initiating and supporting networks between firms and research, training and intermediary institutions is a popular approach in regional research, technology and development policy. It is the rationale of such cluster policies that joint resources, knowledge transfer and collective learning can foster innovation and increase regional competitiveness.

Who is operating Best Practice

The project's consortium brings together eight partners from four European regions. The participating regional institutions from Stuttgart (D), Styria (A), Stockholm (S) and West Transdanubia (HU).
Members of the consortium: <http://www.ricarda-project.org/partners/>

The link between public national/regional activities or legislation and Best Practice

Project coordinator is the German Institute of Urban Affairs (Deutsches Institut für Urbanistik, DIFU), Berlin, the non-profit-making research and consulting institution of the German cities.

The key factors for successful transfer of Best Practice

Knowledge of the method, Adequate personal capacities, team work, demand on self-development

15



Automotive Cluster Serbia

Automotive Network South East Europe (Automotive SEE)

Background of Best Practice

Export promotion of automotive industry suppliers by the networking of the automotive clusters from the western Balkans

Issues are addressed by Best Practice

Developing regional cooperation and strengthening capacities for EU accession in the South-East European (SEE) countries

Overall and specific objectives of Best Practice

Project aims to improve the positioning of automotive industry suppliers from SEE in the European and global markets.

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 by Best Practice

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.

Why this Practice is a Best one

Recreation of sustainable network of largest suppliers from countries of EX - Yugoslavia.

Through this concept, based on three levels of activities, the automotive clusters from the region intend to overcome the weaknesses of the domestic automotive industries and to develop new perspectives of cross-

country co-operation among the companies, and with other relevant public actors and bodies having responsibility for the automotive industry and business development in general.

- **Level C** – Business development and marketing for selected companies on single company level: Preparatory measures and support to enter new European markets; consulting and training services in business development, technology, quality, marketing and sales.

- **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.

Who is operating Best Practice

Automotive clusters from Bosnia and Herzegovina, Serbia and Macedonia, in cooperation with clusters from the partner countries Slovenia and Croatia

The link between public national/regional activities or legislation and Best Practice

The project that was established within the Open Regional Funds for Foreign Trade Promotion which is an instrument of the German Technical Cooperation aimed at developing regional cooperation and strengthening capacities for EU accession in the South-East European (SEE) countries. The ORF are established by the German Federal Ministry for Economic Cooperation and Development (BMZ) and are implemented by the German Company for Technical Cooperation (GTZ).

The key factors for successful transfer of Best Practice

Trust, teamwork, information exchange, know how transfer, willingness for collaboration

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 **Comunimpresa Scarl**

POLI – AUTO (Lombard Industrial Pole automotive)

Background of Best Practice

- Regional call DRIADE (January 2009) for the promotion of new regional clusters
- Lombard automotive sector = mature industry-decline of manufacturing
- Lack of OEM - Mainly components and tooling suppliers
- Not only cars but also motorcycles, industrial vehicles, agricultural machines
- Many multinational companies. High risk of relocation if conditions will not favourable
- Good network of universities and research centers
- Mobility problems in Lombardy

Issues are addressed by Best Practice

- Networking (large and sme’s enterprises, universities, public administrations and associations)
- Transfer know-how between universities - enterprises
- Transfer of technology between different sectors
- R&D and innovation mainly in SME’S
- European project and network

Overall and specific objectives of Best Practice

- growth of innovation capacity of SMEs
- cooperation between enterprises
- create conditions of interest in staying on the territory by large companies
- identify issues on which to address the future development
- be an interface for Public Administration concerning the needs of the sector

Activities are implemented by Best Practice

- networking: 15 large enterprises, 53.sme’s , 3 university and R&D center, 5 public institutions, 8.business associations, 4 industrial consortium

- report on the Lombard automotive sector: situation, problems, development trends, future themes of innovation
- establishment of a “Promotion Committee”
- preparation network projects (by April 2010)

Why this Practice is a Best one

- first potential cluster without the presence of OEM
- great territorial dispersion (the whole Lombardy: 9 provinces)
- to face the decline in manufacturing and conversion in R&D activities

Who is operating Best Practice

- Promotion committee: 5 large enterprises, 23 sme's, 2 university and R&D center, .2 public institutions, 4 business associations, 2 industrial consortium.
- Operating Board: Politecnico Milano, Km Rosso, CSMT, Comunimprese
- Cestec (regional Agency)

The link between public national/regional activities or legislation and Best Practice

- National

Industry 2015 sets out the strategic development and competitiveness of the Italian production system of the future, based on a concept of industry extended to the new production chains that integrate manufacturing, advanced services and new technologies.

The Italian government's strategy identifies in the networks of companies, in the innovative finance and especially in the Industrial Innovation Projects new tools to ensure the strategic repositioning of the Italian industrial system in the world economy, globalized and highly competitive.

- Lombardy region

DRIADE program, in according with regional policies to support clusters and meta-districts, aims to test actions to encourage and support the emergence of various new forms of association, local production systems, of industries or technology platforms, as factors important in the dynamic economic reality of Lombardy

The key factors for successful transfer of Best Practice

- Strong support from the Public Administration (Lombardy Region and the provinces)
- Support of large enterprises
- Intellectual property in the joint development projects
- Availability of human resources and qualified external supports
- Active participation of research centers and universities