Network of AutomotiveRegions

Automotive Regions: Present and Future

Final Report of the Network

November 2007

North East South WEST INTERREG IIIC

Project Part-Financed by the European Union

European Regional Development Fund

Foreword

"Automotive Regions - Present and Future" has been produced to provide an insight into the work carried out by the Network of Automotive Regions, a project part funded by Interreg IIIC European Funding. By its very nature it has had to be just an introduction and summary.

The accompanying CD contains not only a copy of this book, but also the articles from which summaries have been drawn and the full papers from each of the participating thematic workgroups.

Keith Bevis
University of Hertfordshire
Editor

Acknowledgements

Righthand photograph on front cover is copyright of Visenso GmbH
Photograph on page 1 is copyright of Port of Ghent
Photograph on page 10 is copyright of Van Hool
Photographs on pages 17 and 38 are copyright of Daimler Chrysler
Photograph on page 20 is copyright of General Motors
Diagram on page 42 is copyright of Envirowise UK,2007
All other photographs provided by Network members

Contents

Introduction 3
The Network of Automotive Regions 3

The Regions 4
Limburg, Belgium 4
Castilla y Léon, Spain 6
Galicia, Spain 8
Antwerp, Belgium 10
Turin and Piedmonte, Italy 12
Montbéliard, France 14
Stuttgart Region, Germany 16
East Flanders, Belgium 18
Luton and East of England 19
Milan, Italy 21
Eurada 23
Sittard-Galeen 23a

Benchmarking Exercise 24

Good Practice Examples 30
Regional Competence and Innovation Centres 30
Flanders' DRIVE 30
Knowledge Transfer: KEEP and KTP 31
Mirafiori Agreement 32
CTAG 33
European Institute for Geopositioning 33
CIDAUT 34

Supply Chain Management 35
Intelligent Transport Systems 35
Future Fuel-Cell Supply Chains in the Automotive Industry 36

Process Innovation 38
Knowledge Transfer in Process Innovation for the Automotive Industry 38
Energy Efficient Manufacturing 41

Labour market issues and training 43
Territorial Intelligence on Labour Market Issues including Training and Skill Needs 43

Intelligence on policy and diversification 47
Role of the region: local policies to foster the automotive industry and how to diversify 47

Position 51
Regional Networks and Automotive Industry 51

Credits and contact details 54

Introduction

The Network of Automotive Regions

In 2004, the Limburg Development Agency in Belgium put together a bid for €1.5m Interreg IIIC European funding to set up a network of regions heavily dependent on the automotive industry. There are 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. Almost all 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.

Automotive Regions aims to help different regional decision-makers work together to develop approaches to strengthen the competitive position of the existing automotive industry. When regions anticipate or face the closure or downsizing of a car plant, or have to manage its consequences, this involves formulating measures to ease the social and economic effects of such an event. In the longer term, regions should learn from one another how best to support companies and employees, and strive for diversification of the regional economy.

The overall objective of the Automotive Network is to raise awareness of the challenges faced by these regions. It will 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.

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 work presented here is the culmination of the research and deliberation of a benchmarking exercise to identify good practice in partner regions plus the work of the contributing thematic work groups that have been set up to investigate the implications of the supply chain; process innovation; intelligence on policy and diversification; and labour market issues and training.

The Regions

Limburg

The Belgian economy, and the Limburg economy in particular, is an open economy **that focuses on exports**. There are certain **sectors** specifically in Limburg where there is a policy of encouraging development: automotive, logistics, ICT, construction, fruit and foods, life sciences and tourism.

The **dynamic growth** that the province is enjoying, has been created by small, medium-sized and large companies:

- Ninety per cent of industrial companies in Limburg are SMEs (small and medium-sized companies);
- Car assembly, chemical industry and logistics provide a large proportion of the employment in the province.

Limburg has the highest percentage of exports in Belgium. Many daughter companies of **multinationals** have set up in Limburg. Ford in Genk and SKF in Tongeren are just a couple of examples.

The support provided by the **services sector** is also a strong feature. The biggest consultancy and audit offices are represented in the province. Initiatives such as the Mobility Centre Genk Zuid provide customised services for a specific sector – in this instance transport and logistics.

About the region and the regional automotive industry:

The automotive industry has a long history in Belgium. As far back as the 1920s, the largest foreign constructors of cars were already present in the country. However, due to growing European unification, since the 1960s many assembly plants have lost their reason for existence. Car assembly has been thoroughly rethought and a few sites have been successfully converted into important production plants, which can supply the entire European market.

Belgium currently has four main, almost equally important car-assembly centres: Ford in Genk (Limburg province), GM/Opel in Antwerp (Antwerp province), Volkswagen in Vorst (Brussels region) and Volvo in Ghent (East-Flanders province). In addition, the Ghent region harbours, apart from Volvo Cars with 4,099 employees on average in 2003, Volvo Europe Truck (2,480 employees) and the distribution plant for Honda Europe (614 employees). For its part, Antwerp has the Opel operations, which employ more than 5000 individuals and the Van Hool buses, which add another 4150 employees. In 2002 approximately 1 million passenger cars were built in Belgium. The country has one of the world's highest per capita productions of cars, at around 100 cars per 1,000

inhabitants per year. The four Belgian car-assembly plants mentioned on average export 96 per cent of total output (yearly 900,000 up to 1,000,000 units). Between 2003 and 2011 Belgian car production is still expected to grow with an estimated 11.6 per cent (Price Waterhouse Coopers figures).

The employment figures given here do not include the numerous supplier firms, mostly all SMEs, settled in the area. The impact on employment of such outsourcing can be estimated to be more than treble the volume of direct employment (about 18,000 in the case of both Ghent Volvo plants), which should in part be attributed to high labour costs in car-assembly (on average more than 60 per cent of value added, in spite of capital-intensive production). In addition, automotive labour demand (direct employment plus subcontracting) has been practically stable during recent years within the region. Value added reached 313 million euro for the Volvo Cars plant and 159.5 million for the Volvo Europe Truck plant (also 2003 figures). During the same year investment reached 155.5 million euro for Volvo Cars, and 7 million for Volvo Europe Truck.

An important activity in Flanders is generated through the logistics operations in automotive industry. Several of the leading ports of Europe, among them Ghent and Antwerp, create significant employment numbers, reaching 80000 in the case of Ghent and stimulate the presence of other manufacturing operations.

Castilla y León

Castilla y León is not only the largest region of Spain, but also one of the largest regions in the European Union, with an area of 94,225 km². It is made up of an elevated plain bordered by the mountain ranges of Sistema Iberico to the east, Cordillera Central to the south, Cordillera Cantabrica to the north and by the Duero river towards Portugal. It has a population of 2,500,000 inhabitants, which represent 5.7% of the Spanish total, and a quite low population density of around 26 inhabitants per km².

The GDP per capital is around 95% of the EU 27 average.

Junta de Castilla y León

Ade Inversiones y Servicios

Important key industries have emerged in the region, mostly automotive, energy, agro-food, chemical-pharmaceutical and, very recently, aeronautics and biotechnology. The importance of the industrial sector is above the Spanish average in Castilla y León. The 50 biggest companies in the region generate 50 per cent of the industrial turnover. There are also 8 universities within the area with more than 110,000 students and over 30,000 foreign students.

Castilla y León Region adopted its current status of Autonomous Community in 1983, when the Regional Main Law was approved. It has its origins in the regions of Castilla la Vieja and León. Both have been central areas of Spanish medieval history, and the importance during that epoch is still evident in many cathedrals, monasteries, castles and fortified towns, many of which are preserved in perfect state. As part of its monumental patrimony, Castilla y León offers natural parks and kilometres of practically untouched nature, with woods of oaks and cork-oaks. In Lago de Sanabria is the largest lake within Spain and the only one of glacial origins.

The capital of Castilla y León, Valladolid, has one of the most important sculpture museums of all Spain, and the famous Easter week processions

are of great tourist interest. The city itself is monumental, and in its surroundings there are innumerable castles. Other cities, including Segovia, Salamanca and Avila are equally impressive, and have earned UNESCO World Heritage status along with the Santiago Way - the famous pilgrims' trail which traverses Castilla y León, the gothic Burgos cathedral, Roman gold mines in León and the archaeological remains of the earliest known hominids in Europe in Atapuerca.

The automotive sector in Castilla y Léon

The automotive sector in Castilla y León accounts for up to 20% of the industrial GAV in the Region. About 19% of the vehicles manufactured in Spain are produced in Castilla y León. Spain is the sixth largest manufacturer in the automotive sector and fifth exporter in the world.

About 150 automotive companies are established in the Region, and three of them are OEMs: Renault (two plants in Valladolid and Palencia), Iveco and Nissan.

The automotive sector in Castilla y León employs 35,000 people directly, which represents 20% of the industrial employment in the region, about 50% of the regional exports and 45% of the regional imports.

The automotive cluster of Castilla y León is supported by a European top class research centre, CIDAUT linked to Valladolid University, a Regional Automotive Observatory and the total support of the Regional Government and the Regional Development Agency of Castilla y León.

The Automotive Industry in Galicia

Galicia is an autonomous region in the north west of Spain with a population of nearly three million people in an area of 29 574 km^2.

Galicia is one of the main automotive regions in Spain. This activity is mainly concentrated in Vigo and its surrounding area, although it is also present in other parts of the Community of Galicia. Many companies are subsidiaries of international Groups, thus representing the 2nd major industrial area of automotive cars, parts and components in Europe.

Big investments in Industrial Investigation and Design, incorporation of leading technologies in manufacturing processes, a highly qualified labour force, and the development of a cluster policy, make the automotive industry a dynamic and strategic sector in Galicia. The sector's turnover volume in 2005 amounted €7,200 million (equivalent to 18% of the industrial GDP of Galicia). It represented 34% of the total exports of Galicia.

Furthermore, the added value created and its pulling effect over other sectors, means the automotive industry is a strategic sector in the region.

In comparative terms, the contribution of this sector to the Galician economic development is not only high but also, in some cases, greater than the corresponding share in the rest of the country.

	SPAIN	GALICIA
Gross Domestic Product	5.2%	18.0%
Exports	22.2%	34.0%
Industrial employment (direct + indirect)	9.6%	21.6%

Importance of the automotive industry in Galicia
Source: CEAGA/Instituto de Estudios de Automoción

The establishment of Citroën in Vigo in 1958 marked the beginning of the car industry in Galicia. Now the Galician automotive industry is supported by three important pillars or agents:

1. **One unique car manufacturer: PSA Peugeot Citroën** located in Vigo, which is the 2nd most important car assembly plant in Europe. There are 8,500 people working at the PSA facility. 15 out of 100 cars manufactured in Spain are made in Galicia, thus constituting a reference model both in Spain and inside the PSA group.

Of the two Spanish centres, the Vigo plant represents, by far, the production core of PSA Peugeot Citroën in Spain. The PSA Vigo centre contributes to 79% of the total production of the Group in Spain and employs 69% of the staff in the country.

2. **75 companies engaged in the manufacture of parts and components** for the automotive industry. There is 100% of suppliers' involvement in CEAGA, that is, all the existing Galician automotive companies belong to the cluster.

In the case of the Galician automotive industry, the productive system has been characterized by a high business gathering around Vigo, from which it has experienced a progressive spreading to the outskirts. This development has its origin in the core of suppliers created near the plant of PSA Peugeot Citroën in Vigo to provide it with both technical and productive sub-hire services. In this way, this car manufacturer has been stimulating the specialisation and diversification of the auxiliary industry, promoting in addition, its international expansion.

The sector of Galician components manufacturers concentrates the worldwide production of a great number of automotive multinational companies. Its solid regime is one of the fundamental keys. In Galicia, there are foreign multinational companies, such as GKN Driveline, Faurecia, Visteon or Treves; Spanish multinational firms like Grupo Antolín, Dalphimetal and Gestamp; and Galician multinational suppliers, such as Grupo Copo and Viza Automoción, who are present in several countries. The cluster includes both SMEs and large companies representing around the 41% and 34% respectively.

3. **The Technological Automotive Centre in Galicia**, without question one of the biggest projects driven by CEAGA and a key institution for guaranteeing the sector competitiveness through R&D.

These three elements form part of the Galician Cluster of Automotive Companies (CEAGA), considered as an exemplary model of sectorial organisation.

Galicia not only has a high concentration of industry, but is also characterised by the presence of a total of 17 plants, including technological and research laboratories, both at the University of Vigo and at the University of Santiago. These contribute to the innovative activity of companies, providing them with R&D facilities, experts in technology, solutions and information and technological services. On the University of Vigo campus, there are a total of 5 Technical Colleges and Faculties in the technological field, with a total of 9,116 students, mostly studying engineering.

The Automotive Industry in the Province of Antwerp

The province of Antwerp is situated in the north of Belgium, in the Flemish region. It is the most industrialised province of Belgium and it has a population of 1.6 million inhabitants, living in an area of 2,867 km².

The automotive industry in the province of Antwerp consist of three major parts: assembly plants, supply of parts and components, and import and export of vehicles and parts.

Assembly and manufacturing
The assembly industry in the province of Antwerp is represented by OPEL BELGIUM, producing 225,000 cars in 2006 and employing 5,100 persons. The restructuring of GM in Europe will have consequences for OPEL BELGIUM, reducing the number of cars to be produced, as well as a change in the models. The number of employees will drop too.

Also situated in the province of Antwerp is VAN HOOL. It is the largest independent manufacturer of integral buses and coaches in Western Europe; 1,700 buses and coaches are produced each year as well as 4,000 commercial vehicles. The firm employs about 4,400 people.

Supply of parts and components.
About 80 employers are located in the province of Antwerp, offering their products not only to OPEL BELGIUM and VAN HOOL but also to other automotive enterprises in Europe. In total they employ approximately 11,600 people.

To name a few firms : Daf Trucks, Du Pont de Nemours, Johnson Controls Automotive, Bosal, Nedschroef, Stankiewicz, Plastic Omnium …

Importation and exportation.

Due to facilities offered by the port of Antwerp, importation and exportation of vehicles is well developed in Antwerp. Some importers are connected to Asian manufacturers acting on the European market, e.g.

- Mazda;
- Beherman Demoen (Sangyong);
- Hino Motors Belgium;
- Kia Belgium;
- Marubeni Auto;
- Mitsubishi Motors Belgium;
- Moorkens Car Division;
- Nissan Belgium

Others are working for European manufacturers:

Beherman European (Saab);
- BMW Belgium.

On the other hand, European manufacturers use the port of Antwerp to export their products. In 2004 about 280,000 cars were unloaded and 615,000 cars were loaded in the port of Antwerp. If we include all kinds of vehicles we come to a total of 2,520,000 units handled in the port of Antwerp.

In the port itself specialised firms take care of the import of brand new cars (via RORO-terminals), temporary storage and the preparation for the dealer network in so-called re-Delivery Centres (PDI), e.g. Grimaldi, ICO.

The Province of Turin and its Automotive Industry

The Province of Turin is the most important Province of the Piedmont Region in terms of inhabitants and economic activity. Among the Italian regions, Piedmont stands in first place in the automotive components section. Overall the Piedmont system of components suppliers employs more than 73,000 workers, and around 70% of the car supply system is located in the province of Turin. The economy of the Province of Turin is highly dependent on the automotive sector: it's the most important industrial sector for turnover, employees and also for historical reasons (the first car was built in 1899).

Moreover, Turin area is an atypical case compared to most regions: as the whole automotive sector is present in this area. The automotive industry extends beyond components to include the entire range of activities connected with car manufacture: research, planning, design, production of cars and components. The development model followed by Fiat has led to the outsourcing of part of design and production. Indeed, a striking phenomenon in Italy is the strong growth of a components industry. At present, Fiat Auto outsources around 75% of its production. In the province of Turin there are about 80.000 employees (direct and suppliers). The cluster is composed of an integrated fabric of companies (1,222 suppliers) that supply parts and components, machinery, equipment and services, especially styling and engineering: it hosts an integrated system of companies covering the areas of the process "from concept to car".

The local economy, as all the automotive regions in Europe, has been facing a severe crisis in the sector since the nineties, and for this reason several actions have been set up at regional level in order to facilitate the diversification of existing companies and to back up the capabilities of the territory and increasing its competitiveness. This has been done as part of an offensive strategy by emphasizing specialisation in many directions including the service sector, ICT and knowledge economy, logistics, and highly innovative activities. A network of specialised business incubators was set up. The field of design has been fostered, becoming a centre of excellence

and priority sector; the City has been designated as World Design Capital in 2008. Two years ago the local authorities - realising that the global structure of the car market and in particular the difficulties of Fiat Group threatened the survival of the Turin automotive cluster - tried to face this situation; for this reason a negotiation was made and in July 2005 an agreement was reached between Fiat Group and the three local public bodies, i.e. the Piedmont Region, the Province of Turin and the City of Turin, about the regeneration and the re-utilisation of a part of the most vast Fiat industrial area: Mirafiori. In particular, the contents deal with the situation, the future and the possibilities of development for the automotive cluster in Piedmont. The Agreement tries to define a general framework for managing the deep transformation of the Turin area, specially related to the process of productive diversification. This agreement represents a concrete effort from the local authorities to sustain this process working actively for the evolution of our economy into a direction of so called “knowledge economy”. It also includes the setting up of the Pole for Sustainable Mobility. Another initiative in progress is the creation of the “Territorial Committee for the InfoMobility”. These initiatives demonstrate the capacity of the Province of Turin to play a coordination role of all the local and economic actors, which is essential for the territory and the whole economy.

In October 1998, the Italian municipalities of Beinasco, Bruino, Orbassano, Piossasco, Rivalta, Volvera and the Province of Turin set up Assot Ltd, a local development agency whose mission is the economical, social and civil development of Turin’s south - western area.

ASSOT

agenzia per lo sviluppo del sudovest di Torino

Assot provides the following services in partnership with other companies, consortia and no profit associations:

- advising and attendance for the integration and administrative rationalisation of the area’s local authorities ;
- planning, realisation, promotion and management of specific projects, services or activities in matter of:
- productive settlements and integrated services for small and medium enterprises,
- technical and managerial services for enterprises and local administrations, focusing on new technologies and the constitution of new enterprises;
- promotion and management of employment and/or equal opportunities policies through job services in partnership with Province of Turin’s public Job Centre.

Today Assot’s capital is completely public, but local private organisations could be soon included. From 1998 to 2007 Assot managed about 110 projects, raising European and/or regional funds for more than 2,500,000 Euros

Importance of the Automotive Industry in Greater Montbéliard

Agence Pays de Montbéliard de Développement et d'Urbanisme

Greater Montbéliard represents the urban area of Belfort, Montbéliard and Hericourt in the Franche-Comté region of France. Franche-Comté is one of the largest regions in France, with over one million inhabitants, and is the second largest French industrial region in terms of number of jobs related to the transport sector. The Greater Montbéliard area has about 300,000 inhabitants, with a large proportion (41%) of employees working in manufacturing, mostly in sectors linked to transport such as automotive and rail.

With 30,000 people working for the automotive industry in Greater Montbéliard out of 90,000 as a whole in Alsace Franche-Comté, this territory concentrates a large part of industrial forces and helps future innovations in the context of the competitiveness cluster "Vehicle of the future".

With the oldest and biggest production site in France, 13,900 employees for a production of 360,000 cars in 2006, Greater Montbéliard played a specific role in the building of the automotive cluster insofar as Sochaux hosts the development centre for the segment M1 of the car market. Sochaux is part of the platform 2, manufacturing cars such as Peugeot 307 and the future 308. Greater Montbéliard is also home to renowned automotive parts manufacturers such as Faurecia, Delphi and Trevest and world Research and Development centres for two Faurecia business units: Faurecia Exhaust systems and Faurecia front end modules. Beside the major automotive plant in Sochaux and 1st tier parts manufacturers, there is a myriad of small businesses (3000 jobs) dedicated to subcontracting in the mechanical, metalworking, plastics and surface treatment sectors.

Because of its high reliance on the automotive industry (43% of industrial jobs), Greater Montbéliard has been going through lots of changes over the past 40 years, fortunately without any major social crisis. Since Sochaux is one of the 2 sites in France hosting a PSA Peugeot Citroën development centre, we are very much concerned by R&D and innovation trends.

Digital tools and applications such as virtual reality are one way of keeping up with the pace of innovation and accelerated production of a wider range of vehicles.

Greater Montbéliard offers an environment which encourages R&D and innovation. A research pole for design and innovation with PRECI (Regional pole for design and innovation), SET (product design and ergonomics), CNRT(technological research on fuel cells) have been put in place.

Drawing on the benefits of its industrial heritage, Greater Montbéliard is pushing towards anchoring a pole for conception and innovation. With Numerica and joint design facilities such as Visio-Concept, it promotes digital technology for the automotive industry, encourages the settlement of design and engineering companies and leads a strategy of diversification in numerical arts and multimedia.

Greater Montbéliard has also a strong partnership with the Belfort-Montbéliard University (strong emphasis on transport and new sources of energy), enabling the creation for instance of a post-graduate degree in advanced training in innovative and industrial project design. Within the framework of the automotive cluster, Greater Montbéliard pushes towards territorial experimentations for non-polluting and intelligent transport systems.

Stuttgart Region

Geographically located at the heart of Europe, and the state of Baden-Württemberg, Stuttgart Region stands as the epicentre of economic, scientific, and political life in Southwest Germany. It is also the focal point of a dynamic economy with its own elected assembly and administrative structure (Verband Region Stuttgart). Stuttgart Region possesses a rich and competitive blend of firms from different industries. While automotive, electronics and machinery remain as the mainstays of the region's economy; Stuttgart has thriving clusters in ICT, media, and biotechnology industries, among others.

The fabric of enterprises in Stuttgart Region is woven with major global players and dynamic SMEs. The latter group in fact forms the backbone of the regional economy and includes many successful medium sized companies that shine in their respective fields. The picture in automotive industry is not different, with SMEs like Kärcher, Dürr, Schuler, Eberspächer, BOS and Beru and major global players like DaimlerChrysler, Porsche, Robert Bosch, Mahle and Behr. Approximately thirty two per cent of the workforce is engaged in the automotive industry. Moreover, Stuttgart is economic centre of Baden-Württemberg state, where numerous other production locations are present, like the manufacturing and R&D operations of Audi AG in neighbouring Neckars-Ulm.

Stuttgart Region currently has Germany's highest density of scientific, academic and research organisations, and leads in patent applications. Enterprises here invest more in R&D than anywhere else in the country, accounting for 10 per cent of total expenditure by German industry. The R&D expenditures by the regional industry sum up to more than 5% of the GDP, whereas 88% of the total investments in R&D come from the private sector. It is therefore not surprising that the Stuttgart Region is Europe's leading area for high technology according to Eurostat figures. In addition to industrial R&D facilities and academic research, the Stuttgart Region hosts a large-scale research centre – the German Aerospace Centre (DLR), four institutes for collaborative industrial research, two Max-Planck institutes, as well as six institutes of the Fraunhofer Gesellschaft. The educational institutions include two universities, nine universities of applied sciences and ten academies.

The cluster management organisation, WRS GmbH, was established in 1995 by public and private bodies in order to support the

competitiveness of the region. WRS continues to support the existing industrial clusters and to help new ones to develop and flourish. The activities organised and supported by WRS are open to all actors in the region, including all related industries, research and academic institutions. WRS aims to create dialogue and cooperative action to help Stuttgart Region to fulfil its innovative and business potential and to maintain its leading position among German and European regions and the support of SMEs is a prominent target. WRS has a multitude of initiatives that serve these ends, Cars-Initiative, Competence Centres, and Mobility Office being some examples.

The targets for WRS for the future do not differ from its current ones: maintaining the competitiveness of automotive and other industries in the region, stimulating innovativeness, offering first-class business support and creating platforms for communication.

East Flanders

The Provincial Development Agency for East Flanders is in charge of executing the social economic policy in the province. The PDA promotes the social-economic development of the province East Flanders by means of the development, support and execution of social economic projects.

This part of Belgium has an excellent location within Europe. With a population of 1.4 million, East Flanders is situated on the crossroad of two important international European motorways: the E40 and the E17. The E40 and the E17 provide a quick link to the rest of the European network. East Flanders is reachable by train with an optimum connection between Ghent and Brussels. The high speed train links Ghent to both London and Paris. East Flanders has two seaports, the Port of Ghent and the Waasland Port, an expansion zone of the port of Antwerp.

Excellent location and accessibility are not the only asset of East Flanders. East Flanders has one of the highest productivity rates in Europe, has highly qualified and multilingual personnel, a high standard of living and a highly innovative economy. The dense network of schools and training is contributing to both qualified personnel and an innovative economy. One of the innovative sectors is the bio-based economy. The province is participating in the Ghent Bio Energy Valley project through the Development Agency East Flanders and together with the University, the Port and the City of Ghent. Ghent Bio Energy Valley is a public private partnership aiming to support the development of bio-energy activities and resulting economic growth in the Ghent region.

East Flanders has a modern service economy with an industrial backbone. The region has a balanced and diversified economic structure but above all a strong industrial tradition. For many years textiles were the dominant industry. In the sixties diversification in the Ghent region started, partly due to the expansion of the port of Ghent. During this period new industries were attracted such as steel, metal working and major car assembly plants such as Volvo Cars. In recent years there has been a boom in small high-tech business. East Flanders holds an especially strong position with regard to new branches of industry such as biotechnology, environmental technology, computer sciences and communication technology (ICT) and medical technology.

Luton

Luton is a lively, multi-cultural town of about 187,000 people, situated just north of London in the East of England region. The economy of Luton and its surrounding towns has been heavily dependent on the automotive industry since the beginning of the 20th Century, with the first car factory opening in 1903. At its height in the 1960s & 1970s, the industry employed around 35,000 people in the local area. This sector is still a major employer in the town, with approximately 8,000 people working for the automotive industry directly or for 1st & 2nd tier suppliers

GM Manufacturing is a dedicated commercial vehicle plant producing commercial vehicles (e.g. the Vivaro) under the Vauxhall, Opel, Renault and Nissan brand marques. With a workforce of 2,100 people, the plant is amongst the safest plants in the General Motors Europe (GME) family and was recently named the leading EU site for commercial vehicle production. Just to the north of Luton are the warehouse operations and the Vauxhall / General Motors European Customer Care Centre, serving customers of Vauxhall, Opel, Cadillac, Chevrolet and GM Daewoo across 20 countries in Europe.

The East of England is one of the nine English regions, with a population of over 5.4 million people and an area of 19,120 square kilometres. The region has a €110 billion economy, with around 390,000 businesses employing 2.7 million people.

The East of England has one of the fastest growing economies in the UK, and is the leader in innovation and research.

Approximately 17,000 people are directly employed in the automotive sector in the East of England, with about three times that number indirectly employed. There are approximately 700 companies in the automotive supply chain in the region. Original equipment Manufacturers, OEMs, include GM Manufacturing in Luton, Lola and Lotus cars in Norfolk, while Ford manufactures diesel engines and has its European Research & Development centre in Essex. There are several design and

engineering facilities, including the Nissan Technical Centre and Millbrook proving ground in Bedfordshire, and some large-scale, world-wide automotive suppliers as SKF (UK) in Luton and Visteon in Essex.

Universities in the East of England are actively involved in research and education for the automotive industry. The University of Hertfordshire's School of Aerospace & Automotive Design Engineering offers degree courses in both Automotive and Motorsport Engineering, Anglia Polytechnic University offers a degree course in Automotive Engineering and Cranfield University offers a post-graduate course in Automotive Product Engineering. Cambridge University carries out research into emission control, advanced structures and composites and telematic systems.

There is a centre of excellence for automotive engineering in Hethel in Norfolk and the region hosts one of the "spokes" of the UK-wide National Skills Academy for Manufacturing which has grown from the Automotive Academy.

Metropolitan Area of Milan and Automotive Sector

Milan itself has about 1,250,000 inhabitants, but the population of its metropolitan area (Greater Milan) is 4,300,000 people. Milan's city region has 9.4 million inhabitants. Milan ranks among wealthy OECD metropolitan regions and is the main engine of the Italian economy. Milan is the major financial and business centre in Italy with the headquarters of the largest Italian banks.

The Milano Province area is home to more than one factory dedicated to the automobile production. The most significant industrial unit among the many existing, both from the point of view of dimensions and of the history of its industrialisation, is the Arese factory (the historical Alfa Romeo factory). The Arese factory is an essential part of the technological development, of the success of the production system and of the progress of society in Lombardia. The Arese area today is very involved in the general crisis of the automobile construction industry. There is a very strong possibility that its own existence as a productive centre is at risk.

The crisis of “Alfa Romeo” (currently Fiat) and its subsidiary businesses with the consequent impoverishment of the whole area surrounding the factories, has created a progressive downturn in productivity and increased unemployment mitigated only by social support benefits. Although manufacturing was decreasing rapidly, automotive expertise remained. Skilled workers and professional people did not want to waste their talents and with a continuing quest for knowledge, looked for alternatives in the automotive and allied fields. Overall, as the Fiat crisis gained momentum, talents and skills were re-directed rather than being lost in an unproductive future on unemployment benefits.

The area in which Alfa Romeo is situated is a strategic point in Lombardy: it is near Malpensa (airport), in the direction of Sempione on the road to the alpine tunnels and 20km from Milan. It is home to 300,000 inhabitants including 125,000 employees and it has a very good level of accessibility both for railways and highways. On February 27th 2003, a far-reaching agreement was signed by the Lombardy region and the syndicates to create an important centre of technology at Alfa Romeo in Arese. This vision included a technological centre in Lombardy for sustained mobility and technological hybrid propulsion automobiles, that in the future would run on hydrogen. The Lombardy Region Council, the province of Milan, the industrial associations and the communities in that area (spread over 2,100,000 m²) were in complete agreement.

This agreement forecasts the employment of 2,000 people, of which only 550 will apply directly to the activities of Fiat. At the same time new research centres for sustainable mobility and hybrid vehicle (and future hydrogen car) homologation and a car scrapping and recycling service, with high material recovery, will be established. A network of basic and applied research centres will be created for the technology to create and engineer low impact vehicles, technological traffic control methods and components for renewable energy systems. There will also be infrastructures aimed at progressively including more middle-sized companies in the area which specialise in the changing of heavy vehicle engines to methane gas, new types of tyres and fuel cells for using hydrogen. An industrial district is foreseen which will offer attractive conditions and synergies for entrepreneurial activities.

When this new Sustainable Mobility Centre 'Polo della Mobilità Sostenibile' (PMS) is created in Arese, this area will become a central site for advanced innovative technology in Lombardy with respect for human health and environmental safety.

Milan is one of the world capitals for fashion and design thanks to the clustering of highly skilled designers; financial, communication, marketing and advertising services and the media industry.

Several networks of specialised SMEs excel in light industries such as furniture, metal engineering and electric equipment, as well as mechanics.

The Milan metropolitan region's industrial fabric is both specialised and diversified, which has helped to compensate for the negative effect of sectoral crises (see the experience of Alfa-Romeo crisis)

Fiera Milano, the city's Exhibition Centre and Trade Fair complex, is one of the most important in the world. With the new centre at Rho-Pero (opened in April 2005), Fiera Milano is the largest trade

Eurada

Eurada is the European Association of Regional Development Agencies, representing 150 development agencies from 25 countries of both the European Union and Central and Eastern Europe. Eurada was created in December 1991 in the form of a non-profit organisation under the Belgian law, its purpose being to :

- Encourage exchanges of experience between members and promote "best practice" in the field of local and regional economic development;
- Promote the recognition of development agencies as specific mechanisms and economic development entities;
- Participate in the development and delivery of territorial development programmes and/or support programmes for companies and in particular small and medium sized enterprises;
- Reinforce and better organise technical cooperation with both the European Commission and other Community institutions;
- Assist the development agencies newly set up in the non-EU countries;
- Promote the emergence of cooperation projects between development agencies of several countries.

EURADA presents an activity programme encompassing the following:

- the exchange of information on regional development strategies, the assistance to enterprises and the training of development agency executives;
- the analysis of Community Policy impact;
- the development of cooperation projects between different development agencies;
- the promotion of innovative and transferable techniques in the field of local and regional economic development;
- the dissemination of relevant information insofar as that concerns Community policies as much as best practice;
- a relevant form open to new forms of know-how exchange between development agencies.

Sittard-Galeen

Production Plants

Limburg (NL) Sittard-Geleen

- NEDCAR: Mitsubishi (Colt) DaimlerChrysler (Smart).
- units 120.000
- 100% of manufacture power in NL.

Limburg (NL) Sittard-Geleen

- Sittard-Geleen: Mitsubishi Europe, distribution of MMC-parts.

Limburg (NL) Sittard-Geleen

- NEDCAR workers 3.000

Limburg (NL) Sittard-Geleen

- Johnson Controls, Zelissen, Faurecia and PEGUFORM.

Current state

NedCar, situated in Sittard-Geleen, Limburg province, is the only large-scale manufacturer of passenger cars in the Netherlands. It is also one of the most advanced industrial enterprises in the country. With over 600 robots NedCar has a highly automated production process. A workforce of more than four thousand people makes the company one of the largest employers in Limburg. NedCar is among the top 40 companies in the Netherlands ranked by turnover.

Sittard-Geleen, situated in the southernmost and narrowest part of the Netherlands, a stone' s throw from the German and Belgian borders – is a major crossroads of multimodal transport – highways, railways and inland waterways.

NedCar, or Netherlands Car B.V. in full, was officially established in August 1991 as a joint venture between Mitsubishi Motors Corporation of Japan, Volvo Car Corporation of Sweden and the Dutch State. Together they invested more than four and a half billion guilders in the Born factory. On 15 February 1999, the Dutch State transferred its shares to Mitsubishi Motors Corporation and Volvo Car Corporation, which meant that each of the joint venture partners then had a 50% interest in NedCar. This shareholding ratio changed on 30 March 2001 when Mitsubishi Motors Corporation became NedCar's sole shareholder. The cooperation between Mitsubishi Motors Corporation and DaimlerChrysler has become tangible in the new generations of cars, the Mitsubishi Colt and the smart forfour, that are produced at NedCar as from 2004.

At one time it used to be possible to plan the required production volume months or even a year in advance. Owing to the rapidly changing situation in the car market and seasonal influences, such advance planning is no longer possible. They compel NedCar to organize its processes even faster than was originally planned so that the production can be matched to market requirements even more than in the past. In times of peak demand the production will run at full capacity, but when there is a temporary downturn in demand it will be necessary to throttle back slightly. That demands a flexible production process and a flexible attitude on the part of the employees.

Benchmarking Exercise, identifying regional cases of successful support initiatives to the automotive industry

The automotive industry is big business. Depending on the source, on a European level the automotive industry accounts for some 4-5 million jobs and the sector output totals some 700 billion euros. But not only from a private sector perspective is the automotive sector an important business branch. It is likewise from a public sector and societal perspective. From a European viewpoint, the sector represents close to 10% of industrial employment and output. And if we go to the level of regions and metropolitan areas within Europe, we see even more striking indicators of the importance of the sector. For instance, in the case of Stuttgart Region the automotive industry represents some 50% of the economic turnover generated in the area and its role as an employment provider is corresponding.

Hence policy makers, certainly from regions where the automotive industry has a strong presence, have an interest in strengthening the sanity of the automotive sector.

Members of the network of automotive regions were questioned about their specific regional strengths and weaknesses and which threats and opportunities they faced.

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.

Therefore, they also seem best positioned to take on a larger part of the innovation activities that are devolved from OEMs to supplier companies.

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).

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.

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.

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.

Galicia, in particular, has made significant efforts recently in terms of sustaining innovation activities.

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.

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.

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.

To assist policy makers in their efforts to safeguard the automotive industry, a wide ranging European

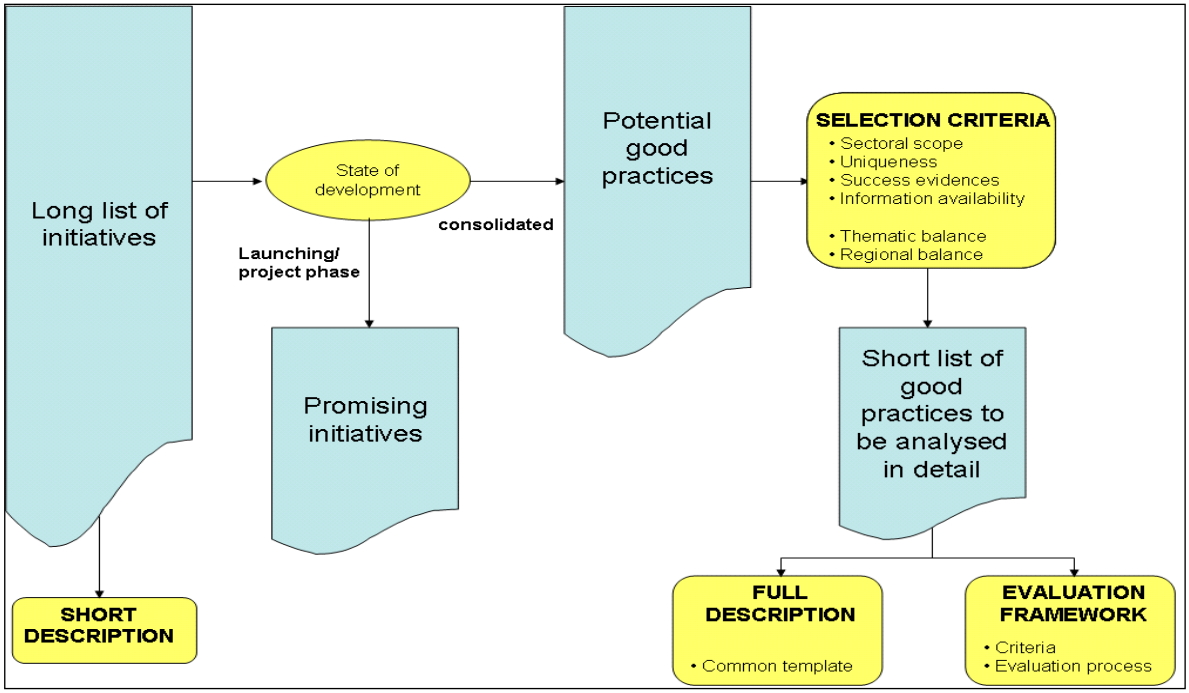


Figure 1: Filtering good practice candidates from long list of automotive support initiatives

search after good practices to sustain and enhance the competitiveness of automotive activities on a regional level was conducted.

Based on a broad, Europe-wide, inventory - using surveys and desk research - a long list was drawn up, containing initiatives that covered a wide range of industrial themes: training, logistics, internationalisation, technology support, quality management, supplier development, specialised infrastructure, business intelligence, etc.

This long list was reduced to a short list of potential good practices on the basis of a number of "filter criteria": consolidation of the initiatives, focus on the automotive industry, preliminary success signals, presumed importance of the measure in terms of contribution to the competitiveness of the automotive industry, and originality / singularity of the measure. The basic outline behind this long list shortening is portrayed in the following picture:

The resulting short list consisted of the following initiatives:

- CTAG : Centro Tecnologico de Automocion de Galicia
- IGAPE : Internationalisation Support Programme Galicia
- Ford Genk conveyor belt
- Flanders' DRIVE Engineering and Test Centre
- Regional Competence and Innovation Centre Programme of the Stuttgart Region (RCICP)
- UK Knowledge Transfer Programme / East of England Knowledge Partners (KTP)

These support measures were subjected to a more severe evaluation framework, which assessed them on the following criteria:

- **Relevance:** to what extent is the intervention relevant in view of the needs and problems on behalf of the targeted regional automotive system?
- **Effectiveness:** efficacy in terms of the progress made towards the attainment of pre-determined objectives.
- **Efficiency:** how much does it cost to attain the obtained results?
- **Wider impacts:** positive and negative side-effects the intervention produces apart from (non-)attainment of the presupposed goals, either for the targeted system or society at large.
- **Sustainability:** 1) to what extent can positive changes resulting from the intervention be expected to last after the initiative concludes or when beneficiaries are no longer supported? 2) to what extent can the intervention be upheld without public funding?
- **Replicability:** can the initiative be rehearsed and imitated with ease in another setting and or locality?

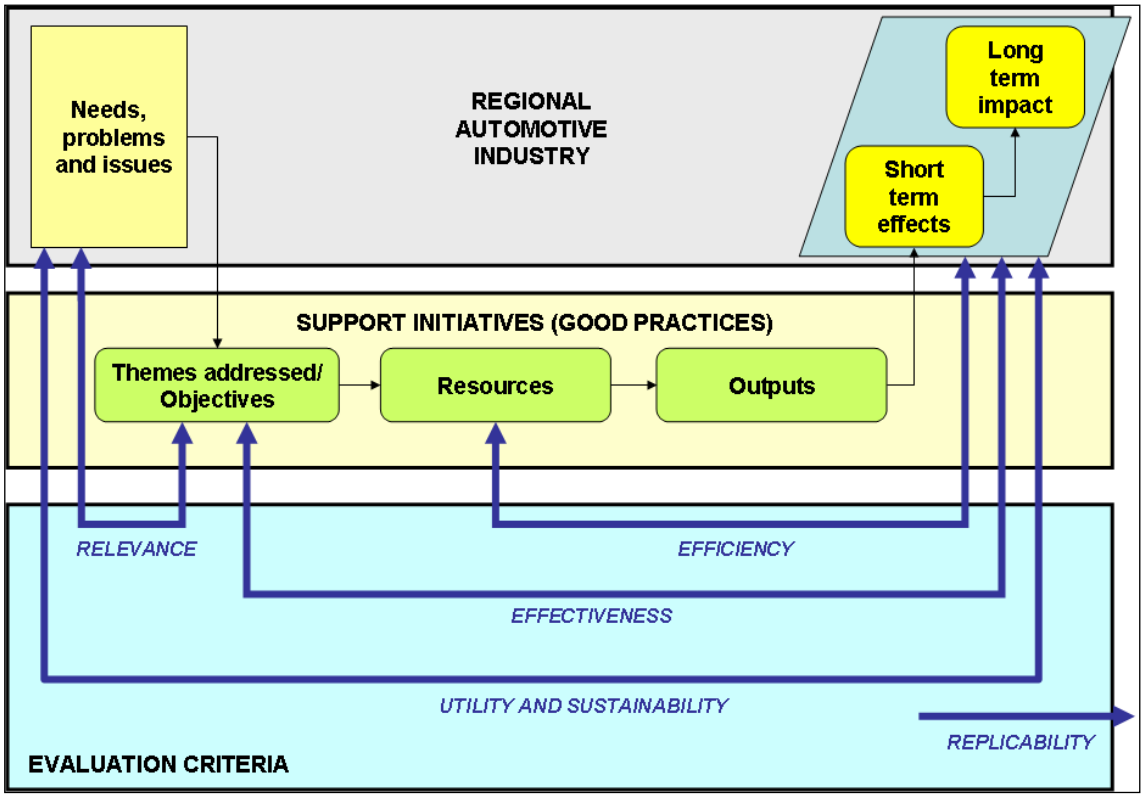


Figure 2: Building blocks of the evaluation framework to assess good practice candidates

Source: Resource Analysis NV.

The figure above synthesises the framework for analysis that follows from the above-exposed examination rationale and the corresponding evaluation criteria.

To enable systematic and impartial evaluations, verifiable proof of performance and of positive effects sorted by the measures in question was gathered. For this, consultations with those responsible for each initiative were set up and written information (obtained via questionnaires

and otherwise) was processed. All in all, ample precautions were taken to secure the evaluations would be as fair as possible.

Arguably, all the reviewed candidates can be characterised as good practices. All seven demonstrate very interesting strengths. As such, all seven deserve a follow-up by other regions wanting to do something similar.

Highlighting some of the most important individual initiative's strengths:

CTAG's international exposure and activities and the width / versatility of services and infrastructure offered, and thereby catalysing an increase in R&D activity in Galicia and diminishing the footloose character of automotive companies in the region.

For companies considering international ventures **From Concept to Car**'s full-service offer enables companies to open doors at potential foreign/multinational clients that would otherwise remain closed for them. Also the assistance provided to foreign companies wanting to open branch locations in the Turin area is of an intensity seldom found elsewhere.

Ford Genk's conveyor belt shows the state-of-the-art in buyer-supplier logistics resulting in a myriad benefits: lower transport costs, less packaging waste, safer work conditions on the shop floor and less negative impacts on local mobility.

- Each €1M of government funds invested generates €3M additional profits

Also, both for the companies and academic researchers involved it is a win-win situation, notably: access to R&D capacity and commercialisation of outcome plus publications and the possibility to give a more applied vocation to science.

RCICP: through the emphasis on fostering inter-firm cooperation, not only with natural counterparts but also with competitors and equals, collaboration between competing companies takes place increasingly. This helps to overcome going-it-alone strategies where the indications are that cooperation would be beneficial. It reduces rivalry in situations when this would turn out to be counterproductive. Another fruit of the clustering and collaboration patterns is that inter-company access is facilitated. In practice this means that, on the one hand, it is easier for SMEs to learn from and market their products and services to new clients (notably large companies). On the other, it enables large companies to tap into the knowledge and capabilities base of small and innovative companies. A further positive effect is that, through cross-linkages between business, academia and public actors; universities and public institutions become more responsive to industry needs.

In general, common denominators behind the

good practices are that they are strongly market-led and market-oriented, and enjoy institutional back-up or are based on public-private partnerships/funding. The latter helps to mobilise and organise resources (e.g. from market actors or capital providers with similar interests to start up and fund an initiative) and to overcome possible sources of market failure (preventing the failure of initiatives that cannot get off the ground when the individual parties lack the required investment).

On top of the specific virtues all seven initiatives demonstrate, the RCICP and KTP stand out for the fact that they can provide documented and revealed proof of their performance.

Another particular strength of RCICP is the fact that the private sector pays more than in its equal share in the financing of the initiative's hardware and operational costs. In spite of the fact that public funding is precisely intended to overcome market failures regarding business functions like R&D and technological innovation, this support measure shows that an adequate twinning of public and private interests can spark sizeable private funding and make the private sector take the lead, both organisationally and financially, leading to self-sustaining regional innovation infrastructures. In all other support measures reviewed, the public sector takes on the lion share (or all) of the costs involved. From a fair financing principle (and the fact that there are tangible benefits involved for the private sector) this is not optimal, certainly not from an efficiency and sustainability perspective.

Based on the overall lack of monitoring of initiative's results, an important final implication of the present benchmarking exercise is the following. There is a strong need for more systematic evaluation of the impacts and performance of regional initiatives that aim to support the automotive industry, for which several conceptual and operational starting points are forwarded in the report.

Selected good practice examples from within the Network of Automotive Regions

Regional Competence and Innovation Centres (Programme), Stuttgart Germany

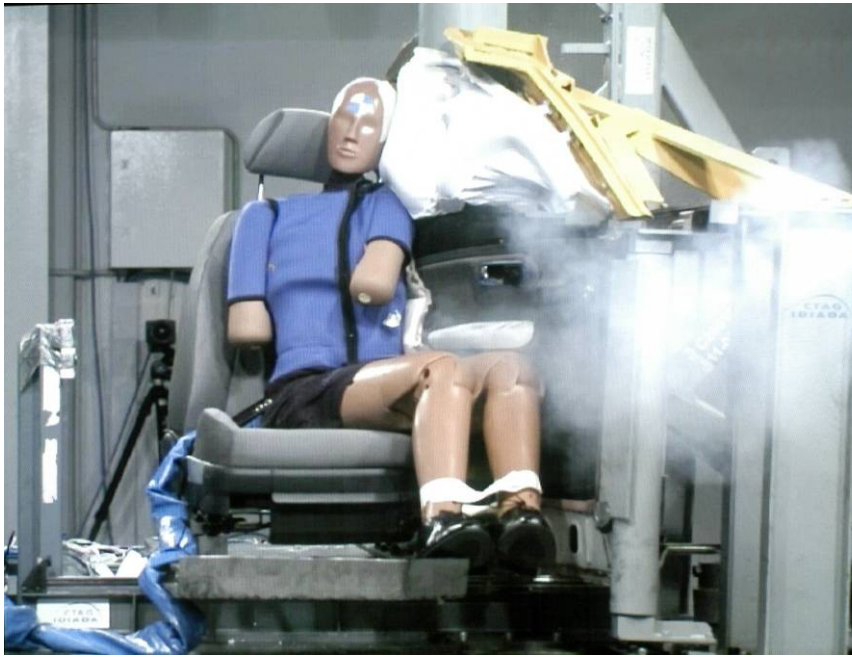
Stuttgart Region Economic Development Corporation (Wirtschaftsförderung Region Stuttgart GmbH - WRS) is the initiator and co-financer of this initiative. As regards objectives, a distinction should be made between the Programme and the centres that were created through this programme. As for the Regional Competence and Innovation Centre Programme (RCICP), its main aim was to set up and develop centres that would help to bundle regional competencies (support network formation) in major fields of future technologies (economically relevant high-tech applications), such as fuel cell technology, mechatronics, technical textiles, telematics and mobile computing network, virtual dimension / reality, etc. i.e. by strengthening and forging links between businesses, universities, research facilities and other relevant organisations. The centres share several common goals: they serve as a platform where companies, universities and research facilities should be able to meet and exchange ideas on the elected topics and technologies, that way enhancing the expertise, competitiveness and economic development of the region as a whole. An underlying aim is to help companies to foster their own innovativeness through cooperation and thereby maintaining and increasing the region's appeal as a business location.

Flanders' DRIVE, Flanders Belgium

The initiating parties have been companies based in Flanders servicing the vehicle industry (like component suppliers, engineering and design service providers). Notably: LMS International, Bekaert, Bosal and Tenneco Automotive-Monroe, Agoria Flanders and WTCM. They were the main drivers behind the creation of Flanders' DRIVE. Financially and organisation-wise the lead partner is the Flemish Government, i.e. the investments in and operational costs of Flanders' DRIVE are funded by the Flemish Government, the European Union, the Province of Limburg and the regional

development company of Limburg Flanders' DRIVE comprises a knowledge network and an Engineering and Testing Centre. As a network of knowledge exchange, Flanders' DRIVE tries to fulfil a sort of cluster role; getting automotive actors together and enhancing cooperation and exchanges of knowledge for the benefit of all.

The goal of the Engineering and Testing Centre is to strengthen the innovation and product development potential of the automotive suppliers. The two axes aim to fortify each other through the conceiving of a coherent innovation and clustering policy that ought to stimulate the formation of technology-specific or component-specific clusters with good (commercial) perspectives and the foundation of centres that can support such clusters.



Knowledge Partners East of England (KEEP): a regional variant on the national Knowledge Transfer Partnership (KTP)) programme, UK

The East of England Development Agency, EEDA, is the leading agent of the KEEP initiative, which is linked to the KTP Programme run by the Department of Trade and Industry of the UK Government.

.

The key objectives of the KEEP programme are to facilitate:

- The access to knowledge resources and facilities between universities and companies.
- career development for associates (new graduates) via company-based experience.

- interaction between businesses and universities or research organisations
- On behalf of the participants, the goals are similar and can be summarised as follows:
- For companies: increase profits and/or gain market position
- For academic institutions: to increase relevance to business
- For associates: to acquire work experience and employment opportunities.

The Mirafiori Agreement, Turin Italy

In 2002 FIAT went through the heaviest crisis of its history and the crisis had its peak in 2004 when the socio-economic structure of the Piedmont region faced a crucial and worrying crux: the survival of the wide network of relations that was turning around FIAT. The local authorities, Piedmont Region, the Province of Turin and the City of Turin, responded to this by an agreement with Fiat Group about the regeneration and the reutilisation of a part of the vast Fiat industrial area: Mirafiori.

In the Mirafiori agreement a model to face the problems of competitiveness, fragmentation and dependence of many companies from the First Group is targeted. The structure of the agreement is based on five main points:

1. The Steering Committee
2. TNE (Turin New Economy)
3. Mirafiori Motor Village
4. The role of Politecnico University
5. The cooperation between the Fiat Group and local authorities

The Mirafiori Agreement tries to define a general framework for managing the deep transformation of the Turin area, spefically related to the process of productive diversification. This agreement represents a concrete effort from the local authorities to sustain this process working actively for the evolution of our economy in direction of so called “knowledge economy”. It is aimed to assist the provincial and regional productive system to demonstrate the ability to absorb the social and productive costs of the transformation process, and during the last two years strong signs of progress have been identified.

Centro Tecnologico de Automocion de Galicia (CTAG), Galicia Spain

CTAG is founded by the Foundation for the Innovation, Research and Technological Development of the Automotive Industry in Galicia. Participating in this foundation are the most important industries of the entire automotive sector as well as organisations committed to the competitive development of the sector: PSA, CEAGA, Viza automoción, Dalphimetal, Grupo Copo, GNK Driveline, Gestamp Automoción, Grupo Antolín, Consellería de Innovación, Industria y Comercio (Local Ministry for Innovation, Industry and Commerce), IGAPE, University of Vigo, Zona Franca (Free Trade Association) and Caixanova.

To increase the competitiveness of the Galician automotive sector via: providing advanced technological solutions, the appropriation and transfer of related technologies, orienting and fostering companies towards technological development and research and innovation.
The CTAG mission can be broken down into four basic goals:

- To provide the companies of the automotive sector with an efficient service through services that are close to their requirements, both present and future.
- To develop the necessary in-house capabilities that permit the generation of quality added value that is in constant improvement.
- To serve as reference and guide in relation to technological development, and innovation, by providing state of the art leadership in the areas of specialisation.
- To contribute to improvement of technological qualification within its geographic and social environment.

European Institute for Geopositioning, Greater Montbéliard France

Located in Montbéliard and created in 2006, the European Institute for Geopositioning was started following on one hand the development of the competitiveness cluster “vehicle of the future” (mainly on its programme dedicated to Intelligent Vehicles and Systems), and on the other hand on the regional competence centre for multimedia, Numerica.

Anticipating also the future launch of Galileo (operational services planned currently for 2012), the Institute is positioned as a competence centre for applications of geo-location to terrestrial transports and mobility. Its activities are focused mainly on service “incubation”, trying to prepare future services development, and to help them to go to the market

CIDAUT (Castilla y Leon)

CIDAUT (Research and Development Centre in Transport & Energy), was created in 1993, with the objective of coordinating and channelling the research potential of the University of Valladolid, as well as actively contributing to the needs of companies in the automotive sector, thus enhancing both their competitiveness and industrial development. The principal objective of the Foundation is to nurture the competitiveness and the industrial development of the companies in the automotive sector, thus enabling them to develop new products and processes. In order to realise this objective, the Foundation promotes scientific investigation, technological development and innovation applicable to industry in general and to the transport and energy sectors in particular.

From the Technological Park in Boecillo (Valladolid), CIDAUT foments the use of technology, design and the manufacture of new products, as well as creating advanced programmes for improving the industrial process as a whole. It builds around three fundamental activities: Investigation and Technological Development, Technological Services and Specialised Training.

CIDAUT works in close collaboration with the University of Valladolid, notably in the design and initiation of the lines of technological research of the centre. The University furnishes personnel for the development of technological investigative lines, who participate actively in CIDAUT projects.

Intelligent Transport Systems: Contribution at the Regional Level

ITS (Intelligent Transport Systems) is one of the forward-looking technology applications that already plays a crucial role in the world economy. ITS itself is a broad term that covers a large group of discrete technologies and applications with the aim to integrate the information and communications technology with transport infrastructure, vehicles and users. ITS applications reach out to all users of transport systems in different forms, for example electronic toll collection systems, or on-board systems like active radar cruise control. In addition to numerous ITS applications that are already in use, many more are being developed at the moment. As the price-performance ratio of ICT applications decrease, ITS systems widen their reach and promise to lead us towards totally-networked transport systems. The benefits foreseen by experts promise significant improvements in road safety, transport efficiency and the environmental impact of transport.

As the volume and sophistication of the inter-firm transactions increase with globalisation, the efficiency of Supply Chain Management, SCM, systems is today mission-critical for competitiveness at all organisational and geographical levels. SCM is similarly crucial to the automotive industry and the ability of Western Europe to protect the existing car manufacturing activities and to attract new investments in this sector. The nature of SCM activities is transformed not only by the dynamics of demand, but also by the means made available by the ever-higher sophistication of ICT systems. Like the global economy itself, SCM today is all about economics of speed and ITS technologies that are embedded in each and every step of the supply chain play key roles.
Currently the basic technologies for ITS applications are either at hand, or are to be developed in due time given necessary resources. The harder task is to overcome the institutional, legal, economic, financial and societal barriers that stand on the way. We strongly believe that the regional level is an appropriate realm for action in order to manage these challenges.

Implementation of ITS requires an all-encompassing vision that does not limit itself to only what is happening on the road networks. Entrepreneurial support, re-skilling of the workforce and the development of future-oriented study programmes are examples of the additional tasks to be tackled. In this sense, regional dedicated ITS coordination representatives, regional vanguards of ITS could accelerate the progress of ITS implementation and business relevant benefits of ITS.

Regional representatives that are active in EU-backed projects today prove that they are dedicated

to cooperate and to enliven the European economy and to the creation of a communication structure for regional ITS representatives would be highly beneficial. Sucha structure for communication and feedback would support interoperability, to exchange of experiences between regions of Europe and furthermore it would prove invaluable for EU, national public administrations and also for initiatives like Ertico. EU possesses many competitive regions and active regional networks. It is only logical to utilise these effective tools in the realm of ITS, in order to achieve the ultimate goal of accident- and congestion-free road-networks of tomorrow.

Future Supply Chains in the Automotive Industry: A Regional Outlook

Today it's hardly questionable that human kind needs to re-think and re-invent its way of approaching energy, its uses and resources. Our dependence on fossil-fuels is clearly no longer tenable and we have passed the point where we could get over the challenges by simply digging deeper into our existing, earthly resources. There is a pressing urgency to develop and commercialise new and sustainable resources, carriers and uses of energy, which would take us into new millennia.

The Automobile, the machine that changed the world, is again at the epicentre of energy and environment related discussions. The exhaust gases from road transport are regarded as one of the primary drivers of global warming, which cause increased damage and change in our lives. The stakeholders of the automotive industry have responded by rising to the challenge and pushing their research agendas to devise not only technically competent, but also commercially viable technologies. The Toyota Group's hybrid-technology or the attempts to squeese out higher efficiencies from existing internal combustion and power-management technology, like the case of BMW's efficient dynamics concept are different means to the same ends: to prove that motor vehicles can be cleaner and more efficient.
On the other hand fuel-cell technology, with its potential for powering zero-emission-vehicles, has been supported actively not only by vehicle

manufacturers and suppliers, e.g. DaimlerChrysler and Ballard, but also research institutions and public actors. Automotive Regions project members Stuttgart Region, Montbéliard and Castilla e Leon are among the European regional actors that are active regarding this technology through research centres or academic institutions.

Following considerable efforts at developing the basic technologies further, experts are busy working on pioneering vehicles that would offer alternatives to today's internal-combustion engine technology. The challenges faced are two-fold: to develop vehicles and to build-up the necessary hydrogen distribution infrastructure. For the former there has been massive progress in recent years and we have already seen commercial vehicles, namely city-busses that have proved the leap in usability and reliability of fuel-cell technology for transport applications. The next step is the smaller private vehicles and tests have already begun, for example DaimlerChrysler has about 60 fuel-cell propelled A-Class vehicles that are being tested. Even larger test fleets will come into use about 2010 by DaimlerChrysler, GM (for Opel brand) and Ford. Experts are already speaking of commercial market readiness around 2015

At this point, a new question appears: where will the necessary supply chains for the fuel-cell vehicles be located? These supply-chains will consist of a mixture of existing and newcomer suppliers, firms that had had no activities related to automotive industry will join new areas. Needless to say, many new, dedicated firms will be founded to provide necessary components and systems. In order to manage to attract these development and manufacturing activities to Europe it is crucial to support the existing automotive industry in Europe, especially considering the public investments made for the development of these technologies.

We believe that action plans to support the development of fuel-cell related supply chains should have a component that connects and embraces the regional level actions. Many a European automotive region has proved to have a minute grasp of the needs and potentials of their regional industries and it is most important to utilise this knowledge to add to the competitiveness of the European automotive industry. In their many activities, including research, network development and human resources, regional actors have much to contribute for the fuel-cell future.

Knowledge Transfer in Process Innovation for the Automotive Industry

On-going process innovation is one of the main ways to increase competitiveness and profitability in any industry, and especially in a highly competitive sector such as the automotive industry. The automotive sector is already highly mechanised and is one of the most highly regulated industrial sectors. The market in Europe is currently nearing saturation, with consumers demanding high quality at low cost, and producers suffering increasing competition from countries with lower production costs.

There is strong market pressure to step up productivity and become even more innovative. Process Innovation can take many forms, from simple streamlining of manufacturing activities, through improved tools and equipment, to the redesign of components to make them easier to handle and cheaper to install. Process innovation may be particularly helpful to smaller firms, enabling them to share in proven process technology which offers advantages of lower risk and quicker payback. Process innovation can help reduce “per item” costs by making workers and machinery more productive and more flexible.

Process innovation must take place at all levels of the industry – at the Original Equipment Manufacturers (OEMs) and their suppliers, and the hundreds of Small to Medium Sized Enterprises (SMEs) that are partly or wholly dependent on the automotive sector. By investing in new processes, firms can gain in terms of efficiency and productivity, use of materials, and improved quality or reliability. Process innovation often (though not always) goes hand-in-hand with product innovation, and is currently more prevalent in the supply chain than at OEM level.

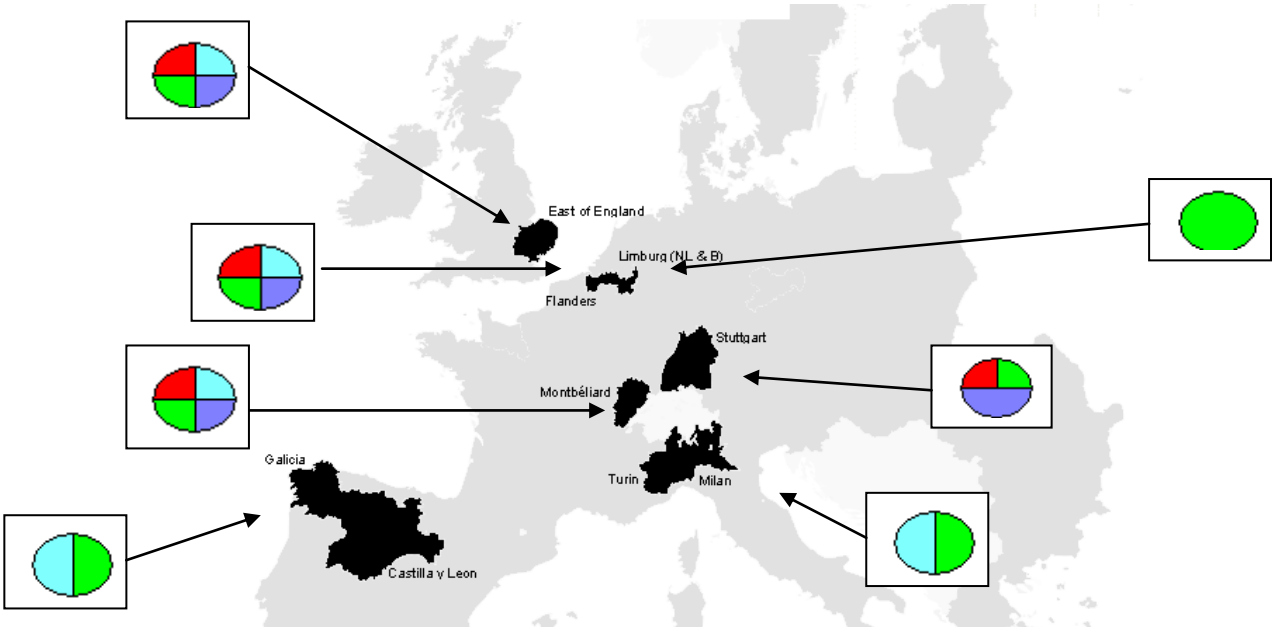
Government bodies, academic institutions and businesses have begun to work together on initiatives known as “Knowledge Transfer” to develop effective and efficient innovation in manufacturing processes. Individual companies may not have the knowledge or facilities to carry out the research they need to become more competitive, and academic institutions can sometimes become too involved in pure research that does not have a commercial application. These partners can work together to in a two-way exchange of knowledge so that common targets of innovation and continued economic growth can be met.

Different regions and organisations have developed different solutions to tackle the challenge of transferring knowledge. Good practice examples of successful knowledge transfer initiatives were identified in several of the partner regions. These are:

- The Flanders’ DRIVE project in Flanders, Belgium
- Knowledge Transfer Partnerships in the East of England in the UK
- Innovative spin-off companies in Franche-Comté in France.
- Galician Centre for Technology (CTAG) in Galicia, Spain

Looking at good practice across the regions, a clear pattern emerges of government agencies working with academic institutions and industry to promote the objectives of the Lisbon Agenda. Governments have not just to be reactive, but have to work with industrial and academic experts to help shape future development with initiatives such as “Foresight Vehicle” in the UK, “Vehicle of the Future” in Flanders and “Vehicle of Tomorrow” in France.

Although there are successful initiatives for transferring knowledge and supporting innovation, it is clear that the companies who survive and become more competitive are those prepared to innovate both their products and their manufacturing processes. These are also the companies that invest in their human capital by development and training initiatives. It is up to manufacturers at all levels to innovate their processes if they are to survive and achieve success.



Forward Thinking **Research Partnerships** **Support for Innovation** **Centres of Excellence**

Figure 3: Fig Innovation and Knowledge Transfer Initiatives in Partner Regions

Energy Efficient Manufacturing

There is currently a “green wave” in business, encouraging companies to minimise the impact of their operations on the environment. There are many drivers of this “wave”, and they can be divided into two main groups – firstly, urgent environmental and economic pressures like higher energy costs, increasing waste disposal costs and shortages of natural resources; and secondly, government, customers and other powerful stakeholders are becoming increasingly concerned about climate change, and compelling companies to improve their impact on the environment (see diagram below).

Automotive manufacturers have long been encouraged by government and market forces to improve the environmental impact of their products, but are now being encouraged to do the same for their operations and services. There is also the urgent economic pressure caused by the rapidly rising costs of energy and raw materials. Manufacturing companies in the automotive sector are already very effective at delivering “lean manufacturing” to minimise waste and maximise profitability, but these initiatives are often targeted mainly at the production line rather than at the entire operation. Energy efficient manufacturing however aims to be both “lean and green” by addressing the concept of "whole life carbon impact" of a vehicle which includes the environmental impact of the whole manufacturing process, as well as the sourcing of raw materials, not just emissions from the vehicle itself.

The process of improving energy efficiency must take place as part of a continuous process of improvement in processes and equipment. Manufacturing energy optimisation can be aimed at three key areas: manufacturing processes, energy conservation and energy usage.

Examples of good practice in becoming more energy efficient could include: switching off equipment when not in use; effective use of cutting tools so that off-cuts can be used for smaller pieces; minimising packaging; recycling and reuse of materials; ensuring that staff facilities like toilets and kitchens are water and energy efficient; maximising the use of natural light, using light pipes if security or heat gain/loss an issue; use of low-energy equipment and lighting; use of renewable energy; minimising transport of materials both around the site and across the globe; grey water usage; and the re-use of plastics / oil. Many efficiency changes can be implemented without any increase in operating costs.

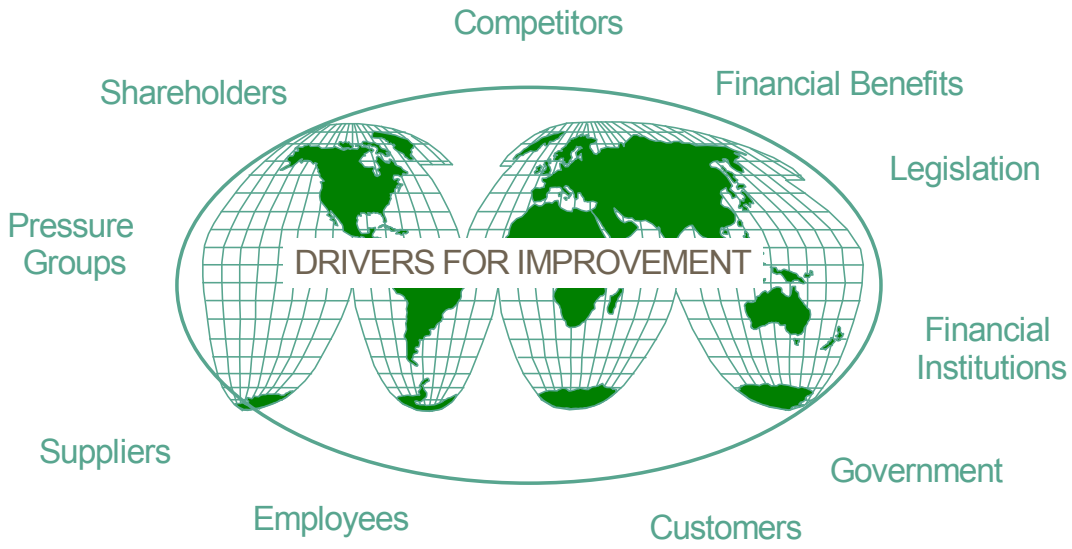
Good practice examples from companies include:

- Mayflower Vehicle Systems in Coventry
- Volvo Trucks in Ghent

- General Motors Manufacturing in Luton
- McKenchie Plastic Components in Scotland

These good practice examples show that companies can both help the environment and themselves, with reduced costs and an improved public profile.

Savings are estimated to average 8% of company turnover (*source: Manufacturing Advisory Service / Envirowise*) and payback times for improvements are sometimes as short as one month. Society in general also benefits with reduced carbon impact, better air and water quality, and improved products.



Source Envirowise UK, 2007

Territorial Intelligence on Labour Market Issues including Training and Skill Needs

The "Network of Automotive Regions" is helping 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", is 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.

The papers "***Social Dialogue: a work in progress***" and "***Case histories about territorial intelligence in automotive in Europe***" take an in-depth look at the subject of social dialogue, in its various forms and levels. Social dialogue is seen as both a basic instrument for better governance – at a European, national and local level – and as the driving force behind economic and social reforms. Social dialogue requires to commitment and skills of all the players involved in the decision-making and implementation process.

In line with the aims of the project, the papers not only illustrate social dialogue and bring together useful information, policies and instruments connected with it, but also focus on social dialogue in the automotive industry. Via an analysis of local experiences, it concentrates mainly on the role of social partners and their relationship with each other, and on the importance of training to foster new needs and to ensure social cohesion, active citizenship, personal development, employability and a competitive market.

Automotive – a vital industry for Europe

Today it has become clear that the European automotive industry – the second largest producer after the Asia-Pacific and a key player in the European Union (due to size, complexity and economic contribution, role in providing mobility), with an estimated 10 million workers employed in the motor vehicle manufacturing industry across Europe (of those approximately 8 million people over 5000 companies) - is losing competitiveness

as challengers from lower-cost economies have increased their share of world automotive markets at the expense of the European suppliers and manufacturers. To reverse this dangerous trend, the public and private sector in Europe must, above all, seriously invest in education, training and learning for all.

Over the past decade the automotive industry has gone through profound changes due to the challenge from global competitors. The industry continues to transform rapidly in the face of technological developments that change both processes and products, making the automotive sector an increasingly knowledge-based sector, characterised by lean thinking. The European automotive industry is losing competitiveness partly due to the lack of skilled labour to fill open positions. The imbalance between the supply and demand in the educational system in many countries across Europe is contributing to a mismatch in the labour market, which is also felt in the automotive sector.

The European automotive sector has shifted from an industrial to a knowledge-based industry. Human resources are central to the creation and transmission of knowledge and a determining factor in the European automotive industry's potential for innovation.

Social dialogue – a work in progress

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.

In recent years the social partners have wished to pursue a more autonomous dialogue and are adopting a diverse array of initiatives, including an increasing number of 'new generation' joint texts, characterised by the fact that they are to be followed-up by the social partners themselves. It requires greater interaction between the different levels of industrial relations, including effective industrial relations systems and social partner capacities at national level.

Enlargement of the EU will reinforce the need for social dialogue and partnership. Enlargement creates new opportunities for EU economies and enterprises, but major adjustments are still necessary, particularly in the economies of the new Member States. Partnership will therefore be of particular importance to managing the impact of continuing restructuring in those Countries. However, the enlargement of the EU also presents a challenge for the European social dialogue. Moreover, the question of the technical capacity of the social partners is of high importance in this context.

In a world of rapid change and high mobility of capital and technology, the quality of human resources is the key factor for international competitiveness. These fundamental transformations are changing the way Europe works, the employment profile and traditional thinking about how EU labour markets function.

Enterprises are having to respond to structural change, reassess the skills they need and how production in general and work processes in particular should be organised. The challenge ahead is to improve quality in work with a view to positively managing all dimensions of change - economic, social and environmental – in order to ensure sustainable development and social cohesion. This can only be achieved by mobilising and developing the full potential of both the present and future labour force.

Companies have had to be prepared to be innovative in their approaches to recruitment, employment and training. This applies not only to large enterprises; SMEs too need to understand not

the advantages or disadvantages of training, but the perils of missing the opportunities that are open to an SME with a well trained workforce.

In this scenario of complex and rapid changes social dialogue is an absolute priority.

Education and training are the key messages coming out of the social dialogue. This is not a generic request for training. The voice of industry and unions has been very precise in articulating their needs in terms of subject matter and form of learning. The providers need to respond in different ways to these needs. It is not simply a progression of qualifications. It is also about the role of learning in different situations. There are those who need training to gain employment. Businesses need staff trained to improve the competitiveness of their businesses. There is the need to capture the knowledge locked in older workers and to retrain those workers for new technologies. Above all in the new knowledge based economy, routes for innovation must be found and staff trained to adjust to the changes that innovation will bring with it.

"Social dialogue is not old-fashioned". It must be seen as a constantly evolving process. With changes taking place in Europe both geographically and in demographic and economic terms, social dialogue remains an extremely valuable instrument, capable of producing appropriate solutions.

Role of the region: local policies to foster the automotive industry and how to diversify

The main aim of the Policy Workgroup has been to finalise some key policy recommendations that will be presented, if possible, to the European Commission in conjunction with the other European partnerships related to the Automotive industry (i.e. NEAC and BelCar).

Before identifying the priorities of the Automotive Industry in our areas, we provide an overall overview on the automotive industry in the different partner areas, in tabular form.

From the table we can identify three different groups of partners in the working group that in general are representative of three typologies:

1) The first with a high employment intensity linked to Automotive.
2) The second group is made of areas where the automotive sector is very strong and linked to large plants, research centres, suppliers and Automotive services.
3) The third group, Turin, where the whole car district is present in this area.

There are considerable differences between regions; therefore territorial intelligence has different ways and means to be described. Although the concept of 'regions in Europe' has an administrative framework, clearly, not all have the same power or status. Some automotive producing regions have considerable devolved administrative power and financial control - plus democratic legitimacy. Others do not have this status. Another important aspect - that is beyond this paper but is concerned with regional policies - is that the automotive industry is organised on a huge and global scale and this makes the regional dimension of the industry difficult in the face of its global organisation and aspect. Moreover the industry has a major impact on society and the environment and is thus subject to legislation. Some trends appear inevitable. The problem is how to best manage or exploit them rather than trying to halt them. Issues are therefore complex, and policymakers need to be aware of the full range of their implications.

The various possibilities for linking with European policies operate in synergy at different levels for getting funding and implementing actions.

Area / Variables	Arese (Province of Milan)	Ghent and East Flanders	Limburg Province	Province of Antwerp	Greater Montbeliard Area	Castilla y Léon	Province of Turin
Employed automotive industry	**11.456**	**11.000**	**14.000**	**16.000**	**24.500**	**33.000**	**80.000**
Employed assembly plants	**1.000**	**5.745**	**5.939**	**5.400**	**15.000** (PSA)	**30.000**	**12.048**
Car production	n.d.	n.d.	**260.000**(appr .)	**231.503**	**430.000**	**570.742**	**169.500**
OEM located in the area	ALFA ROMEO	VOLVO HONDA EUROPE	FORD	OPEL VAN HOOL	RENAULT, NISSAN, IVECO	PSA SOCHAUX	FIAT GROUP
Structure of the automotive sector in the area (presence of suppliers, R&D Centres, cluster...)	1R&D centre (Alfa Romeo Technological Centre); some suppliers; cluster foreseen	*Some sub-suppliers companies; Volvo cluster.*	*1 cluster; Flanders Drive Test and engineering centre for suppliers; suppliers to Ford; other important suppliers Tenneco, ZF Getriebe, Melexis.*	Numerous suppliers such as: Daf Trucks , Johnson Controls Automotive, Bosal, Nedschroef, Du Pont de Nemours, Stankiewicz, Plastic Omnium.	1 R&D Centre (CIDAUT, Regional Research Centre for the automotive industry) 150 enterprises related to the automotive industry	1st tier suppliers (Faurecia, Delphi, Snop) World R&D Centres (Faurecia) and numerous SMEs related to mechanical, metalworking, plastics and surface treatment sectors.1 competitivenes s cluster	**Many R&D Centres both private (for ex.CRF –FIAT research centre) and public** 1222 suppliers (components, machinery, equipment, design and engineering)

European Commission policies related to the automotive sector and/or to the regional dimension include a mix of policy instruments and regulatory frameworks. The most relevant ones are:

1. Instruments of regional policy: structural funds (DG REGIO):
    - Competitiveness and Employment Objective: regional programmes (ERDF) and national programmes (ESF)
    - Territorial Cooperation Objective (border regions, and larger areas of trans-national cooperation)
2. Instrument of Technology and Innovation policy: (DG RESEARCH): 7th Framework Programme for Research and Technological Development and Demonstration Activities
3. Instrument of enhancing entrepreneurship and innovation (DG ENTERPRISE & INDUSTRY): Competitiveness and Innovation Framework (CIP)
4. Regulatory Framework on State Aid (DG COMPETITION)
5. CARS 21: 'Competitive automotive regulatory system for the 21st century' (DG ENTERPRISE & INDUSTRY).

These frameworks are very complicated, the new regulations about Structural Funds have been approved in July 2006 and the operational programmes under the National frameworks are under construction. This means it will take some time before calls and tenders will be published and projects/programmes activated. The Framework Seven was launched at the end of 2006, but again it will take some months before the first calls will be concluded and they will not necessarily concern the automotive industry's fields of interest. The territories must get ready to participate in European projects and initiatives, but they need sound partnership besides knowledge. It's evident that more co-operative and long-term relations are needed to encompass the wider policy community and the European public and also an integrated policy is essential. In this sense perspectives are at mid-term while there is a need for long-term thinking. If 'crises' occur, then cooperation is difficult.

We identified four distinct major categories of regional development initiatives in automotive regions, namely:

- Fostering the automotive industry
- Diversification
- Interventions for facing crisis situations and alleviating downsizing
- Territorial aspects of (investment) environment.

Examples of all these actions, drawn from the partner regions of the Network of Automotive Regions are described fully in the report. Looking at the different tools for facing crisis a first conclusion could be that dialogue and planning over longer periods will help avoid crisis situations and conflict between groups of employees. This should not restrict company competitiveness. Cooperation should be beneficial to improving working practices and flexibility. There is a need for better dialogue and cooperation at all levels. At European level, there is a need for dialogue that engenders the principle of sustainable competitiveness. Policies on mobility, safety, transport networks and technology hold the key. The goal for all the actors involved, including policymakers, should be to seek a scenario of sustainable competitiveness for the automotive industry in Europe. There is a need for them to work with policymakers at all levels - not just the supra-national EU level. Good interaction and networking between the actors, and appropriate public investment, is essential if Europe is to retain its technological lead. Legislation can make a difference - if coherent and Member States agree to a ‘European agenda’. At regional level policymakers must be aware of, and respond to, EU legislation in the local context. They must try to provide a framework for the industry according to the local circumstances and traditions.

Position

Regional Networks and Automotive Industry

The challenge today for developed European nations is to lead the economic change and to stay at the forefront of innovation. More than ever before, the pivotal task is to produce knowledge faster and be more adept in utilising it economically.

Therefore mechanisms of knowledge production, management and utilisation are crucial for the well being of European regions and the European economic area in general. To achieve success in these tasks, a holistic understanding of the issues and effective communication between different spatial and governance levels are essential. Regional networking organisations are effective agents to take on these tasks and to build the vertical communication channels based on horizontal networks.

Furthermore, these networks are best placed to mobilise regional resources to fulfill their potentials and to lead the economic growth for the benefit of European citizens.

When it comes to European Union's measures to acknowledge and to support activities and governance at the regional level, we believe that initiatives such as Regions of Knowledge in the Capacities Programme of Framework Seven are effective means to help European economy to deal with the challenges. Furthermore, we also regard European Globalisation Adjustment

Fund as a potential tool to deal with the cases of unavoidable restructuring measures in the automotive industry, such as far-reaching lay-offs in European car manufacturing locations.

Feedback and recommendations for EU policy-making

Clusters and cluster management are crucial tools to bolster the competitiveness of European economic area and are designated among industrial and innovation support mechanisms by European Union. Automotive industry, the focus of Network of Automotive Regions project, has a crucial importance not only due to its economic contribution that is visible in statistics (employment, added-value creation, investments in R&D among others), but also because it predates developments and trends in other industries. Automotive has always had a wide-reaching strategic, organisational and technological influence and it continues to pull along other industries as it moves ahead on its path of innovativeness and change.

The European Union supports different means to intensify inter-territorial cooperation, as the Network of Automotive Regions exemplifies. The importance of cooperation in the field of automotive industry doesn't need to be underlined; the European Automotive industry has to work together to face the challenge of globalisation. As the real and fruitful cooperative projects from Network of Automotive Regions partner regions presented in the previous sections prove, the regional actors are fully aware of their role as crucial stakeholders and are making vibrant and effective contributions to this end. It is important that the mechanisms to continue to support such networks are maintained and reinforced. The Structural Funds through the Cooperation Objective (former Interreg) and the Competitiveness and Innovation Programme through Europe Innova and Pro Inno Europe initiatives should be open to reinforce cooperation. Considering the situation and significance of automotive industry, which has been laid out ion the preceding pages, it is also conceivable to have direct budget lines

calls for automotive industry to be initiated. A step as such would address the issues and challenges directly and would bring added value for European Union and its regions over the existing tools of governance and support.

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.

In our opinion, there are still opportunities to improve the interaction and cooperation between European regions and European Union by devising new, closer and sector specific communication channels. This would ultimately elevate the utilisation of the governance know-how contained at the regional level and would boost the effectiveness of the financial and organisational resources of the European Union and its member states.

We would like to propose the European Automotive Strategy Network EASN as a tool to this end. EASN is set to provide industry specific, bottom-up feedback within an exact regional development context, in a big picture that does not renounce regional specificities. We heartily invite European Union for discussion to co-establish the means of dialogue and cooperation with this new, progressive initiative.

Credits and Contact Details

Membership of Working Groups featured in Automotive Regions - Present and Future

Supply Chain Management

Cluster, value chain and service support to local (SME) suppliers

Chair	Stuttgart **Reha Tözün**
Co-Chair	Castilla y Leon
Members :	Galicia, POM Antwerp, LIOF (Dutch Limburg), Turin, POM Limburg (Belgium)

Process Innovation

Foresight and territorial intelligence on innovation of production processes and organisational concepts

Chair	Luton **Angela Rowney**
Co-Chair	City of Antwerp
Members :	Galicia, LIOF (Dutch Limburg), City of Genk, Montbéliard, Comunimprese, POM Limburg(Belgium)

Labour market issues and training

Foresight and territorial intelligence on labour market issues including training and skills needs

Chair	Comunimprese **Diego Borsellino**
Co-Chair	Montbéliard
Members :	Luton, POM East Flanders, City of Ghent, POM Limburg (Belgium), Sittard-Geleen

Intelligence on policy and diversification

Foresight and territorial intelligence on role of European Commission and national governments and diversification of regional economies

Chair	Turin **Tessa Zaramella**
Co-Chair	POM Antwerp
Members :	Castilla y Leon, Galicia, POM East Flanders, City of Ghent, LIOF (Dutch Limburg), Montbéliard, Comunimprese, POM Limburg (Belgium)

Benchmarking

Eurada / Consultants (Bart Kamp of *RESOURCE ANALYSIS NV* with Socintec Corporation IBV and Management Consulting Leuven)

Contact details

Co-ordinator 'Network of Automotive Regions'
Drs Margo Alofs
The Limburg Development Agency (POM Limburg), Belgium **LEAD PARTNER**
+32 11 300 100
margo.alofs@pomlimburg.be
www.pomlimburg.be
Kunstlaan 18
B-3500 Hasselt
Belgium

Junta de Castilla y León, Spain
Luis Miguel Sanchez Vadillo / Wim Martem
+34 983 31 70 83
sanvadlu@jcyl.es / martenwi@jcyl.es
www.jcyl.es

Xunta de Galicia , Spain
Raúl Rodríguez Couto
+34 981 54 10 79
rrcouto@opidi.org
www.xunta.es

Comunimprese, Arese (Milan), Italy
Diego Borsellino
+39 335 585 6269
comunimprese@tiscali.it
www.comunimprese.it

Eurada (European Association of Regional Development Agencies)
Christian Saublens / Raphael Szymczak
Avenue des Arts 12 Bte 7
B-1210 BRUSSELS
BELGIUM
+32 2 218 43 13
E-mail : info@eurada.org /
christian.saublens@eurada.org /
raphael.szymczak@eurada.org
www.eurada.org

Stuttgart Region Economic Development Corporation, Germany
Holger Bach / Reha Tözün
+49 711 22 83 559
hbach@region-stuttgart.de
www.region-stuttgart.de

L'Agence de Développment et d'Urbanisme, Montbéliard, France
Christophe Bolot
+33 3 81 31 86 65
c.bolot@adu-montbeliard.fr
www.adu-montbeliard.fr

Luton Borough Council, East of England, UK
Angela Rowney
+44 1582 54 62 70
Angela.Rowney@luton.gov.uk
www.luton.gov.uk

POM East Flanders(The East Flanders Development Agency)
Tomas Lejaeghere
+32 9 267 86 20
tomas.lejaeghere@pomov.be
www.pomov.be

Stad Gent (Ghent City Council), Belgium
Adinda Baro adinda.baro@gent.be
Pieter Hendrickx pieter.hendrickx@gent.be
+32 9 266 84 02
www.gent.be

Stad Genk (Genk City Council), Belgium
Bert Verbrugghe
+32 89 654410
bert.verbrugghe@genk.be
www.genk.be

POM Antwerpen (The Antwerp Development Agency)
Wilfried Verhé
+32 3 240 68 75
wilfried.verhe@pomantwerpen.be
www.pomantwerpen.be

Stad Antwerpen (Antwerp City Council), Belgium
Anniek Desmet / Koen Decock
+32 3 202 66 88
anniek.desmet@stad.antwerpen.be /
koen.decock@stad.antwerpen.be
www.antwerpen.be

NV Industriebank LIOF, The Netherlands
Theo Hommels
+31 433 280 280
thommels@liof.nl
www.liof.nl

Province of Turin, Italy
Mario Lupo
+39 011 861 2318
mario.lupo@provincia.torino.it
Tessa Zaramella
+39 0011 861 2642
tessa.zaramella@provincia.torino.it
www.provincia.torino.it

Assot, Regional Development Agency, Turin
Dario Albino
dario.albino@assot.com
+39.011.9040893

Cities of Sittard and Geleen, The Netherlands
Leo Burdorf / Marion Mulkens
leo.burdorf@sittard-geleen.nl /
marion.mulkens@sittard-geleen.nl
+31 46-477 77 77
www.sittard-geleen.nl

Edited and Published by the School of Aerospace,
Automotive and Design Engineering
at the University of Hertfordshire
on behalf of the Network of Automotive Regions